



Board of Intermediate & Secondary Education,  
86-Mozang Road, Lahore

**Academic  
Session  
2025-2027**

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# **Rules of Intermediate Examinations & Scheme of Studies (11<sup>th</sup> & 12<sup>th</sup>)**

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**\*Syllabus is not yet available**

## تواعد و ضوابط

برائے

### امتحانات II اور پارٹ I انٹر میڈیٹ پارٹ

سیکریٹری تعلیمات / کنٹرولنگ اتھارٹی بورڈز (حکومت پنجاب) کی طرف سے جاری کردہ چٹھی نمبر-12(S.O(Boards) 3/2014 مورخہ 18.09.2015 اور پنجاب بورڈز کمیٹی آف چیئرمین کے اجلاس منعقدہ 24 دسمبر 2014 کی شق نمبر 13 کے تحت سیکنڈری سکول وہائیر سیکنڈری سکول کی سطح پر پریکٹیکل کی گریڈنگ کو ختم کر کے دوبارہ پریکٹیکل کے نمبر بحال کر دیے گئے ہیں (جس کی تفصیل بورڈ کی جانب سے جاری کیے گئے نوٹیفکیشن نمبر 2/2015 مورخہ 28.09.2015) پر موجود ہے۔ نیز حکومت کی پنجاب چیف منسٹرز مانیٹرنگ فورس سکول ایجوکیشن کی طرف سے سیکنڈری سکول کی سطح پر ڈینیگی سے متعلق نہم جماعت میں بیالوجی اور جزل سائنس جبکہ جماعت دہم میں دہشت گردی سے متعلق مختصر سوال مطالعہ پاکستان کے پرچہ میں دیئے جائیں گے۔ اسی طرح انٹر میڈیٹ کی سطح پر دہشت گردی سے متعلق مختصر سوال گیارہویں جماعت میں اسلامیات لازمی جبکہ بارہویں جماعت کے لیے ڈینیگی سے متعلق سوال مطالعہ پاکستان میں دیئے جائیں گے۔ اس سکیم کا اطلاق اکیڈمک سیشن 17-2015 سے ہو گا۔ اس سکیم کے تحت گیارہویں جماعت سالانہ امتحان 2016ء و ماہ بعد لیا جائے گا۔ گیارہویں جماعت اور بارہویں جماعت کے امتحانات کے لیے مضامین / پرچہ جات اور نمبروں کی تقسیم کتاب کے اگلے صفحات پر درج معیار کے مطابق ہوگی۔

### SCHEME OF STUDIES FOR INTERMEDIATE EXAMINATIONS UNDER PART SYSTEM FOR SESSION 2016-18 & ONWARD

Punjab Boards of Intermediate and secondary Education, offer qualifications for both English and Urdu medium candidates for Intermediate / Higher Secondary School Certificate (HSSC) level education. The revised Intermediate / HSSC Scheme of Studies issued by the Curriculum Wing will be implemented from Session 2012-2014 and onward. Accordingly, each Intermediate / HSSC subject will be taught across both the Classes XI & XII. Punjab Curriculum & Textbook Board Introducing new subject "Translation of Holy Quran vide letter No. M-48-58-A/PSMD/2022 dated 28.07.2022. The marks and groups allocated to the subjects in the revised Scheme of Studies are as follows:

**PRE - MEDICAL GROUP**

Sr.#	Code	Subject	Part-I	Part-II	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	100	
2.	6001	English	100	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	---	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	50	
5.	6091	Pakistan Studies	---	50	
6.	6046	Biology	85	85	30
7.	6047	Physics	85	85	30
8.	6048	Chemistry	85	85	30
			<b>555</b>	<b>555</b>	<b>90</b>
<b>Total Marks:</b>			<b>1200</b>		

**PRE - ENGINEERING GROUP**

Sr. #	Code	Subject	Part-I	Part-II	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	100	
2.	6001	English	100	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	---	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	50	
5.	6091	Pakistan Studies	---	50	
6.	6046	Mathematics	100	100	30
7.	6047	Physics	85	85	
8.	6048	Chemistry	85	85	
			<b>570</b>	<b>570</b>	<b>60</b>
<b>Total Marks:</b>			<b>1200</b>		

**GENERAL SCIENCE GROUP**

Sr.#	Code	Subject	Part-I	Part-II	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	100	
2.	6001	English	100	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	---	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	50	
5.	6091	Pakistan Studies	---	50	
6.		Physics+Mathematics+Statistics	85+100+85	85+100+85	60
		Mathematics+Economics+Statistics	100+100+85	100+100+85	30
		Economics+Mathematics+Computer Science	100+100+75	100+100+75	50
		Mathematics+Statistics+Computer Science	100+85+75	100+85+75	80
		Mathematics+Physics+Computer Science	100+85+75	100+85+75	80
<b>(CHOOSE ANY ONE COMBINATION)</b>					
<b>Total Marks:</b>			<b>1200</b>		

**COMMRECE GROUP**

Sr.#	Code	Subject	Part-I	Part-II	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	100	
2.	6001	English	100	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	---	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	50	
5.	6091	Pakistan Studies	---	50	
6.	6070	Principles of Accounting	100	100	
7.	6054	Principles of Economics <b>Commercial Geography in Part-II</b>	75 ---	--- 75	
8.	6058	Principles of Commerce with <b>Banking in Part-II</b> <b>OR</b>	75	75	---
	6095	Principles of Commerce with <b>Computer Studies in Part-II</b>	75	50	25
9.	6064	Business Mathematics <b>Statistics in Part-II</b>	50 ---	--- 50	--- ---
<b>Total Marks:</b>			<b>1200</b>		

**ISLAMIC STUDIES GROUP**

Sr#	Code	Subject	Part-I	Part-II
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	100
2.	6001	English	100	100
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	---
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	50
4.	6091	Pakistan Studies	---	50
5.	6024	Arabic	100	100
6.	6025	Islamic Studies (Fiqh and Usul-e-Fiqh)	100	100
7.	6082	<b>Islamic History and Culture with Option-I</b> (The Political & Cultural History of Islam from the beginning of Abbasies to falls of Baghdad) in Part-II. <b>OR</b>	100	100
	6081	<b>Islamic History and Culture with Option-II</b> (The Cultural system of Islam) in Part-II.		
			<b>600</b>	<b>600</b>
<b>Total Marks:</b>			<b>1200</b>	

**HOME ECONOMICS GROUP CLASS-XI (PART-I)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	---
2.	6001	English	100	---
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	---
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	---
5.	6073	Biology	35	15
6.	6074	Chemistry	35	15
7.	6076	Home Management	85	15
8.	6075	Clothing & Textile	85	15
<b>Total Marks:</b>			<b>600</b>	

**HOME ECONOMICS GROUP CLASS-XII (PART-II)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6091	Pakistan Studies	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
5.	6072	Applied Art	85	15
6.	6077	Food & Nutrition	85	15
7.	6078	Child Development and Family Living	85	15
<b>Total Marks:</b>			<b>600</b>	

**HUMANITIES GROUP**

Sr#	Code	Subject	Part-I	Part-II
1.	6002 6006	Urdu / Pakistani Culture (for Foreign Students only)	100	100
2.	6001	English	100	100
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	---
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	50
5.	6091	Pakistan Studies		50
		<b>Choose Three Elective Subjects</b> (From the List of Elective Subjects)	100+100+100	100+100+100
			<b>600</b>	<b>600</b>
<b>Total Marks:</b>			<b>1200</b>	



## **\* MEDICAL TECHNOLOGY GROUP**

### **\* MEDICAL LABORATORY TECHNOLOGY - CLASS-XI (PART-I)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Elementary Anatomy and Micro Techniques	50	50
		Microbiology-I	50	50
		Elementary Chemistry and Chemical Pathology	50	50
<b>Total Marks:</b>			<b>600</b>	

### **\* MEDICAL LABORATORY TECHNOLOGY - CLASS-XII (PART-II)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6091	Pakistan Studies	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Hematology and Blood Banking	50	50
		Microbiology-II	50	50
		Clinical Pathology and Serology	50	50
<b>Total Marks:</b>			<b>600</b>	

### **\* MEDICAL IMAGING TECHNOLOGY - CLASS-XI (PART-I)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Radiographic Techniques-I	100	50
<b>Total Marks:</b>			<b>600</b>	

### **\* MEDICAL IMAGING TECHNOLOGY - CLASS-XII (PART-II)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6091	Pakistan Studies	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Radiographic Techniques-II	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* OPERATION THEATRE TECHNOLOGY - CLASS-XI (PART-I)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Operation Theatre Techniques-I	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* OPERATION THEATRE TECHNOLOGY - CLASS-XII (PART-II)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6091	Pakistan Studies	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Operation Theatre Techniques-II	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* OPHTHALMIC TECHNOLOGY - CLASS-XI (PART-I)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Ophthalmic Techniques-I	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* OPHTHALMIC TECHNOLOGY - CLASS-XII (PART-II)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6091	Pakistan Studies	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Ophthalmic Techniques-II	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* PHYSIOTHERAPY TECHNOLOGY - CLASS-XI (PART-I)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Physiotherapy Techniques-I	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* PHYSIOTHERAPY TECHNOLOGY - CLASS-XII (PART-II)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6091	Pakistan Studies	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Physiotherapy Techniques-II	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* DENTAL HYGIENE - CLASS-XI (PART-I)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6092	Islamic Education <b>OR</b> Religious Education <b>(for Non Muslims)</b>	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Dental Hygiene-I	100	50
<b>Total Marks:</b>			<b>600</b>	

**\* DENTAL HYGIENE - CLASS-XII (PART-II)**

Sr.#	Code	Subject	Theory	Practical
1.	6002 6006	Urdu / Pakistani Culture <b>(for Foreign Students only)</b>	100	
2.	6001	English	100	
3.	6091	Pakistan Studies	50	
4.	6093 35	Translation of the Holy Quran <b>OR</b> Ethics <b>(for Non Muslims)</b>	50	
		Basic Medical Sciences	50	25
		Applied Sciences	50	25
		Dental Hygiene-II	100	50
<b>Total Marks:</b>			<b>600</b>	

**\*Syllabus is not yet available**

**LIST OF ELECTIVE SUBJECTS FOR (CLASSES XI & XII)**

<b>Sr#</b>	<b>Code</b>	<b>Subjects</b>
1.	6015	History(Opt one only from the following History Subjects) History of Modern World
2.	6031 6007	History of Islam Banu Ummayyah with (Muslim in Spain) in Part-II History of Islam Banu Ummaya with (Abbasi of Baghdad) in Part-II
3.	6009	History of Muslim India
4.	6010	History of Pakistan
5.	6011	Economics
6.	6012	Geography (Marks: Th-I-85+ Th-II-85+Pra-30=200)
7.	6014	Philosophy
8.	6016	Psychology (Marks: Th-I-85+ Th-II-85+Pra-30=200)
9.	6017	Civics
10.	6018	Statistics (Marks: Th-I-85+ Th-II-85+Pra-30=200)
11.	6019	Mathematics
12.	6020	Islamic Studies
13.	6021	Outlines of Home Economics (Marks: Th-I-85+ Th-II-85+Pra-30=200)
14.	6023	Fine Arts (Marks: Th-I-40+ Th-II-40+Pra-120=200)
15.	6024 6034 6032 6096 6033 6038 6039 6040 6028 6029	Arabic/ Persian/ Punjabi/ Saraiki/ Pushto/ Balochi/ Sindhi/ Modern Languages French (Marks: Th-I-100+ Th-II-75+Pra-25=200) German (Marks: Th-I-100+ Th-II-70+Pra-30=200)
16.	6027	English Elective
17.	6037	Urdu Advance
18.	6042	Health and Physical Education (Marks: Th-I-85+ Th-II-85+Pra-30=200)
19.	6043	Education
20.	6045	Sociology
21.	6008	Library Science (Marks: Th-I-85+ Th-II-85+Pra-30=200)
22.	6083	Computer Science (Marks: Th-I-75+ Th-II-75+Pra-50=200)
23.	6041	Geology (Marks: Th-I-85+ Th-II-85+Pra-30=200)
24.	6090	Agriculture (Marks: Th-I-85+ Th-II-85+Pra-30=200)
25.	6079	Nursing (Marks: Th-I-85+ Th-II-85+Pra-30=200)
26.	6022	Music (Marks: Th-I-40+ Th-II-40+Pra-120=200)
27.	6013	Military Science (Marks: Th-I-100+ Th-II-100=200)
28.	6038	Commercial Practice

- 1- پنجاب بورڈز کے زیر انتظام 1996ء سے انٹر میڈیٹ کا امتحان پارٹ سسٹم کے تحت پارٹ وائز (Part Wise) لیا جائے گا۔ گیارہویں جماعت کا امتحان انٹر میڈیٹ (پارٹ-1) اور بارہویں جماعت کا امتحان انٹر میڈیٹ (پارٹ-2) کہلائے گا۔
- 2- پارٹ سسٹم کے امتحان کے لیے پرچہ اے اور پرچہ بی کی بجائے پرچہ I اور پرچہ II کے نام استعمال کیے جائیں گے۔
- 3- صرف پارٹ I (گیارہویں جماعت) کا دوسرا سالانہ امتحان نہیں لیا جائے گا۔
- 4- اسلامیات (لازمی) / اسلامک ایجوکیشن کا امتحان پارٹ I میں لیا جائے گا۔ اور مطالعہ پاکستان کا امتحان پارٹ II میں لیا جائے گا۔
- 5- پارٹ I اور پارٹ II میں نمبروں کی تقسیم گورنمنٹ / بورڈ کی وضع کردہ پالیسی کے مطابق ہوگی۔
- 6- پارٹ I میں شریک ہونے والے امیدواران کو بارہویں جماعت میں ترقی دے دی جائے گی اور وہ پارٹ I کے نتیجے کا انتظار نہیں کریں گے اور 33% سے کم مارکس حاصل کرنے والے مضامین کا امتحان پارٹ II کے ساتھ ہو گا اور اسی سال دوسرا سالانہ امتحان میں انکی شمولیت نہیں ہوگی۔
- 7- پارٹ II امتحان میں 33 فیصد سے کم نمبر والے مضمون / مضامین میں اگر کوئی امیدوار پارٹ II کے ساتھ دینا چاہے تو اسے ایسا کرنے کی اجازت ہو گی بصورت دیگر ان کا نتیجہ پارٹ I اور پارٹ II میں حاصل کردہ نمبروں کی بنیاد پر مرتب کیا جائے گا۔ پارٹ I اور پارٹ II کو ایک ہی امتحان تصور کیا جائے گا اور امیدوار کی اس امتحان کے تمام مضامین میں شرکت اس کے الاٹ شدہ امتحانی مرکز میں حاضر ہونے پر مشروط ہوگی۔ بیماری یا دیگر کسی بھی وجہ سے کوئی اضافی موقع نہیں دیا جائے گا اور امتحانی مرکز سے غیر حاضری امتحان سے غیر حاضری تصور کی جائے گی۔
- 8- انٹر میڈیٹ امتحان کا حتمی نتیجہ پارٹ I اور پارٹ II میں تحریری نمبروں کے مجموعہ اور عملی نمبروں میں علیحدہ علیحدہ پاس کرنے کی بنیاد پر ہوگا۔
- 9- "O" Level "جی سی ای" یا کوئی مساوی امتحان پاس کرنے والے امیدواروں کو IBCC سے مساوی سرٹیفکیٹ حاصل کرنے کے بعد مروجہ قوانین کے مطابق انٹر میڈیٹ کا امتحان دینے کی اجازت ہوگی۔
- 10- سسٹم کے تحت تحریری اور عملی پرچوں کا دورانیہ بورڈ کی جانب سے تعیین کردہ اوقات کے مطابق ہوگا۔
- 11- پارٹ I میں کالجوں میں داخلہ لینے کی آخری تاریخ بورڈ کے جاری کردہ شیڈول کے مطابق ہوگی۔
- 12- پارٹ I اور پارٹ II کا امتحان ہر سال بورڈ کے اعلان کردہ شیڈول کے مطابق ہوگا۔
- 13- پارٹ I کے امتحان کے بعد امیدوار کو صرف نتیجہ کا اطلاع نامہ جاری کیا جائے گا۔ کسی قسم کی پاس کی سند جاری نہیں کی جائے گی۔
- 14- پارٹ I اور پارٹ II کا امتحان مجموعی طور پر پاس کرنے کے بعد سند جاری کی جائے گی۔
- 15- گیارہویں جماعت (فرسٹ ایئر) کے کسی بھی مضمون / مضامین میں 33% سے کم نمبر، غیر حاضر اور صرف رجسٹرڈ ہونے والے طلباء / طالبات سالانہ امتحان پارٹ I کے نتیجہ (RESULT) کی اشاعت کے 30-ایام کے اندر بغیر کسی بھی Result Cancellation کے کسی بھی ادارہ میں دوبارہ داخلہ (RE-ADMISSION) حاصل کر سکتے ہیں۔ ری ایڈمیشن حاصل کرنے والے طلباء / طالبات کا سابقہ رجسٹریشن نمبر ہی برقرار رہے گا اور ادارہ اس امر سے بورڈ کو تحریری طور پر قواعد و ضوابط کے مطابق مطلع کرنے کا پابند ہوگا۔ تاہم گیارہویں جماعت میں پاس طلباء / طالبات اپنا رزلٹ کینسل کروا کر دوبارہ گیارہویں جماعت کا امتحان دے سکتے ہیں۔ ایسے امیدوار کو اپنا مضمون / مضامین / گروپ بھی تبدیل کرنے کی اجازت ہوگی رزلٹ کینسل کروا نیوالے امیدواران کی پہلے والی رجسٹریشن بحال رہے گی۔ تاہم ریگولر امیدواران کیلئے ضروری ہے کہ وہ گیارہویں جماعت کے رزلٹ (RESULT) کی اشاعت کے 30-ایام کے اندر اپنا رزلٹ / نتیجہ منسوخ / کینسل کروائیں جبکہ پرائیویٹ امیدواران امتحان میں شرکت کے لیے داخلہ فارم جمع کروانے سے پہلے اپنا سابقہ پاس شدہ رزلٹ کینسل کروانے کے پابند ہوں گے۔

- 16- صرف ریگولر فیل شدہ طلباء / طالبات پارٹ I کا امتحان پارٹ II کے ساتھ دیں گے۔ جبکہ ایسے پرائیویٹ امیدوار ان جو اپنا سینڈری سکول سرٹیفکیٹ امتحان دو سال قبل پاس کر چکے ہیں۔ پارٹ I اور پارٹ II کا امتحان ایک ساتھ دینے کے اہل ہوں گے۔
- 17- پارٹ I کے ایسے ریگولر امیدوار جن کو ناجائز ذرائع استعمال کرنے کے سلسلہ میں ایک امتحان یا دو امتحانات کیلئے نااہل قرار دیا گیا ہو وہ سزا ختم ہونے کے بعد آئندہ سالانہ امتحان میں بطور ریگولر امیدوار پارٹ I اور پارٹ II کا اکٹھا امتحان دے سکتے ہیں۔ اسی طرح پارٹ I کے ایسے پرائیویٹ امیدوار جن کو ناجائز ذرائع استعمال کرنے کی بناء پر ایک امتحان یا دو امتحانات کیلئے نااہل قرار دیا گیا ہو وہ سزا ختم ہونے کے بعد آئندہ سالانہ امتحان میں بطور پرائیویٹ امیدوار پارٹ I اور پارٹ II کا اکٹھا امتحان دے سکتے ہیں۔ پارٹ I کے ایسے ریگولر امیدوار جن کو ناجائز ذرائع استعمال کرنے کے سلسلے میں تین یا زائد امتحانات کے لیے نااہل قرار دیا گیا ہو۔ وہ سزا ختم ہونے تک پارٹ II کا امتحان دینے کے اہل نہیں ہوں گے۔ سزا ختم ہونے کے بعد وہ آئندہ امتحان میں بطور ریگولر امیدوار پارٹ I اور پارٹ II کا اکٹھا امتحان دینے کے اہل ہوں گے۔ اسی طرح پارٹ I کے ایسے پرائیویٹ امیدوار جن کو ناجائز ذرائع استعمال کرنے کے سلسلے میں تین یا زائد امتحانات کے لیے نااہل قرار دیا گیا ہو وہ سزا ختم ہونے کے بعد آئندہ امتحان میں بطور پرائیویٹ امیدوار پارٹ I اور پارٹ II کا اکٹھا امتحان دینے کے اہل ہوں گے۔ مزید برآں پارٹ I میں ایک سے زائد امتحانات میں نااہل قرار دیے جانے والے امیدوار کا چانس پہلے سالانہ امتحان کے ساتھ دوسرا سالانہ چانس خیالی (Notional) تصور کیا جائے گا۔ پارٹ II کے ریگولر اور پرائیویٹ امیدوار جن پر ناجائز ذرائع استعمال کرنے کے سلسلے میں شکایات درج ہوں گی کو مروجہ قوانین کے تحت نمٹایا جائے گا۔ نیز پارٹ II کے ساتھ پارٹ I کے فیل شدہ مضامین کا امتحان دینے والے امیدوار پر بھی مروجہ قوانین ہی لاگو ہوں گے۔
- 18- ریگولر امیدوار کے لیے لازم ہو گا کہ وہ پارٹ I کے امتحان کے لیے کل دیئے گئے لیکچروں میں سے کم از کم 75% میں حاضر رہا ہو۔ اور کالج امتحان برائے استحقاق شمولیت بورڈ امتحان میں کم از کم ای گریڈ حاصل کیا ہو اسی طرح پارٹ II کے امتحان کے لیے بھی 75% لیکچروں کی حاضری کی پابندی ہوگی نیز کالج امتحان برائے استحقاق شمولیت بورڈ امتحان میں کم از کم ای گریڈ حاصل کیا ہو۔
- 19- اگر کوئی ادارہ نامساعد حالات کی وجہ سے پارٹ I (گیارہویں جماعت) کے کسی امیدوار کا داخلہ نہیں بھیج سکا تو اس امیدوار کو پارٹ II (بارہویں جماعت) میں پروموٹ کر دیا جائے گا اور اس کا داخلہ پارٹ II (بارہویں جماعت / کمپوزٹ) میں حاضریاں پوری ہونے پر اس سال کرے گا اگر نامساعد حالات کی بناء پر پارٹ II (بارہویں جماعت) میں بھی حاضریاں پوری نہ ہوتی ہوں تو پھر اسے Detain کر کے اس کا داخلہ آئندہ دوسرے سالانہ امتحان میں اس سال کرے گا۔ اسی طرح کسی وجہ سے پارٹ I کے امتحان میں رول نمبر جاری ہونے کے بعد شرکت نہ کر سکنے والے امیدوار کا داخلہ بھی اگلے سال پارٹ II کے ساتھ بھیجا جاسکے گا۔
- 20- انٹر میڈیٹ پارٹ I- میں کی گئی رجسٹریشن پارٹ II- کے لیے بھی کارآمد ہوگی۔
- 21- اگر کوئی ریگولر امیدوار پارٹ I- کے امتحان میں شریک ہوتا ہے اور نامساعد حالات کی وجہ سے ریگولر تعلیم جاری نہیں رکھ سکتا اور اسکے مضامین پریکٹیکل والے نہیں ہیں۔ تو وہ پارٹ II- میں بطور پرائیویٹ امیدوار امتحان میں شامل ہو سکتا ہے۔
- 22- دوسرے سالانہ امتحان میں انٹر میڈیٹ پارٹ I، II کمبائنڈ امتحان نئے سرے سے (As a Fresh Candidate) دینے کی اجازت ہوگی۔
- 23- انٹر میڈیٹ امتحان پاس کرنے کے لیے امیدوار کے پارٹ I- اور پارٹ II- کے مجموعی نمبروں کو ملا کر متعلقہ مضمون میں پاس یا فیل شمار کرنا ہو گا۔ کمپارٹمنٹ کے مضمون / مضامین کو پاس کرنے کے لیے اگلے فوری تین امتحانی مواقع دیے جائیں گے اس شق کے تحت ہر امیدوار کو پارٹ I- اور پارٹ II- کے امتحانات میں ایک ساتھ شریک ہونا ہو گا تاہم اگر کوئی امیدوار کسی مضمون کے کسی پارٹ میں غیر حاضر رہتا ہے اور دوسرے پارٹ میں وہ اتنے نمبر حاصل کر لیتا ہے۔ کہ اس کے حاصل کردہ نمبر اس مضمون کے دونوں پارٹس کے پاس مارکس کے مجموعہ کے برابر یا زیادہ بھی ہو جائیں تو پھر بھی اس کو اس مضمون میں پاس نہیں کیا جائے گا۔ کیونکہ کسی ایک پارٹ میں غیر حاضر رہنے کی بنا پر دوسرے

پارٹ میں اس نے کوئی نمبر حاصل نہیں کیا اس لیے غیر حاضر پارٹ کو دوسرے پارٹ کے حاصل کردہ نمبروں کے ساتھ ملایا نہیں جاسکتا اس کو اس پارٹ میں فیل کر دیا جائے گا جس میں وہ غیر حاضر رہا اور اس کو فیل شدہ مضمون / مضامین جن میں وہ غیر حاضر رہا تھا۔ پاس کرنے کیلئے قواعد کے مطابق امتحانی موقع / مواقع دیئے جائیں گے۔

24- جو امیدوار پارٹ-I اور پارٹ-II میں حاصل کردہ نمبروں کے حساب سے فیل ہو گا۔ وہ فیل شدہ پارٹ کا امتحان دے گا۔ مثلاً اگر ایک امیدوار ایجوکیشن کے مضمون میں پارٹ-I میں 40 نمبر لیتا ہے۔ اور پارٹ-II میں 24 نمبر لیتا ہے تو مجموعہ  $24+40=64$  بنتا ہے اس کے پارٹ-II میں 33 فیصد سے کم نمبر ہیں اس لیے اسے صرف پارٹ-II کا ایجوکیشن کا امتحان دینا ہو گا۔

25- اگر کوئی امیدوار پارٹ-I کے امتحان میں شرکت کرتا ہے لیکن پارٹ-II کے امتحان میں شرکت نہیں کرتا تو اس کا پارٹ-I کا نتیجہ اسکے پارٹ-II کے امتحان میں شرکت یا زیادہ سے زیادہ دو سال تک بشرطیکہ جو بھی پہلے واقع ہو محفوظ رکھا جائے گا۔ اس کے بعد یہ نتیجہ منسوخ سمجھا جائے گا۔

- 26- For the purpose of improving marks/grades, candidates will be provided with four examination opportunities in the same subjects or subject groups in which they previously passed examinations, the following the current prevalent syllabi. These opportunities can be availed within a period of four (4) years of passing the SSC and Intermediate examinations, provided that they are utilized before appearing in any higher examinations conducted by any examining body.
- Candidate will need to submit an affidavit, of marks not attaining higher degree, if improvement chances are availed beyond two years of first attempt.
- The Candidate may appear in following categories:
- (a) In subject(s) of his choice (subject means Part-I + Part-II + Practical)
- (b) In Part-I (c) In Part-II (d) In Part-I and Part-II both (e) In any paper(s) of Part-I or Part-II (f) The highest marks obtained by the candidate will be counted toward final result.
- Old posting (previous result) will be taken from the last improved result which will carry the highest marks obtained in a paper after multiple attempts.
- In case, a candidate remains absent after applying for improvement, his old posting (previous result) will continue.
- Grace-Marks subject(s) must be re-taken with improvement attempt and no Grace Marks will be allowed in case of improvement.

- 27- i. A candidate may appear in any number of additional subject/s along with his/her group of subjects already opted at SSC/ HSSC level in the same Board from where he/she appeared in the SSC/HSSC examination. To qualify the additional subject/s a candidate may avail the same number of attempts as available for the regular candidate to qualify the said examination.
- ii. A candidate desirous of appearing in the subject(s) at the level of HSSC examination having practical shall take admission in affiliated institution as regular student, attend classes and perform practical in laboratory. Institutions shall forward his/her registration and admission as regular student. However, the candidate shall appear in both papers i.e. part-I and Part-II in 1st annual and 2nd annual examinations in the current course not offered by him/her previously.

28- کوئی بھی امیدوار پارٹ-I کا نتیجہ چھوڑنے (Forgo) کے بعد پارٹ-I اور پارٹ-II کا امتحان اکٹھا دے سکتا ہے مگر ایسے امیدوار کو امتحان پاس کرنے کے بعد نمبر بہتر بنانے کا چانس نہیں ملے گا۔

29- داخلی تخمینہ کا گریڈ اداروں کی طرف سے بارہویں جماعت کے آخر میں منگوا یا جائے گا۔ اور اس کا اندراج پارٹ-II امتحان کے سرٹیفکیٹ میں کیا جائے گا۔

- 30- پارٹ-1 کا نتیجہ مرتب کرتے وقت امیدواران کو مجموعی طور پر پارٹ -II اور پارٹ -II کے امتحان پاس کرنے کے لیے کل نمبروں (یعنی 1200 نمبروں) کا ایک فیصد بطور رعایتی نمبر دیئے جائیں گے۔ یہ رعایتی نمبر بورڈ کے ضابطہ نمبر ۴۶ کی روشنی میں دیئے جائیں گے۔ پارٹ-1 کا نتیجہ مرتب کرتے وقت کوئی رعایتی نمبر نہیں دیئے جائیں گے۔ تاہم اگر کوئی امیدوار رعایتی نمبر نہیں لینا چاہتا تو وہ اگلے امتحان کے داخلہ فارم جمع کروانے کے شیڈول کے اندر اندر اشٹام پیپر پر مجسٹریٹ درجہ اول کا تصدیق شدہ حلف نامہ اس امر کا مہیا کرے گا کہ اسے گریس والے مضمون / مضامین میں فیل کر دیا جائے کیونکہ وہ گریس لے کر پاس نہیں ہونا چاہتا۔ نیز یہ کہ اس نے گریس مارکس والے رزلٹ کارڈ پر نہ تو کسی کالج میں داخلہ لیا ہے اور نہ ہی کوئی ملازمت کی ہے نیز یہ بھی کہ آئندہ وہ گریس مارکس والا نتیجہ واپس نہیں مانگے گا۔ اس حلف نامے کے پیش نظر امیدوار کو فیل کر کے فیل شدہ مضمون / مضامین میں دوبارہ امتحان دینے کی اجازت دے دی جائے گی بشرطیکہ امیدوار کے کمپارٹمنٹ والے موقع / مواقع باقی ہو۔ اگر امیدوار کمپارٹمنٹ والا رزلٹ لینا چاہے تو اس کو مجوزہ فیس کی ادائیگی پر نیا رزلٹ کارڈ جاری کیا جاسکتا ہے۔
- 31- انٹرمیڈیٹ کا کوئی امیدوار کسی ایک بورڈ کے پارٹ -1 کے امتحان میں شرکت کرنے کے بعد پارٹ-II کا امتحان اور پارٹ-1 کے فیل شدہ مضمون / مضامین کا امتحان مروجہ قواعد و ضوابط کے تحت کسی بھی دوسرے بورڈ میں دینے کا اہل ہو گا۔ لیکن یہ سہولت پورے تعلیمی دورانیہ (اکیڈمک سیشن) میں صرف ایک بار دی جائے گی۔
- 32- پرائیویٹ امیدواران پارٹ -1 اور پارٹ -II کے امتحانات میں ایسا کوئی مضمون اختیار کرنے کے اہل نہیں ہوں گے جس میں عملی امتحان شامل ہو۔
- 33- پرائیویٹ امیدوار کیلئے لازم ہو گا کہ اس نے پارٹ -1 میں شرکت سے پہلے کم از کم ایک سال بیشتر اور پارٹ -II کے امتحان میں شرکت سے کم از کم دو سال بیشتر میٹرک کا امتحان پاس کیا ہو۔
- 34- اگر کوئی ریگولر امیدوار پارٹ-II کے سائنس مضامین کا داخلہ بھیجتا ہے اور امتحان کیلئے اہل قرار پاتا ہے۔ لیکن کسی وجہ سے امتحان میں شرکت نہیں کر سکتا۔ وہ سائنس مضامین کے ساتھ پرائیویٹ طور پر امتحان دے سکتا ہے۔ البتہ اسے امتحان میں شرکت کے مواقع (Chance) مروجہ قانون کے مطابق ملیں گے۔ جس چانس کو امیدوار نے کسی وجہ سے خود ضائع کیا ہو وہ چانس استفادہ شدہ تصور ہو گا۔
- 35- سائنس کے مضامین یا آرٹس کے ایسے مضامین جن میں عملی امتحان شامل ہو۔ بحیثیت پرائیویٹ امیدوار اختیار نہیں کیے جاسکتے البتہ جو امیدواران پہلے ریگولر امیدوار کی حیثیت سے امتحان میں شمولیت کر کے تمام مواقع ختم کر چکے ہوں تو وہ پریکٹیکل والے مضامین میں بطور پرائیویٹ امیدوار شامل ہو سکتے ہیں۔
- 36- اگر کسی امیدوار نے سائنس گروپ یا پریکٹیکل کے مضمون / مضامین میں بطور ریگولر پارٹ-1 کا امتحان پاس کر لیا ہو لیکن کسی وجہ سے وہ اپنی تعلیم بطور ریگولر طالب علم جاری نہ رکھ سکا ہو تو وہ اپنا پارٹ-1 کا نتیجہ نظر انداز کرتے ہوئے آرٹس کے ایسے مضامین جن میں پریکٹیکل نہ ہو پارٹ -1 اور پارٹ -II کا امتحان بطور پرائیویٹ امیدوار دینے کا اہل ہو گا۔
- 37- انٹرمیڈیٹ پارٹ-II یا کمپوزٹ سالانہ امتحان میں رول نمبر جاری ہونے کے بعد کئی طور پر غیر حاضر ہونے والے امیدواران کو بھی اس سال کے دوسرے سالانہ امتحان میں شرکت کی اجازت ہو گی۔
- 38- ایسے امیدوار جو O-A Level عامہ / خاصہ / ثانویہ وغیرہ کا امتحان پاس کرنے کے بعد IBCC کی طرف سے جاری کردہ لیٹر کے مطابق مضمون / مضامین کا امتحان دیں گے اُن کو 1% رعایتی نمبر دیئے جائیں گے۔ ایسے امیدواران بورڈ قانون کے مطابق نمبر بہتر / گریڈ بہتر بنانے کے مواقع فراہم کیے جائیں گے۔
- 39- انٹرمیڈیٹ پارٹ-II (کمپوزٹ) امتحان میں فیل / غیر حاضر ہونے کی صورت میں دوبارہ صرف پارٹ-1 کا امتحان نہیں دیا جاسکے گا۔



## نصاب اُردو (لازمی)

پارٹ-۱ (برائے جماعت گیارہویں)

کل نمبر: 100

وقت: 3:00 گھنٹے

## حمد و نعت

عنوانات	شعرا	عنوانات	شعرا
حمد	حفیظ تائب	نعت	شعرا
		سید نفیس الحسینی نفیس	

## حصہ نثر

عنوانات	مصنفین	عنوانات	مصنفین
اخلاق نبوی خاتم النبیین ﷺ	شبلی نعمانی	فاتحہ میں روزہ	مصنفین
مکاتیبِ غالب	اسد اللہ خاں غالب	ایک استاد عدالت کے کٹہرے میں	خواجہ حسن نظامی
چارپائی	رشید احمد صدیقی	اور پاکستان بن گیا	اشفاق احمد
نیا قانون	سعادت حسن منٹو	دلہیز	خدیجہ مستور
تاریخ کاکفن	امر جلیل	پاکستانی زبانیں اور ان کا باہمی رشتہ	امجد اسلام امجد
			ڈاکٹر ممتاز منگلوری

## حصہ نظم

عنوانات	مصنفین	عنوانات	مصنفین
اے وادیِ لولاب!	علامہ محمد اقبال	اودیس سے آنے والے بتا	مختار شیرانی
آزادی	احسان دانش	اخلاص	رحمان بابا (مترجم: پروفیسر محمد طلحہ خاں)
کھڑاؤنر	سید محمد جعفری		

## حصہ غزل

عنوانات	مصنفین	عنوانات	مصنفین
پتا پتا بونا بونا، حال ہمارا جانے ہے	میر تقی میر	سر میں سودا بھی نہیں، دل میں تمنا بھی نہیں	فراق گورکھ پوری
بے چین، بہت پھرنا، گھبراے ہوئے رہنا	منیر نیازی	سلسلے توڑ گیا وہ سبھی جاتے جاتے	احمد فراز
باد باں کھلنے سے پہلے کا اشارہ دیکھنا	پروین شاکر		

اُردو (گیارہویں جماعت)

• پروفیسر محمد ظفر الحق چشتی

• پروفیسر طارق حبیب

• ڈاکٹر محمد خاور نوازش

• رانا حنان محمود

• محمد طاہر صدیقی

• مطیع: اسحاق الفتح پریس

ناشر: ضیاء القرآن پبلی کیشنز

برائے: پنجاب ایجوکیشن، کریکولم، ٹریننگ اینڈ اسسٹنٹ اتھارٹی



## نصاب اُردو (لازمی)

### پارٹ-II (برائے جماعت بارہویں)

کل نمبر: 100

وقت: 3:00 گھنٹے

حصہ نثر: کتاب "سرمایہ اُردو"

دیے گئے اقتباس کی سیاق و سباق کے حوالے سے تشریح

سبق کا خلاصہ

15 نمبر

10 نمبر

05 نمبر

10 نمبر

10 نمبر

05 نمبر

اسباق پر سوالات

نظم کی تشریح

غزل کی تشریح

نظم کا خلاصہ

قواعد و انشا

مضمون

20 نمبر

10 نمبر

15 نمبر

خط / آپ بیتی

قواعد

قواعد برائے سال دوم

مختلف حروف کا استعمال فاعل / مفعول کے ساتھ فعل

کی مطابقت ر موزا و قاف۔ چند مصادر بطور امدادی افعال

سرمایہ اُردو (بارہویں جماعت)

مؤلفین: 1۔ ڈاکٹر علی محمد خان

ایڈیٹر: 1۔ پروفیسر محمد ظفر الحق چشتی

ناشر: پنجاب ٹیکسٹ بک بورڈ، لاہور

3۔ پروفیسر جعفر بلوچ

2۔ ڈاکٹر عبدالغنی فاروق



**PAKISTANI CULTURE***(For Foreign Students Only in lieu of Urdu Compulsory)*

(There will be two papers of 100 marks each)

**(Outlines of tests)**

<b>Marks : 100</b>	<b>CLASS XI (PART I)</b>	<b>Time : 3:00 hours</b>
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1. **Geography:**
  - (i) **Land :** Physical features, rivers, canals and communications gateways to Pakistan. Climate, important cities, hill stations.
  - (ii) **People:** Population distribution (Rural and Urban) Racial features, religions, dress and customs.
  - (iii) Influence of Geography on culture.
2. **Islamic Heritage.**
  - (i) Advent of Islam: The Holy Prophet ﷺ and the Holy Quran.
  - (ii) Islamic Principles and Ideology.
  - (iii) **Islam in the sub-continent:** Contribution of Arabs, Turks, Afghans and Mughals in the spread of Islamic culture.
  - (iv) **Culture:-** Definition – Islamic Culture – its distinctive features.
3. **Archeological Heritage of Pakistan.**
  - (i) Mohenjodaro (ii) Taxila (iii) Gandhara (iv) Bhamboore
  - (v) **Mainamati** (East Pakistan) (vi) Thatta (vii) Multan (viii) Lahore (ix) Peshawar.
4. **Making of Pakistan. (1857-1947) Political, Ideological and Socio-economical background.**
5. National and Regional Languages, their impact on Everyday life, Family Pattern in Pakistani Society.
6. **Arts and Crafts.**

**Recommended Books:**

1. **Pakistani way of Life**  
By Dr. Ishtiaq Hussain Qureshi (Published in London)
2. **The Pakistani way of life and Culture**  
By Dr. Abdul Hamid (M/S Publishers United, Lahore)

<b>Marks : 100</b>	<b>CLASS XII (PART II)</b>	<b>Time : 3:00 hours</b>
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1. Factors Leading to October Revolution of 1958.
2. Broad Features of the Constitution of Pakistan.
3. A detailed study of the Basic Democracies.
4. Economic Resources of Pakistan: Products and Minerals, Agriculture and Industrial developments, Trade and commerce.
5. Education in Pakistan: Primary and Secondary, Universities, Technical.
6. Pakistan and the World: Pakistan and its neighbours – Kashmir, China, Russia, Afghanistan, Bharat, Burma, (Pakistan and Muslim countries), (Pakistan and the Commonwealth.)

**Recommended Books:**

1. **Pakistani way of Life**  
By Dr. Ishtiaq Hussain Qureshi (Published in London)
2. **The Pakistani way of life and Culture**  
By Dr. Abdul Hamid (M/S Publishers United, Lahore)
3. **Pakistan its Resources and Potentialities**  
By Dr. M.B. Pithawala (M/S Publishers United, Lahore)
4. **Pakistan Way of Life & Culture**  
(By Sher Muhammad Garewal)



## ENGLISH

<b>Marks : 100</b>	<b>CLASS XI (PART I)</b>	<b>Time : 3:00 hours</b>
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### Unit No.1 Khatam-un-Nabiyeen Hazrat Muhammad ﷺ

Theme/Sub-Theme:	Ethics and Values / Handling of Trust / Self-discipline
Reading and Critical Thinking:	Comprehension Questions / Summary of Text
Vocabulary and Grammar:	Pronunciation/Dictionary Skills/Word Patterns/Parts of Speech
Oral Communication Skills:	Oral Discussion / Attentive Listening
Writing Skills:	Paragraph Writing / Informative / Explanatory Essay Writing

### Unit No.2 Responsibility of the Youth in Nation-Building

Theme/Sub-Theme:	Quality Education
Reading and Critical Thinking:	Comprehension Questions/ Choose the Correct Option
Vocabulary and Grammar:	pattern of Word Changes/ Tenses
Oral Communication Skills:	Oral Discussion/ Group Presentation
Writing Skills:	Argumentative Essay

### Unit No.3 A Bird Came Down the Walk (Poem)

Theme/Sub-Theme:	Connecting People and Nature
Reading and Critical Thinking:	Comprehension Questions/ Choose the Correct Option
Vocabulary and Grammar:	Figure of Speech/Compound Preposition and Prepositional Phrase
Oral Communication Skills:	Role-Play/ Interview/ Discussion
Writing Skills:	Objective Summary/Critical Appreciation and Literary Critique

### Unit No.4 Team Moon

Theme/Sub-Theme:	Team Work
Reading and Critical Thinking:	Comprehension Questions/ Choose the Correct Option
Vocabulary and Grammar:	Adjectival, Prepositional and Adverbial Phrases
Oral Communication Skills:	Oral Discussion/Role-play/Community Meeting
Writing Skills:	Writing a Book Review

### Unit No.5 Impact of Global Warming on Pakistan

Theme/Sub-Theme:	Effects of Global Warming on Pakistan
Reading and Critical Thinking:	Comprehension Questions/Summary
Vocabulary and Grammar:	Idioms and Proverbs/Conjunctions and Transitional Devices
Oral Communication Skills:	Dialogues
Writing Skills:	Informative Essay

### Unit No.6 The Echoing Green (Poem)

Theme/Sub-Theme:	Environment Matters
Reading and Critical Thinking:	Comprehension Questions/Plot Development Review
Vocabulary and Grammar:	Meaning of a Word/Parts of Speech/Tenses/Sentence Structure
Oral Communication Skills:	Oral Discussion
Writing Skills:	Paraphrasing Skills

### Unit No.7 What You Do is What You are

Theme/Sub-Theme:	Respecting Self and Others
Reading and Critical Thinking:	Comprehension Questions/Choose the Correct Option
Vocabulary and Grammar:	Use Context Clues/Gerunds/Infinitives/Participles
Oral Communication Skills:	Mind-map/ Dialogues
Writing Skills:	Writing Analytical Essay

### Unit No.8 Clean Water

Theme/Sub-Theme:	SDGs/ Clean Water & Sanitation
Reading and Critical Thinking:	Comprehension Questions/Characters Evaluation
Vocabulary and Grammar:	Word maps/Commonly Confused Words/
Oral Communication Skills:	Oral Discussion/ Enact the Play/ Discussion on Play
Writing Skills:	Formal Letter And e-mail

### Unit No.9 Freedom (Poem)

Theme/Sub-Theme:	Literature & Poetry/ Freedom
Reading and Critical Thinking:	Comprehension Questions/Paragraph Writing/ Pronunciation/ Organizational patterns In a Text
Vocabulary and Grammar:	Capitalization/ Punctuation/ Use the Aspect of Time

Oral Communication Skills: Oral Discussion & Short Stories/ Dialogues

Writing Skills: Precis Writing/ Objective Summary

### **Unit No.10 The Punishment of Shahpesh, The Persian, on Khipil, the Builder**

Theme/Sub-Theme: Soft Skills/ Decision Making

Reading and Critical Thinking: Comprehension Questions/

Vocabulary and Grammar: Using the Sentence Patterns/Context Clues

Oral Communication Skills: Oral Discussion/Dialogues

Writing Skills: Writing Narrative Story

### **Unit No.11 Those Winter Sundays (Poem)**

Theme/Sub-Theme: Human Relationships

Reading and Critical Thinking: Comprehension Questions/ Choose the Correct Option

Vocabulary and Grammar: Dictionaries and Thesaurus/Writing in Different Varieties of Texts

Oral Communication Skills: Presentation/Speech

Writing Skills: Writing a Dialogue

### **Unit No.12 The Impact of AI on Society, Human Relationships, and Ethics**

Theme/Sub-Theme: Digital Media

Reading and Critical Thinking: Comprehension Questions

Vocabulary and Grammar: Word maps Change Tense in indirect/ Direct Speech

Oral Communication Skills: Role-play/ Interview/ Discussion

Writing Skills: Writing a Short Story

### **Unit No.13 Ruba'iyat (Poem)**

Theme/Sub-Theme: Literature & Poetry/ Spiritualism

Reading and Critical Thinking: Comprehension Questions/ Summary

Vocabulary and Grammar: Change Tense In Indirect/ Direct Speech

Oral Communication Skills: Mind-map

Writing Skills: Writing a Descriptive Composition

### **Unit No.14 The End of the Beginning**

Theme/Sub-Theme: Literature & Poetry/ Gender Role

Reading and Critical Thinking: Comprehension Questions/ Plot Development Review

Vocabulary and Grammar: Inferred Meaning in Context Sentence

Oral Communication Skills: Oral Discussion

Writing Skills: Applying Editing and Proofreading Skills

**Recommended Book:** English Part-I

**Authors:**

- Aamna Aamad
- Malik Karrar Hussain Jakhar
- Shazia Manzoor
- Rubia Younas
- Zahida Batool
- Safdir Hussain

**Printed by:** Ishaq Al Fateh Press

**Published by :** Maktaba-i-Raheemia

**Punjab Education , Curriculum, Training And Assessment Authority**

Marks : 100	CLASS XII (PART II)	Time : 3:00 hours
1- Book II (Modern Prose and Heroes)	(15+15)	30
2- <b>Novel:-</b>		20
3- <b>Composition:-</b>		15
(Descriptive and Narrative Essays consisting of 300 to 400 words)		
4- <b>Applied Grammar:-</b>		20
A) Correction of Common Errors	B) Direct and indirect narration	
C) Use of Prepositions.	D) Phrases of current usage. (Idioms)	
5- <b>Translation:-</b>		15
(A Continuous Prose Passage from Urdu into English)	OR	Total 100
6- Candidate whose medium of examination is English will write a paragraph on.....		

### **Intermediate English Book – II**

**Publishers:** 1. Niaz Book Depot 2. Tariq Publishing House 3. Wajid Ali

**Author:** Dr. Muhammad Sadiq **Editor:** Mrs. S.M. Suleri



## ENGLISH GRAMMER AND COMPOSITION

### Chapter 1— Parts of Speech

#### Nouns

##### Kinds of Nouns

Proper Nouns and Common Nouns

Countable Nouns

Material Nouns

Compound Nouns

#### Pronouns

##### Types of Pronouns

Indefinite Pronouns

Reflexive Pronouns

Possessive Pronouns

Interrogative Pronouns

Intensive Pronouns/ Emphatic Pronouns

#### Verbs

##### Types of Verbs

Action Verbs

Transitive Verbs

Stative Verbs

Phrasal Verbs

Irregular Verbs

Subject -Verb Agreement

#### Adjectives

##### Comparison of Adjectives

Positive Degree of an Adjective

Superlative Degree of an Adjective

Formation of Comparative and Superlative Adjectives

#### Adverbs

##### Kinds of Adverbs

#### Prepositions

##### Types of Prepositions

#### Conjunction

##### Classes of Conjunctions

Co-ordinating Conjunctions

Correlative Conjunctions

#### Interjection

Grammar Exercise — 1

### Chapter 2 — Punctuation

#### Punctuation

Full Stop [ . ]

Question Mark [ ? ]

Exclamation Mark [ ! ]

Apostrophe [ ' ]

Grammar Exercise — 2

### Chapter 3 — Tenses

#### Tenses

##### Present Tense

Forms of the Present Tense

##### Past Tense

Forms of the Past Tense

Past Tense Verbs with the Past and Past Participle Forms

##### Future Tense

Forms of the Future Tense

Grammar Exercise — 3

Collective Nouns

Uncountable Nouns

Abstract Nouns

Personal Pronouns

Demonstrative Pronouns

Relative Pronouns

Reciprocal Pronouns

Distributive Pronouns

Auxiliary Verbs

Intransitive Verbs

Modal Verbs

Regular Verbs

Linking Verbs

Comparative Degree of an Adjective

Formation of Adverbs

Kinds of Prepositions

List of Prepositions with Usage and Sentences

Subordinating Conjunctions

Comma [ , ]

Colon [ : ]

Semicolon [ ; ]

Quotation Marks [ " 15 ]

Structure of the Present Tense

Structure of the Past Tense

Structure of the Future Tense

**Chapter 4 — Correction of Common Errors**

Correction of Common Errors

Pronoun Errors

Redundancy

Lacking Parallel Structure

Faulty Comparisons

Grammar Exercise — 4

Lack of Subject-Verb Agreement

Mistakes in Apostrophe's Usage

Misplaced Modifiers

Comma Splice

**Chapter 5 — Sentences**

Sentence

Sentences on the Basis of Function

Declarative Sentences

Imperative Sentences

Interrogative Sentences

Exclamatory Sentences

Sentences on the Basis of Structure

Simple Sentence

Complex Sentence

Compound Sentence

Compound-Complex Sentence

Grammar Exercise — 5

**Chapter 6 — Direct and Indirect Speech**

Direct and Indirect Speech

Direct Speech

Indirect Speech

Rules for Conversion of Direct Speech to Indirect Speech

Conversion of Direct Speech to Indirect Speech — Reporting Verb

Change of Present Tenses

Change of Past Tenses

Change of Future Tenses

Change of Modal Verbs

Conversion of Interrogative Sentences from Direct Speech to Indirect Speech

Conversion of Imperative Sentences from Direct Speech to Indirect Speech

Conversion of Exclamatory Sentences from Direct Speech to Indirect Speech

Conversion of Wish (Optative Sentences) from Direct Speech to Indirect Speech

Change of Pronouns

Change of Typical Words of Time and Place

Grammar Exercise — 6

**Chapter 7 — Pair of Words**

14 Pair of Words

Grammar Exercise — 7

**Chapter 8 — Idioms**

15 Idioms

Grammar Exercise — 8

**Section 2 — Composition****Chapter 9 — Stories**

Stories with Moral Lessons, Honesty is the Best Policy, A Friend in Need is a Friend Indeed, Union is Strength, The Mouse and the Lion, The Foolish Stag, The King and the Spider, Greed is a Curse, As You Sow, So Shall You Reap, Look Before You Leap, The Thief and His Mother, The Hare and the Tortoise, The Crow and the Pitcher, A Stitch in Time Saves Nine, A Rolling Stone Gathers No Moss, An Arab and His Camel, The Bee and the Dove, The Little Fish, The Hen that Laid Golden Eggs, The Wolf and the Lamb, King Midas and the Golden Touch, The Boy Who Cried Wolf, A Wise Counting, The Blue Jackal

**Chapter 10 — Letters and Applications**

Letters and Applications, Introduction, Kinds of Letters, Parts of a Letter, Format of Formal/ Informal Letter, Formal Letters, Tips for Writing an Application, Application for sick leave, Application for full fee concession, Application for character certificate, Application for a scholarship, Application for the refund of library security fee, Application for an urgent piece of work, Application for leave to attend to the sick mother, Application for leave to attend a funeral, Application for the remission of absence fine, Informal Letters, Tips for Writing an Informal Letter, Letter to your friend requesting him to spend summer vacation with you, Letter to your friend about the profession you want to adopt, Letter to your younger brother advising him how to improve his English language, A Rolling Stone Gathers No Moss, An Arab and His Camel, The Bee and the Dove, The Little Fish, The Hen that Laid Golden Eggs, The Wolf

and the Lamb, King Midas and the Golden Touch, The Boy Who Cried Wolf, A Wise Counting, The Blue Jackal

### **Chapter 10 — Letters and Applications**

Introduction, Kinds of Letters, Parts of a Letter, Format of Formal/ Informal Letter, Letter to your father telling him about your health and studies, Letter to your younger brother advising him to avoid bad company and pay attention to studies, Letter to your friend to borrow books from him, Letter to your mother about your performance in the examination, Letter to your father/ mother about your ft day at college, Letter to your father requesting him to allow you to join the educational tour, Letter to your mother/ father justifying your poor performance in the examinati, Letter to your father requesting him to hire a private tutor for you, Letter to your friend advising him to participate in games and physical activities, Letter to your friend inviting him to attend the marriage ceremony of your sister, Letter to your friend who had an accident, Letter to your friend telling him about your performance in the examination, Letter to your friend condoling with him on his father's death

Exercise — 10

### **Chapter 11 — Translation**

Rules of Translation from Urdu into English and from English into Urdu, Translation from Urdu into English, Translation from English into Urdu, Exercise (Translation from Urdu into English) — 11.1, Exercise (Translation from English into Urdu) — 11.2

### **Chapter 12 — Paragraph**

#### **Paragraph Format**

**Four Types of Paragraphs:** Narrative Paragraph, Descriptive Paragraph, Expository Paragraph, Persuasive/Argumentative Paragraph.

**Sample Paragraphs:** Spring Season, My Best Friend, My Favourite Personality, My Hobby, A Hot Day in Summer, Mobile Phone, Corruption, Terrorism, Smog, Poverty

### **Chapter 13 — Essays**

Structure of an Essay - Tips for Essay Writing - Internet - Traffic Problems in Big Cities - A Visit to a Zoo - Village Life - My Last Day at College - Advantages and Disadvantages of Cell Phones – Festivals - A Rainy Day - My Favourite Personality – Terrorism - A Road Accident – Examinations - Education System of Pakistan - Atomic Energy – Pollution - The Dignity of Labour - Uses of Science – Patriotism – Beggary - Why I Love My Country - My Aim in Life - A Journey by Train - A Visit to a Hill Station - Hostel Life - A Visit to a Fair - A Visit to a Historical Place - My Hobby - Women Empowerment - Smog





## نصاب تعلیمات اسلامی (لازمی)

کل نمبر: 50

(برائے جماعت گیارہویں)

وقت: 2:00 گھنٹے

- باب اول: قرآن مجید و حدیث نبوی ﷺ خاتم النبیین ﷺ (الف) علوم القرآن (ب) علوم الحدیث
- باب دوم: ایمانیات و عبادات (1) ایمانیات: (الف) توحید کے دلائل اور تقاضے (ب) رسالت محمدی ﷺ خاتم النبیین ﷺ کی خصوصیات (ج) ملائکہ پر ایمان (د) کتب سماویہ پر ایمان (ه) آخرت پر ایمان (2) عبادات: (الف) فلسفہ نماز (ب) فلسفہ زکوٰۃ و صدقات (ج) فلسفہ صوم (د) فلسفہ حج و قربانی
- باب سوم: سیرت نبوی ﷺ خاتم النبیین ﷺ (الف) نبی کریم ﷺ خاتم النبیین ﷺ کی بطور مثالی سربراہ خاندان (ب) نبی کریم ﷺ خاتم النبیین ﷺ کی بطور مثالی سربراہ ریاست (ج) نبی کریم ﷺ خاتم النبیین ﷺ کی بطور مثالی سپہ سالار (د) نبی کریم ﷺ خاتم النبیین ﷺ کی معاشی تعلیمات
- باب چہارم: اخلاق و آداب (الف) اجتماعی خیر خواہی اور احترام انسانیت (ب) اخلاقی ردائل سے اجتناب (ج) معاشرتی تعلقات کے اخلاق و آداب
- باب پنجم: حسن معاملات و معاشرت (الف) حقوق العباد (اساتذہ کرام، معاون عملہ، زوجین، اولاد، بیوہ) (ب) وراثت کی اسلامی تعلیمات (ج) نکاح و طلاق کی اسلامی تعلیمات
- باب ششم: ہدایت کے سرچشمے اور مشاہیر اسلام (الف) خلافت راشدہ (ب) ائمہ اہل بیت اطہار رضی اللہ تعالیٰ عنہم (ج) صوفیہ کرام رحمۃ اللہ علیہم (پیر سید مہر علی شاہ رحمۃ اللہ علیہ، میاں شیر محمد شر قپوری رحمۃ اللہ علیہ)
- باب ہفتم: اسلامی تعلیمات اور عصر حاضر کے تقاضے (الف) قانون کی پاسداری (ب) نظام اسلام کی نشاۃ ثانیہ اور مسلمانوں کی ذمہ داریاں (ج) اسلاموفوبیا اور ہماری ذمہ داریاں

- مجوزہ کتاب: اسلامیات (لازمی) برائے (گیارہویں جماعت)
- مصنفین: • پروفیسر ڈاکٹر شہباز منج • ڈاکٹر فخر الزمان • پروفیسر ڈاکٹر محمد اکرم ورک • ڈاکٹر شاہ عبدالرؤف • ڈاکٹر محمد اویس سرور • محمد صفدر جاوید • ڈاکٹر سلطان سکندر • ڈاکٹر محمد منشاء طیب
- ناشر: حسن بک سنٹر، لاہور مطبع: شخصیت پرنٹرز، لاہور
- برائے: پنجاب ایجوکیشن، کرکولم، ٹریننگ اینڈ اسسٹنٹ اتھارٹی



## PAKISTAN STUDIES (Compulsory)

Marks : 50

CLASS XII

Time : 2:00 hours

### Chapter 1. ISLAM AND PAKISTAN

1. Islam as the Ideological Base of Pakistan
2. The Sunnah of Hazrat Muhammad ﷺ
3. Basic Principles of Islam
4. Definition and Functions of an Islamic Welfare State
5. Basic Principles of an Islamic Welfare State
6. Pakistan as a Modern Islamic State Delineated by Quaid-e-Azam Muhammad Ali Jinnah (رحمۃ اللہ علیہ), Allama Muhammad Iqbal (رحمۃ اللہ علیہ), Liaqat Ali Khan and Objectives Resolution
7. Objectives Resolution
8. Islam and Modernism
9. Promotion of Peace, Tolerance and Co-Existence in Islam

### Chapter 2. POLITICAL AND CONSTITUTIONAL DEVELOPMENT

1. Progress and Problems of Democracy in Pakistan
2. Role of Political Parties in Promoting of Democracy in Pakistan
3. Salient Features of the Constitution of 1956
4. Salient Features of the Constitution of 1962
5. Reasons and Impacts of Separation of East Pakistan
6. Salient Features of the Constitution of 1973
7. Federal Structure under the Constitution of 1973
8. Structure of Provincial Governments
9. Role of Judiciary in Pakistan under the Constitution of 1973
10. Fundamental Rights under the Constitution of 1973
11. Islamic Provisions under the Constitution of 1973
12. Important constitutional Amendments

### Chapter 3. ADMINISTRATIVE SYSTEM

1. Functions of Federation and Provinces in the Light of the Constitution of 1973
2. Difference between Function of Central and Provincial Governments
3. Administrative Structure and Functions of Azad Jammu and Kashmir and Gilgit Baltistan
4. Nature of the Relationship between the Federal and Provincial Governments
5. Relations between the Federation and the Provinces
6. Mutual Relationship between Provincial and Local Governments
7. Structure of Different Levels of Local Government
8. Rural Areas
9. Urban Areas
10. Functions of Local Governments at Various Levels
11. Functions of the Metropolitan / Municipal Corporation

**Chapter 4. HUMAN RIGHTS**

1. Concept of Human Rights
2. Islamic Concept of Human Rights
3. Citizen's Rights in Islam
4. United Nations Universal Declaration of Human Rights
5. Comparison of the Rights Granted under the Constitution of Pakistan and the Human Rights of the United Nations
6. Nature of Basic Human Rights in Pakistan
7. Human Rights at National and International Level

**Chapter 5. EDUCATION SYSTEM OF PAKISTAN**

1. Concept of Education
2. Goals of Education System of Pakistan
3. Main Features of Education System of Pakistan (Primary, Elementary, Secondary, Higher Secondary and Professional Education)
4. Professional, Technical and Vocational Education in Pakistan.
5. Education System of Pakistan with Reference to General Education
6. Concept of Education in Pakistan
7. Challenges of Education in Pakistan
8. Suggestions for Resolving Educational Problems

**Chapter 6. SPORTS AND TOURISM**

1. Importance of Sport in a Society
2. Profile of Pakistan in World Sports
3. Indoor Games
4. Indigenous Games of Pakistan
5. Other Games

**Prescribed Book:** **Pakistan Studies** (Urdu & English Version)

**Authors:** 1.Prof. (R) Dr. Sultan Khan      2.Prof. Dr. Nouman Aftab Dar  
3.Prof. Dr. Amir Ali      4.Prof. Rana Muhammad Asghar Meo

**Published by:** Eagle Book Centre, Mandi Bahauddin

**Printed by:** Qudrat Ullah Printers, Lahore



## اخلاقیات لازمی (ETHICS)

(غیر مسلموں کیلئے متبادل تَرْجَمَةُ الْقُرْآنِ الْمَجِيدِ)

وقت: 2:00 گھنٹے	(برائے جماعت گیارہویں)	کل نمبر 50
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- 1- مذاہب کا تعارف  
مذہب کی تعریف مختلف ماہرین کی نظر میں  
مذہب کی سماجی، فلسفیانہ اور نفسیاتی تفہیم  
مذہب کی جامع تعریف  
مذہب پر معاشرے کے اثرات
- 2- پاکستان میں مختلف مذاہب  
اسلام  
مسیحیت
- 3- اخلاقی اقدار  
اجتماعی عدل اور مساوات  
معاشرتی ادارے (• ریاستی ادارے • سماجی ادارے)
- 4- آداب  
کام کی جگہ کے آداب  
خدمت گار کے آداب  
ملاقاتی کے آداب
- 5- مشاہیر  
عبد الستار ایدھی  
مدثریسا  
جمشید سروان جی مہتا
- 6- فرہنگ  
مصنفین:  
ناشر:  
ڈاکٹر عبداللہ شاہ ہاشمی  
افعیصل ناشران کتب، لاہور  
ڈاکٹر محمد شفیع مرزا

## اخلاقیات لازمی (ETHICS)

(غیر مسلموں کیلئے متبادل تَرْجَمَةُ الْقُرْآنِ الْمَجِيدِ)

وقت: 2:00 گھنٹے	(برائے جماعت بارہویں)	کل نمبر 50
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- 1- مذاہب کا تعارف  
مذہب کی تعریف مختلف ماہرین کی نظر میں  
وحدت ادیان کا تصور  
مذہب اور دین کی تعریف  
مذہب اور سائنس
- 2- پاکستان میں مختلف مذاہب  
سناتن دھرم / ہندو دھرم  
زرشتشت مذہب  
سکھ مذہب
- 3- اخلاقی اقدار  
معاشرتی ادارے (مذہبی / تعلیمی)  
کام کی جگہ پر وقت کی اہمیت
- 4- آداب  
کام کی جگہ کے آداب  
انتظامیہ اور آداب  
ما تحت عملہ اور آداب
- 5- مشاہیر  
نیلسن منڈیلا  
ڈاکٹر محمد یونس  
نجیب محفوظ
- 6- فرہنگ  
مصنفین:  
ناشر:  
ڈاکٹر عبداللہ شاہ ہاشمی  
بک سیلز انٹر نیشنل، لاہور  
ڈاکٹر محمد شفیع مرزا



## تَرْجَمَةُ الْقُرْآنِ الْمَجِيدِ

وقت: 02:00 گھنٹے	پارٹ - I (جماعت گیارہویں)	کل نمبر: 50
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## فہرست عنوانات

- 1- قرآن مجید کے آداب
  - 2- ہدایات برائے اساتذہ کرام
  - 3- مقاصد تدریس
  - 4- سُورَةُ الْبَقَرَةِ: تعارف اور خصوصیات
  - 5- سُورَةُ الْبَقَرَةِ: مضامین اور اہم نکات
  - 6- سُورَةُ الْبَقَرَةِ: متن و ترجمہ
  - 7- سُورَةُ الْبَقَرَةِ: مشق
  - 8- سُورَةُ آلِ عَمْرٍ: تعارف اور خصوصیات
  - 9- سُورَةُ آلِ عَمْرٍ: مضامین اور اہم نکات
  - 10- سُورَةُ آلِ عَمْرٍ: متن و ترجمہ
  - 11- سُورَةُ آلِ عَمْرٍ: مشق
  - 12- سُورَةُ الْأَنْفَالِ: تعارف اور خصوصیات
  - 13- سُورَةُ الْأَنْفَالِ: مضامین اور اہم نکات
  - 14- سُورَةُ الْأَنْفَالِ: متن و ترجمہ
  - 15- سُورَةُ الْأَنْفَالِ: مشق
  - 16- سُورَةُ التَّوْبَةِ: تعارف اور خصوصیات
  - 17- سُورَةُ التَّوْبَةِ: مضامین اور اہم نکات
  - 18- سُورَةُ التَّوْبَةِ: متن و ترجمہ
  - 19- سُورَةُ التَّوْبَةِ: مشق
  - 20- ماڈل پیپر برائے جماعت گیارہویں
  - 21- رموز و اوقاف قرآن مجید
  - 22- تصدیقی سرٹیفکیٹ
- درسی کتب کا نام: تَرْجَمَةُ الْقُرْآنِ الْمَجِيدِ (برائے گیارہویں جماعت)
- بک ڈویلپر: جدید ایجوکیشنل سروسز، لاہور

## تَرْجَمَةُ الْقُرْآنِ الْمَجِيدِ

وقت: 02:00 گھنٹے	پارٹ-II (جماعت بارہویں)	کل نمبر: 50
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## فہرست عنوانات

- 1- تلاوت قرآن مجید کے آداب
- 2- عمومی ہدایات
- 3- حاصلاتِ تعلیم
- 4- سُورَةُ النَّسَاءِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 5- سُورَةُ الْمَائِدَةِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 6- سُورَةُ التَّوْبَةِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 7- سُورَةُ الْأَحْزَابِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 8- سُورَةُ مُحَمَّدٍ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 9- سُورَةُ الْفَتْحِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 10- سُورَةُ الْحُجُرَاتِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 11- سُورَةُ الْحَدِيدِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 12- سُورَةُ الْمَجَادَلَةِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 13- سُورَةُ الْحَشْرِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 14- سُورَةُ الْمُمْتَحِنَةِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 15- سُورَةُ الصَّفِّ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 16- سُورَةُ الْجُمُعَةِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 17- سُورَةُ الْمُنْفِقُونَ: تعارف، مرکزی موضوع اور بنیادی مضامین
- سُورَةُ التَّغَابُنِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- سُورَةُ الطَّلَاقِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- سُورَةُ التَّحْرِيمِ: تعارف، مرکزی موضوع اور بنیادی مضامین
- 18- ماڈل پیپر
- 19- رموز اوقاف
- 20- سرٹیفکیٹ

محمد صفدر جاوید

مضنفین: ڈاکٹر فخر الزمان

(برائے بارہویں جماعت)

درسی کتب کا نام: تَرْجَمَةُ الْقُرْآنِ الْمَجِيدِ

تیار کردہ: پنجاب کریکولم اینڈ ٹیکسٹ بک بورڈ، لاہور



**HISTORY**

There will be two papers of 100 marks each

**آپشن i- تاریخ اسلام**

پارٹ-I	(جز اول عہد رسالت، جز دوم خلافت راشدہ، جز سوم بنو امیہ)	100 نمبر
پارٹ-II	بغداد کی خلافت بنو عباس	100 نمبر

یا

پارٹ-I	اندلس میں مسلمانوں کی حکومت	100 نمبر
مجزوہ کتاب: پارٹ-I	تاریخ اسلام مطبوعہ سرحد ٹیکسٹ بک بورڈ، پشاور	
	(جو پنجاب ٹیکسٹ بک بورڈ، لاہور کے سیل ڈپو سے میسر ہے)	

**آپشن ii- تاریخ اسلامی ہند**

پارٹ-I	(عہد سلاطین ۱۲ء تا ۱۵۲۶ء)	
پارٹ-II	(عہد مغلیہ ۱۵۲۶ء تا ۱۸۵۷ء)	
	تاریخ اسلامی ہند (عہد سلاطین)	
ناشر:	ٹیکنیکل پبلشرز، اردو بازار، لاہور (برائے پنجاب ٹیکسٹ بک بورڈ، لاہور)	

**آپشن iii- تاریخ پاکستان**

پارٹ-I	(۱۸۵۷ء تا ۱۹۴۷ء)	100 نمبر
پارٹ-II	(۱۹۴۷ء تا ۱۹۷۳ء)	100 نمبر

**آپشن iv- تاریخ جدید دنیا**

پارٹ-I	(۱۹۰۴ء تا ۱۹۴۵ء)	100 نمبر
پارٹ-II	(۱۹۴۵ء تا ۱۹۷۳ء)	100 نمبر

نوٹ:- اوپر دیے گئے Options میں سے ایک Option لینا ہوگا۔

## CURRICULUM OF ISLAMIC HISTORY

<b>Marks : 100</b>	<b>Sequence Chart: Paper-I Per-Islamic Arabia</b>	<b>Time: 3 Hours</b>
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### CHAPTER-I

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHTAGE	RESOURCE MATERIAL
<b>1. COGNITIVE</b> Knowledge of the Conditions of Per-Islamic Arabian society.  <b>2. Knowledge of miseries of Arabs before the birth of Holy Prophet ﷺ</b>	Ignorance corruption Morality Shirk, Murder Endless-war Good-qualities (Heroism Hospitality Literary qualities). Memory Racial and Linguistic Pride).	The land and people of Arabia, Religious political, Social Economic Cultural Conditions.	<b>1. Per-Islamic Arabia, 5%.</b>  <b>2. Makkah life 12% out of 33.</b>  <b>3. Madina life 16% out of 33.</b>	<b>A</b> 1. Map of the world showing the location of Arabia.  2. Map of Asia. 3. Map of Arabia. 4. Map of Africa.  <b>B</b> 1. Group 2. Discussions Seminars

#### AFFECTIVE

To create feelings of repulsion against all that is evil and immoral  
 Appreciation of the re-deeming features of the Arabian Society them  
 Psychomotor Skill to draw map of Arabia.

### EARLY LIFE OF RASULULLAH ﷺ

### Chapter-II

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHT AGE	RESOURCE MATERIAL
<b>COGNITIVE</b> <b>1. Knowledge of the early life of Rasulallah ﷺ</b> Knowledge of his family <b>2. background.</b> Acquaintance with the <b>3. noblest virtues of Rasulallah ﷺ</b> Significance of the first revealed word. <b>4.</b>	<b>1. Truthfulness</b> <b>2. Trust</b> <b>3. Worthiness</b> Care for oppressed	<b>1. Birth and family background of Rasulallah ﷺ</b> <b>2. Before of NUBUWAH</b> <b>3. After declaration of NUBUWAH</b>		Genealogy of Rasulallah ﷺ upto Adnan Picture of Jable-e- Noor declaration Picture of Cave Hira.  Picture of Place of birth of Rasulallah ﷺ  Discussion Seminars
<b>AFFECTIVE</b> To inculcate reverence and affection for Rasululla ﷺ Appreciation of the virtues of Rasulallah ﷺ To inculcate spirit to follow Rasulallah ﷺ				
<b>PSYCHOMOTOR</b> <b>1. Collect relevant information</b> <b>2. Skill to make chart.</b>				



## PROGRESS OF ISLAM AT MAKKAH

### Chapter-III

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHT AGE	RESOURCE MATERIAL
<b>COGNITIVE</b>				
1. Knowledge of the various aspects of the Makkah life of Rasulallah ﷺ	1. Perseverance	1. Beginning of Mission and opposition from Quresh		1. <b>Charts:</b> Chronological order of events from early life
2. Acquaintance with essence of the teaching of Islam.	2. Forbearance	2. Early Muslims and their sufferings and its importance.		2. <b>Maps:</b> showing the important areas and cities and tribes of the peninsula.
3. Awareness of the great sufferings of the early converts	Unity			
4. Significance of Miraj.	Cohesion, Leadership, Elevation of Human-Capacities.	3. Emigrations to Habsha.		
	Fulfillment of pledges.	Journey to Taif. Miraj		
<b>AFFECTIVE</b>				
1. Appreciation for Tableegh.		The pledges of Aqaba Importance		3. Panel discussion and Seminars
2. To create spirit of self-sacrifice and self revival.		Rasulallah ﷺ		
3. To prepare for undergoing sufferings for righteous		Makkah life, Teachings		
<b>PSYCHOMOTOR</b>				
1. Ability to pick out selected information				
2. skill to draw maps of Saudi Arabia and Habsha.				

## PROGRESS OF ISLAM AT MADINA

### Chapter-IV

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHT AGE	RESOURCE MATERIAL
<b>COGNITIVE</b>				
1. Knowledge of about Hijrat.	Hijrat and	Hijrat and its significance		The first written constitution of the world
2. Understanding. Importance of Brotherhood.	Muwakhat.	Brotherhood		
3. Acquaintance with the Ghazwat.	Jihad	i- Mithaq of Madina ii- Battle of Badr, Uhud, Ahzab, Khyber, Hunain, Tabuk.		
4. Knowledge about charter and Treaties.	Dignity of Labour	Relations with Jews.		
	Adlo Ihsan	Bait-e-Rizwan conquer of Makkah Message to Rulers. Year of deputations, farewell (Pilgrimage) the last sermon and Its significance.		
<b>AFFECTIVE</b>				
1. Appreciation of the glorious services of the Early Muslims towards the cause of Islam under adverse circumstances.	Forgiveness			
2. Appreciation of Brotherhood.	Duties towards Allah, Right & Duties of human beings.			
3. Awareness of obedience and loyalty to the commands of ALLAH and his Prophet ﷺ				
<b>PSYCHOMOTOR</b>				
1. Ability to draw maps of all the battles.				

## SEERAT-UL-NABI ﷺ

## Chapter-V

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHTAGE	RESOURCE MATERIAL
<b>COGNITIVE</b>	Equality.	(i) As a prophet.		Book on
1. Knowledge of the various aspects of the personality of Rasulullah ﷺ	Fraternity.	(ii) As a perfect man		Seerat-un-Nabi.
2. Knowledge of his contribution towards the betterment of human society.	Care for slaves.	(iii) As a founder of Ummah		ﷺ
3. Recognition of Holy Prophet ﷺ As a world leader.	Emancipation slave.	(iv) As an Administrator, Preacher and Educator.		
4. Knowledge of Islam as a complete code of life.	Education.	(v) Law giver		
<b>AFFECTIVE</b>	Human relations.	(vi) As a general		
1. Appreciation for the equality and fraternity preached by the Holy Prophet ﷺ	Transformation of society.	As a statesman		
2. Appreciation for the status of woman in Islam.	Uplift of status of women and other oppressed sections of the society.			
3. Learning to lead life according to Sunnah				
<b>PSYCHOMOTOR</b>				
1. Ability to acquaint Seerat-un-Nabi. ﷺ				
2. Capability to deliver speeches on Seerat-un-Nabi. ﷺ				
3. Ability to pickout relevant information on Seerat-un-Nabi. ﷺ				

## PART-I KHILAFAT-E-RASHIDAH

## Chapter-IV

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHTAGE	RESOURCE MATERIAL
<b>COGNITIVE</b>	Khilafat (Shura)	Khilafat-e-Rashidah	1. Being one portion of three parts 33/100 are being assigned to this part.	<b>1. CHARTS</b>
1. Knowledge of the status of the companions of Rasulullah ﷺ	Spirit of Jihad		2. Personalities 9/33	(a) Chronological order of events under the Caliphs.
2. Knowledge regarding the succession of the Pious Caliphs.	3. Preaching of Islam		3. Jihad and expansion 8/33	(b) Conquest and expansion in chronological order.
3. Knowledge about the sacrifices and efforts of the Caliphs towards Jihad. Establishment of righteous society and welfare state.	Spiritual and moral uplift of the society.		4. Administration 8/33	<b>2. MAPS</b>
4. Knowledge about the propagation of Islam and expansion of the territories, during Khalafat-e-Rashtdah.	Socio-economic Justice.		5. Preaching of moral and spiritual values 8/33	(a) Showing routes of Jihad & conquests through arrows.
5. Knowledge about the working of shura.				(b) Showing period wise conquests of areas and their consolidation.
<b>AFFECTIVE</b>				<b>3. Group discussions.</b>
1. Appreciation of the Spirit of Jihad.				
2. Appreciation of the moral and spiritual up-lift of the society during Khilafat-e-Rashidah.				
3. Appreciation of the efforts of the Pious Caliphs towards the Government machinery.				
<b>PSYCHOMOTOR</b>				
1. Drawing maps and charts.				
2. Ability to participate in the group Discussion.				
3. Ability to discuss salient features of Khilafat-e-Rashidah				

## PART-III Umayya

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHTAGE	RESOURCE MATERIAL
<b>COGNITIVE</b>				
1. Knowledge of Emergence of Umayyads.	1. Emergence of Umayyads	Umayyads of Damascus.	Paper-I consisting of three parts.	Charts
2. Information about the important personalities of the period.	2. Unity of Ummah	Establishment	Overall 30% weightage is given to Umayyads of Damascus details of which are as follows.	(a) Showing routes Jihad expeditions through arrow.
3. Knowledge about the expansion of Islam in three continents.	3. Spirit of Jihad	t Rise.		(b) Showing Period wise conquests of areas and their consolidation.
4. Knowledge about the various disciplines during Umayyads.	4. Preaching of Islam.	Development and decline of Umayyads of Damascus.	(i) Personalities of rulers Governor's Scholars and scientists 10/33.	3. Group Discussion.
	5. Islamic Literature.		(ii) Conquests and consolidation 5/33.	
	6. Establishment of comprehensive system of administration		(iii) Administration 5/33.	
<b>AFFECTIVE</b>			(iv) Reforms 5/33.	
1. Appreciation of the Contribution by Umayyads towards Jihad conquests and development of Islamic literature.			(v) Expansion of Islam 8/33	
<b>PSYCHOMOTOR</b>				
1. Drawing maps and charts.				
2. Ability to participate in Panel discussions.				
3. Ability to consult original historical sources.				

Marks: 100

## PART-II OPT (1) ABBASI OF BAGHDAD

Time : 3 Hours

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHTAGE	RESOURCE MATERIAL
<b>COGNITIVE</b>				
1. Knowledge of emergence of the Abbasies.	1. Khilafat.	Abbasi	1. Personalities Rulers Ulemas Scholars. 30%	1. Charts
2. Knowledge about the important Personalities of the period.	2. Importance of early Abbasi Caliphs in Islamic History	Caliphs of Baghdad	2. Administration / Reforms 20%	a. Chronology of events
3. Knowledge about literary, cultural and scientific development during the period.	3. Relations with Byzantine Empire		3. Cultural, literary & Science fields 16%.	b. Chronology showing famous Ulema, Fugha Muhaddithin Scientists and other writes.
	4. Crusades.		4. Orthodox Scholar Innovators 12%.	2. MAP
1. <b>AFFECTIVE</b>	Development in the various fields of Knowledge.		5. Relation with Christian powers 12%.	Maps showing routes and battle fields during the period of Salah Uddin Ayyubi.
2. <b>PSYCHOMOTOR</b>			6. Integration of Ummah.	3. Panel Discussions
2. Drawing Maps and Charts.				
Ability to participate in Panel Discussions.				
3. Ability to consult original historical Source.				

Marks: 100

**PART-II OPT (II) MUSLIMS IN SPAIN**

Time : 3 Hours

OBJECTIVE	CONCEPTS	CONTENTS	WEIGHTAGE	RESOURCE MATERIAL
<b>COGNITIVE</b>				
1. Knowledge of the circumstances leading to the invasion and conquest of the Peninsula.	1. Invasion	1. Umayyads of Spain	1. PERSONALITIES	1. <b>Charts</b>
2. Knowledge about the establishment of the Umayyads rules in Spain.	2. Establishment of Umayyads Rule.	2. Causes of Their decline.	a. Rulers	(a) Chronology of events
3. Knowledge about the spirit of jihad which led to the continuous warfare against the Christian of the North and even beyond the Pyrenees.	3. Spirit of Jihad.		b. Generals	(b) Chronology and expansion in chronological order.
4. Knowledge of the important, Personalities	4. Preaching of Islam		c. Ulama	
	5. Spirit of toleration Towards Jews and Christian.		d. Scholars	2. <b>MAP</b>
	6. Architecture.		e. Architects	(a) Showing routes of Jihad expeditions through arrows.
	7. Literature.		f. Scientists 20%	(b) Showing period wise consequents of areas.
	8. Scientific Development		2. Conquests and Consolidation 10%	3. Group discussions
			3. Administration 10%	
			4. Reforms 12%	
			5. Preaching of Islam 12%	
			6. Toleration towards non-Muslims 8%	
			7. Cultural Literary and scientific activities 10%	
			8. Spirit of Jihad 10%	
			9. Impact of Islam on European civilization 10%	
<b>AFFECTIVE</b>				
1. Appreciation of the contribution by the Umayyads Caliphs of Spain towards jihad and assimilation of knowledge.				
<b>PSYCHOMOTOR</b>				
1. Drawing Maps and Charts.				
2. Ability to participate in Panel discussion and debates.				
3. Ability to consult original historical source				



**HISTORY OF MUSLIM INDIA**

<b>Marks : 100</b>	<b>CLASS-XI (PART I)</b>	<b>Time: 3 Hours</b>
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**CHAPTER – I ADVENT OF ISLAM IN INDIA****Concepts**

1. Advent of Islam being new code of life. Faith, discipline, Jihad, martyrdom
2. Muslim brotherhood
3. Succession
4. Consolidation
5. Tolerance
6. (The historical events will be discussed by emphasizing the above concepts)

**Contents**

1. Advent of Islam in India
2. Advent of Islam in India from the period of Hazrat Muhammad ﷺ to 712 A.D.
3. Advent of Islam from 712 A.D. onwards. (Advent of Islam will be discussed in the socio-political perspective – the impact of change will be observed.)

**CHAPTER – II GHAZNAVI AND GHAURI DYNASTIES****Concepts**

1. Ghaznavi Dynasty:
2. Sultan Mahmood Ghaznavi.
3. Ghauri Dynasty
4. Sultan Shahabuddin Muhammad Ghauri.

**Contents**

1. Sultan Mahmood Ghaznavi's Rule in the context of:  
Early life – rise to power.  
Expenditions and establishment.  
Socio-cultural impact.  
Fall of Ghaznavi Dynasty.
2. Sultan Shahabuddin Muhammad Ghauri's rule in the context of: Early life. Rise to power, Conquests, Socio-cultural impact, Fall of Ghauri Dynasty

**CHAPTER – III SLAVE DYNASTY****Concepts**

- Turkish Sultans:
1. Consolidation of Muslim Rule.
  2. Concept of gender equity.
  3. Islamization process and some other social achievements during the period of last Turkish Sultan.

**Contents**

1. Role of Qutubud Din Aibak
2. Altamash and Ghiasud Din Balban consolidating Muslim Rule. Specially socio-political and administrative aspects be emphasized. Recognition by Abbasid.
3. Acceptance of female ruler Razia
4. Sultana her brave personality.
5. During Nasir-ul-Din Mehmood's and Ghias-ul-Din Balban's period the important contribution:- Islamic provisions, Justice and equality, Concept of Kinship, Crushing rebellion

**CHAPTER – IV KHILJI'S DYNASTY****Concepts**

- Khiljis
1. Jalalud Din Khilji
  2. Allaud Din Khilji

**Contents**

1. Rise to power
2. Personality as a general and restoration of law and order
3. Expenditions
4. Mangol and Dakan policy
5. Administrative control
6. Fiscal and agricultural reforms

**CHAPTER – V TUGHLAQ RULE****Concepts**

1. Ghazi Malik Ghayasuddin
2. Muhammad Bin Tughlaq
3. Feroze Shah Tughlaq
4. Amir Taimur

**Contents**

1. Rise to power
2. Personality characteristics
3. Innovative schemes in the fields of administration and economy and resultant effects
4. Efforts for an Islamic Welfare State

**CHAPTER –VI SAYYADS AND LODHIS****Concepts**

1. Sayyads Dynasty
2. Social and administrative reforms of
3. Lodhis  
Fall of Lodhis

**Contents**

1. Rise of Sayyads Dynasty
2. Brief introduction of following rules in the perspective of rise of power reforms and consolidation: Bahlol Lodhi, Sikandar Lodhi, Ibrahim Lodhi.  
1<sup>st</sup> battle of Panipat and fall of Lodhis

**CHAPTER –VII OUTSTANDING FEATURES OF SULTANATE PERIOD****Concepts**

1. Sultanate period – some outstanding features.

**Contents**

1. Role of Ulemas
2. Growth of new language
3. Influences of Islamic Architecture
4. The concept of Welfare state
5. Some glimpses of gender equity

**Marks : 100****CLASS-XII (PART II)****Time : 3 Hours****CHAPTER – VIII THE EMERGENCE OF MUGHAL DYNASTY IN INDIA****Concepts****Mughal's Emergence:**

1. Socio-political background
2. Zahirud Din Babar
3. Conquests

**Contents**

1. Socio-political scenario on the eve of Babar's Invasion.
2. Life in Central Asia and his personality characteristics  
Conquests of :  
i. Delhi and Agra  
ii. Battle of Panipat Kannauj Chanderi

**CHAPTER – IX NASIR UD DIN HAMAYUN AND SHER SHAH SURI****Concepts**

1. Nasirud Din Hamayun
2. Sher Shah Suri
3. Recapture of Hamayun

**Contents**

1. Hamayun's accession to power and difficulties.
2. Conflict with Sher Shah and exile-escape to Iran and Afghanistan
3. Personality characteristics
4. Administrative, fiscal and agricultural reforms and works for public welfare
5. The fall of Suri
6. Determination of Hamayun and recapture-battle of Sarhad
7. End of Hamayun rule.

**CHAPTER – X JALAL UD DIN MUHAMMAD AKBAR****Concepts**

1. Accession
2. Expansion of his empire
3. Policies to strengthen the empire
4. Reforms

**Contents**

1. His early life and influence of Bairam Khan.
2. The second battle of Panipat
3. Conquests- Agra, Delhi, Gawaliar, Ajmair, Rajistan, Gujrat, Bengal, Kabul, North Western area, Kashmir, Sindh, Balochistan, Uressa, Kandhar.
4. Religious policies, Din-e-Elahi.
5. Rajput policy
6. Daccan policy
7. Administrative and revenue reforms
8. Art and literature.

**CHAPTER – XI NOOR UD DIN MUHAMMAD JEHANGIR****Concepts**

1. Accession
2. Noor Jehan's role
3. Some other revolts and problems
4. Justice
5. His commitments with Ulemas

**Contents**

1. Accession and role of Ulema especially of Mujadid Alif Sani.
2. Khurram's revolt.
3. Characteristics of Noor Jehan's Personality and her role in administrative affairs.
4. Khurram's and Mehabbat Khan's revolts. Problems in Daccan.
5. Jehangir's justice-equity for all.
6. Implementation status on the demands of Ulemas in relation to his initial commitments, specially about Din-e-Elahi
- 7.

**CHAPTER –XII SHAHAB-UD-DIN MUHAMMAD SHAHJEHAN****Concepts**

1. Shahjehan
1. Contributions
2. Expeditions
3. End of Shahjehan's period

**Contents**

1. Revenue collection system
2. Administrative
3. Architecture
4. Expeditions: Daccan, Central Asia War of succession among his sons and his confinements

**CHAPTER – XIII MOHIY-UD-DIN AURANGZEB ALAMGIR****Concepts**

1. Accession
2. Contributions

**Contents**

1. His early life and accession.
2. Islamization process and its impacts
3. Facing revolts of Jats, Sutnamis, Bandhalays, Sikhs, Rajputs, Marhatas
4. Annexation of Daccan States
5. His personal characteristics

**CHAPTER – XIV OUTSTANDING FEATURE OF MUGHAL PERIOD****Concepts**

1. Educational contribution
2. Reforms
3. Contribution towards world of Arts

**Contents**

1. Introducing a new language.
2. Improving literacy.
3. Expansion of general and specialized education.
4. Anatomy of educational institutions.
5. Reforms in administrative set-up.
6. Revenue and fiscal reforms
7. Architecture.
8. Paintings and music.

مجوزہ کتاب: تاریخ تعلیم اور عہد سلاطین برائے انٹر میڈیٹ کلاسز

مصنفین: 1- شیخ محمد رفیق 2- عبداللہ ملک

برائے پنجاب ٹیکسٹ بک بورڈ، لاہور



## HISTORY OF PAKISTAN

Marks : 100

PART I (1857 TO 1947)

Time : 3:00 hours

- Chapter-I. TWO NATIONS THEORY IN SOUTH ASIA WITH SPECIAL REFERENCE TO THE IDEAS OF ALBERUNI, MUJADDID ALIF SANI & SHAH WALIULLAH**
- Chapter-II. WAR OF INDEPENDENCE, 1857:**
1. Its causes.
  2. Main events with special reference to the role of the people of the areas which now constitute Pakistan.
  3. Aftermath, Govt. India Act, 1858. India Council Act, 1861.
- Chapter-III. SIR SYED AHMED KHAN**
1. His Political ideas and role: Urdu-Hindi controversy.
  2. His Educational & Social Services.
- Chapter-IV. RELIGIOUS & POLITICAL MOVEMENT**
1. Bhramo Samaj
  2. Arya Samaj
  3. Indian National Congress, 1885.
  4. Deoband
  5. Nadvatul Ulama
- Chapter-V. PARTITION OF BENGAL 1905**
1. Causes of the Partition
  2. Hindu reaction
  3. Muslim reaction
  4. Its Annulment, 1911
- Chapter-VI. SIMLA DEPUTATION & THE BIRTH OF ALL-INDIAN MUSLIM LEAGUE**
- Chapter -VII. POLITICAL STRUGGLE**
1. Govt. of India Act, 1892
  2. Minto – Moreley Reforms, 1909
  3. Lucknow Pact, 1916
  4. Government of India Act, 1919
  5. Khilafat Movement
  6. Nehru Report
  7. Jinnah's 14 points
  8. All-Parties Muslim Conference
- Chapter-VIII. ALLAMA IQBAL AND HIS ALLAHABAD ADDRESS, 1930**
- Chapter-IX. CHAUDHARY REHMAT ALI & HIS CONTRIBUTION IN THE PAKISTAN MOVEMENT**
- Chapter-X. ROUND TABLE CONFERENCE & THE GOVERNMENT OF INDIA ACT, 1935**
1. First Round Table Conference
  2. Second Round Table Conference
  3. Third Round Table Conference
  4. Communal Award
  5. Salient Features of Govt. India 1935 Act
  6. Creation of Sind as a separate Province.
- Chapter-XI. ELECTION OF 1937 & CONGRESS MINISTRIES:** Formation of congress Ministries ; and their anti-Muslim Policies
- Chapter-XII. REORGANIZATION OF MUSLIM LEAGUE UNDER QUAID-I-AZAM.**
- Chapter-XIII. THE LAHORE RESOLUTION, 1940**
- Chapter-XIV. TOWARDS PAKISTAN**
1. Cripps Mission
  2. Cabinet Mission
  3. Elections of 1945-46
  4. Interim Government
  5. Third June, 1947 Plan
  6. Birth of Pakistan

مجوزہ کتاب: تحریک پاکستان برائے انٹر میڈیٹ کلاسز

مصنفین: 1- شیخ محمد رفیق 2- عبداللہ ملک

برائے پنجاب ٹیکسٹ بک بورڈ، لاہور



Marks : 100	PART II (1947 TO 1973)	Time : 3 Hours
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**Chapter-I. ESTABLISHMENT OF PAKISTAN & ITS EARLY PROBLEMS**

1. Refugee Problems
2. Administrative & Economic Problems
3. Kashmir Issue and Water Dispute

**Chapter-II. POLITICAL & CONSTITUTIONAL DEVELOPMENTS 1947-58**

1. First Constituent Assembly & Objectives Resolution
2. Second Constituent Assembly: Constitution of 1956 and its working
3. Formation of One Unit

**Chapter-III. AYUB ERA**

1. Causes of the imposition of Martial Law, 1958
2. Constitution of 1962
3. Ayub's Reforms
4. Indo-Pak War 1965

**Chapter-IV. YAHYA'S MARTIAL LAW**

1. Dissolution of One Unit
2. Elections of 1970

**Chapter-V. CONSTITUTIONAL CRISIS OF 1971 & THE SEPARATION OF EAST PAKISTAN**

1. Six points of Sheikh Mujeeb ur Rehman
2. Indian Intervention in East Pakistan
3. Army Action
4. Indian Aggression
5. Separation of East Pakistan

**Chapter-VI. PEOPLES PARTY GOVERNMENT**

1. Immediate Problems
2. P.O.Ws. issue
3. Simla Agreement
4. The Constitution of 1973

**Chapter-VII. FOREIGN POLICY**

## HISTORY OF MODERN WORLD

<b>Marks : 100</b>	<b>PART I (1904 TO 1945)</b>	<b>Time: 3 Hours</b>
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- 1. Introduction to Modern World (Geo-political)**
- 2. Russo-Japanese War 1904-05. Its effects**
- 3. Young Turks (1908)**
- 4. First World War**
  - i. Causes
  - ii. Effects
- 5. Peace Treaties**
  - i. Versailles
  - ii. Sevres and Lausanne
- 6. League of Nations**
  - i. Its formation
  - ii. Objectives
  - iii. Working
  - iv. Its success and failure
- 7. Russian Revolution of 1917**
  - i. Causes
  - ii. Events
  - iii. Effects and Results
  - iv. Role of main leaders
- 8. Rise of Dictatorship in Europe**
  - i. Italy
  - ii. Germany
  - iii. Spain
- 9. Afro-Asian countries**
  - i. Balfour Declaration and Palestine problem
  - ii. Egypt and Arab Nationalism
  - iii. Syed Jamaluddin Afghani and Pan-Islamism
  - iv. Modern Turkey
- 10. Second World War**
  - i. Causes and effects
- 11. United Nations**
  - i. The Atlantic charter
  - ii. Objectives
  - iii. Organs of United Nations (General Assembly, Security Council, International Court of Justice, W.H.O. ILO., UNESCO, UNICEF, F.A.O)
- 12. Personalities**

Mustafa Kamal Atta Turk, Dr. Sun Yat Sen, Saad Zaghlol Pasha, Roosevelt, Churchill, Quaid-i-Azam, Allama Iqbal, Mr. Ghandi, Maulana Muhammad Ali Johar, Sir Syed Ahmed Khan.

<b>Marks : 100</b>	<b>PART II (1945 TO 1975)</b>	<b>Time : 3 Hours</b>
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- 1. Emergence of U.S.A. as world power**
- 2. Rise of Modern China**
- 3. Freedom movements in Asia, Africa and Middle East**
- 4. Regional Defence Pacts**

### NATO, WARSAW, CENTO, SEATO

The Israel and the Arabs

The importance of oil and the world politics

Pakistan and the world with special reference to Islamic Countries

Indo-Pakistan relations

Personalities

- |                         |                       |
|-------------------------|-----------------------|
| i. Mao Tse-Tung         | ii. Chau-en-Lai       |
| iii. Dr. Ahmed Soekarno | iv. Jamal Abdul Nasir |
| v. Shah Faisal          | vi. Eisenhower        |
| vii. J.L.Nehru          | viii. Ho Chi Minh     |
| ix. Gen. De-Gaulle      | x. Marshall Tito      |
| xi. Miss Fatima Jinnah  |                       |



**ECONOMICS**

<b>Marks : 100</b>	<b>CLASS-XI (PART I)</b>	<b>Time: 3 Hours</b>
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**CHAPTER – I NATURE AND SCOPE OF ECONOMICS****Weightage: 15%****Concepts**

1. Nature and scope of Economics
2. Definition and law of Economics

**Contents****A. Introduction**

1. Wants and satisfaction
2. Goods and services
3. Utility and scarcity
4. Economics problems and its nature
5. **Definition by:-** Adam Smith, Alfred Marshall, Loonier Robbins

**B. Meaning of:** Micro Economics,

1. Macroeconomics, positive and normative economics.
2. Economic laws and their nature

**CHAPTER – II CONSUMER'S BEHAVIOUR AND ITS ANALYSIS****Weightage: 10%****Concepts**

1. Consumer's behavior.
2. Utility approach
3. Indifference curve

**Contents**

1. Definition
2. Meaning
3. Rationale
4. The Law of diminishing marginal utility with table and graph
5. The law of equimarginal utility or law of substitution with formula and diagram
6. Indifference curve
  - i- Definition and Characteristics (graphical presentation)

**CHAPTER-III BASIC TOOLS OF STATISTICS AND MATHEMATICS IN ECONOMICS****Weightage: 5%****Concepts**

1. Basic tools of statistics and Mathematics in economics
2. Equation

**Contents**

- i. Variables: Continuous, discontinuous, independent, dependent.
- ii. Linear equation with group
- iii. Quadratic equation
- iv. Simultaneous equations
- v. Statistical data its collection and tabulation

**CHAPTER – IV DEMAND****Weightage: 10%****Concepts**

1. Law of demand and practical uses
2. Demand elasticity

**Contents**

1. Definition
2. Law of demand
3. Demand function and functional equation of demand
4. Movement along with demand curve and shift in demand curve
5. Price elasticity of demand (Arc & point) and methods of measurement
6. Concepts of income elasticity and cross-elasticity of demand
7. Factors influencing the elasticity of demand
8. Practical uses of the concept of elasticity of demand

**CHAPTER –V SUPPLY****Weightage: 10%****Concepts**

1. Law of supply and practical uses
2. Elasticity

**Contents**

1. Definitions stock and supply
2. Law of Supply
3. Supply functions and functional equation of supply

	<ol style="list-style-type: none"> <li>4. Movement along with supply curve and shift in supply curve</li> <li>5. Elasticity of supply and its measurement</li> <li>6. Factors influencing the elasticity of supply</li> <li>7. Practical uses of the concepts</li> </ol>	<b>Weightage: 10%</b>
<b>CHAPTER –VI EQUILIBRIUM</b>	<b>Concepts</b>	<b>Contents</b>
<ol style="list-style-type: none"> <li>1. Equilibrium in demand and supply etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Concept of equilibrium</li> <li>2. Equilibrium of demand and supply</li> <li>3. Equilibrium in price and equilibrium in output</li> <li>4. The effects on equilibrium in price and output due to change in demand and supply</li> </ol>	<b>Weightage: 10%</b>
<b>CHAPTER –VII THEORY OF PRODUCTION</b>	<b>Concepts</b>	<b>Contents</b>
<ol style="list-style-type: none"> <li>1. Theory of production</li> <li>2. Factors of Production</li> </ol>	<ol style="list-style-type: none"> <li>1. Meaning of production</li> <li>2. Characteristics and importance of FOP</li> <li>3. Factors of production:-               <ol style="list-style-type: none"> <li>(a) Land</li> <li>(b) Labour</li> <li>(c) Capital</li> <li>(d) Organization</li> </ol> </li> </ol>	
<b>CHAPTER –VIII SCALES OF PRODUCTION AND LAWS OF RETURNS</b>	<b>Concepts</b>	<b>Contents</b>
<ol style="list-style-type: none"> <li>1. Scales of production</li> <li>2. Laws of Returns</li> </ol>	<ol style="list-style-type: none"> <li>1. Scale of production</li> <li>2. Economies and diseconomies internal and external</li> <li>3. Merits and demerits of large scale (increasing, constant, diminishing) and their relation with the cost of production</li> <li>4. Laws of production (increasing, constant, diminishing) and their relation with the cost of production</li> </ol>	<b>Weightage: 5%</b>
<b>CHAPTER –IX COST OF PRODUCTION</b>	<b>Concepts</b>	<b>Contents</b>
<ol style="list-style-type: none"> <li>1. Cost of production</li> <li>2. Relationships of different cost curves</li> </ol>	<ol style="list-style-type: none"> <li>1. Definition, classification, Fixed and variable.</li> <li>2. Total, average and marginal cost</li> <li>3. Relationship between total, average and marginal cost</li> </ol>	<b>Weightage: 5%</b>
<b>CHAPTER –X REVENUE ANALYSIS</b>	<b>Concepts</b>	<b>Contents</b>
<ol style="list-style-type: none"> <li>1. Application of Revenue curves in price and output determination</li> </ol>	<ol style="list-style-type: none"> <li>1. Definition</li> <li>2. Total, marginal and average revenue under perfect competition and monopoly</li> <li>3. Price and output determination and short and long run under perfect competition and monopoly</li> </ol>	<b>Weightage: 5%</b>
<b>CHAPTER –XI MARKET</b>	<b>Concepts</b>	<b>Contents</b>
<ol style="list-style-type: none"> <li>1. Market Kinds of market</li> </ol>	<ol style="list-style-type: none"> <li>1. Perfect competition and monopoly</li> <li>2. Short run and long run in perfect competition and monopoly</li> </ol>	<b>Weightage: 5%</b>
<b>CHAPTER –XII DISTRIBUTION : FACTORS PRICING</b>	<b>Concepts</b>	<b>Contents</b>
<ol style="list-style-type: none"> <li>1. Factors pricing</li> <li>2. Productivity</li> </ol>	<ol style="list-style-type: none"> <li>1. Rent, meaning, Kinds and Ricardian theory of rent</li> <li>2. Wages definition, meaning, and Kinds. Marginal productivity theory</li> </ol>	<b>Weightage: 10%</b>

3. Interest: Meaning and Kinds
4. Profit : meaning and kinds
5. Difference between profit and interest

Recommended Book: Economics Part-I

**Authors:** 1) Mahmood Ahmad Ch. 2) Azra Ismat Ullah Awan  
**Editors:** 1) Rubina Qamar Qureshi 2) Muhammad Ikram Rana  
**Publisher:** Muhammadi Publisher & Stationers, Lahore.

<b>Marks : 100</b>	<b>CLASS-XII (PART II)</b>	<b>Time : 3 Hours</b>
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### MACRO ECONOMICS

#### CHAPTER –I NATIONAL INCOME

**Weightage: 10%**

##### Concepts

1. National Income
2. When saving is equal to investment
3. Flow of National income
4. Per capita income

##### Contents

1. G.N.P, N.N.P, G.D.P, National Income
2. Methods of computing national income
  - I- Product method
  - II- Income methods
  - III- Expenditure methods
  - IV- Circular flow diagram
  - V- Concept of equilibrium:  
MPC, MPS,  $Y=C+S$ ,  $Y=C+I$
  - VI- Income where  $S=I$

#### CHAPTER –II MONEY

**Weightage: 10%**

##### Concepts

1. Barter system
2. Money
3. Value of money
4. Credit cards

##### Contents

1. Barter system and its difficulties
2. Evolution of money
3. Definition of money
4. Functions of money
5. Kinds of money
6. Instruments of money: (credit cards ATM, Traveler Cheques)
7. Demand for and supply of money
8. Value of money
9. Quantity theory of money (Fisher's equation)

#### CHAPTER –III BANKS

**Weightage: 10%**

##### Concepts

1. Bank
2. Commercial Bank
3. Interest

##### Contents

1. Definition of Bank
2. Kinds and functions of Banks
3. Commercial Banks and their functions with particular reference to credit creation
4. Definition of interest
5. Interest free Banking in Pakistan
6. Case study of Malaysia, Kingdom of Saudi Arabia

#### CHAPTER –IV PUBLIC FINANCE

**Weightage: 10%**

##### Concepts

1. Private finance
2. Public finance
3. Tax revenue
4. Public revenue in Pakistan

##### Contents

1. Public Vs private finances
2. Public revenue and tax culture
  - I- Tax and non-tax revenue
  - II- Principles of taxation
  - III- Kinds of taxation
    - a- Direct and indirect tax
    - b- Progressive and proportional
    - c- An analysis of public revenue in Pakistan

**CHAPTER –V INTERNATIONAL TRADE****Weightage: 10%****Concepts**

1. Foreign trade
2. Domestic trade
3. Balance of payment
4. Balance of trade
5. Meaning and improving role
6. Globalization

**Contents**

1. Differentiation between domestic and foreign trade
2. Advantage and disadvantages of international trade
3. Classical theory of international trade
4. Balance of trade vs. Balance of payment
5. Globalization MNCs, TNCs, WTO

**CHAPTER –VI INTRODUCTION TO PAKISTAN ECONOMY****Weightage: 3%****Concepts**

1. Meaning of economy of Pakistan
2. Components of Pakistan economy

**Contents**

1. Agriculture Sector
2. Trade and Industrial sector
3. Involvement of Stock Exchange
4. Education and Health Sector

**CHAPTER –VII NATIONAL INCOME OF PAKISTAN****Weightage: 10%****Concepts**

National Income  
GNP, GDP, NNP  
Product, personal Income disposable,  
Total Income

**Contents**

1. Its size and sectoral contribution
2. Difficulties in measurement
3. Causes of low per capita income
4. Tax Culture

**CHAPTER –VIII ECONOMIC DEVELOPMENT AND PLANNING****Weightage: 10%****Concepts**

1. Economic Development and Planning

**Contents**

1. Concept of economic development
2. Problems of under development
3. Factors influencing development
4. Quality of life (living standard) with reference to Pakistan
5. Planning in Pakistan with reference to current five years plan
6. Importance and problems in agricultural and industrial sectors of Pakistan and their solution
7. Development of Industries

**CHAPTER –IX COMMUNICATION AND HUMAN RESOURCE DEVELOPMENT****Weightage: 7%****Concepts**

1. Communication and its significance
2. Mobility of labour population
3. Unemployment
4. Population education

**Contents**

1. Traditional communication system.e.g. roads, and transportation, Dry-ports, seaports etc.
2. Modern approaches
3. Computers and Information
  - i. Technology Motorway
  - ii. Role of communication in Pakistan's prosperity
  - iii. Factors affecting productivity of labour
4. Mobility of labours its factors
5. Problems of high rate of population growth and need of population education
6. Population growth its effects and factors
7. Comparison with LPCs and MPCs
8. Labour force, its problem, facts and its remedies
9. Problems of unemployment and under-employment

**CHAPTER –X BANKING IN PAKISTAN****Weightage: 5%****Concepts**

1. Significance and functions of banks in Pakistan

**Contents**

1. Commercial Banks and their functions
2. Role of banking system in economic development
3. State Bank of Pakistan, its functions and importance
4. Money market capital market
5. E-Commerce
6. Inflation Definition and types / causes, consequences and remedies with reference to Pakistan

**CHAPTER –XI PUBLIC FINANCE OF PAKISTAN****Weightage: 5%****Concepts**

1. Public Finance
2. Revenue
3. Zakat
4. Ushr
5. Charity

**Contents**

1. Kinds of taxation in Pakistan
2. Sources of revenue
3. Heads of expenditure of Federal and Provincial governments with reference to latest budget
4. Zakat and its distribution
5. Ushr and charity as instruments of source of revenue and Social Justice

**CHAPTER –XII FOREIGN TRADE OF PAKISTAN****Weightage: 5%****Concepts**

1. Exports
2. Import
3. Regional Organization
4. International Organization
5. Balance of payment
6. Foreign exchange rates

**Contents**

1. Major exports of Pakistan
2. Major imports of Pakistan
3. Balance of payments position of Pakistan
4. Regional and international Organization their role towards Pakistan e.g. ECO, SAARC, WTO
5. Foreign exchange rates

**CHAPTER –XIII ECONOMIC SYSTEM OF ISLAM****Weightage: 5%****Concepts**

1. Islamic Economic System.
2. Different economic system.

**Contents**

1. Elaboration of basic characteristics and instruments of Islamic
2. Economic System
3. Interest free Banking
4. Equality
5. Justice (Social and Economies), Goodness and Ehsan
6. Elimination of wealth concentration and wasteful consumption
7. Austerity/self contentment
8. Implication of ostentation and Hoarding.
9. Comparison between capitalism, socialism and Islamic system

Recommended Book: Economics Part-II

**Authors:** 1) Mian Muhammad Akram

2) Mahmood Ahmad Ch.

**Editor:** Rubina Qamar Qureshi**Publisher:** Imtiaz Book Depot, Lahore.

## GEOGRAPHY

Part-I (Class-XI)  
Theory: 85

Distribution of Marks:

Part-II (Class-XII)  
Theory: 85  
Practical: 30

**Total Marks: 200**

<b>Marks: 85</b>	<b>(PART-I) CLASS-XI</b>	<b>Time:3:00 Hours</b>
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### PHYSICAL GEOGRAPHY

#### 1. Physical Geography:

- |   |   |
|---|---|
| a. Definition, history and scope of Geography | b. Introducing Physical Geography       |
| c. Branches of Physical Geography             | d. Universe, Solar system and the Earth |
| e. Land and Water distribution                |   |

#### 2. Structure of the Earth and Lithosphere:

- |                                    |                    |
|------------------------------------|--------------------|
| a. Internal structure of the Earth | b. Plate Tectonics |
| c. Volcanism                       | d. Earthquakes     |
| e. Rocks                           |                    |

#### 3. Landforms:

- |                            |                               |                  |             |
|----------------------------|-------------------------------|------------------|-------------|
| a. <b>Major Landforms:</b> | i: Mountains                  | ii: Plateaus     | iii: Plains |
| b. <b>Denudation:</b>      | i: Weathering                 | ii: Mass Wasting |             |
| c. Landforms made by river | d. Landforms made by glaciers |                  |             |
| e. Landforms made by wind  | f. Landforms made by waves    |                  |             |

#### 4. Atmosphere:

- |  |  |
|--|--|
| a. <b>Introduction:</b> i: Composition of atmosphere | ii: Structure of atmosphere              |
| b. <b>Atmosphere Temperature:</b>                    | i: Insolation                            |
| ii: Horizontal distribution of temperature           | iii: Vertical distribution of atmosphere |

#### 5. Global Circulation:

- |   |   |
|---|---|
| a. Atmospheric pressure                   | b. Pressure distribution over the earth surface |
| c. <b>Winds:</b>                          |   |
| i: Relationship between pressure and wind | ii: Planetary winds                             |
| iii: Seasonal winds                       | iv: Local winds                                 |
| d. Air masses and their types             | e. Fronts and their types                       |
| f. Cyclones and their types               |   |

#### 6. Atmospheric Moisture:

- |                  |           |
|------------------|-----------|
| a. Humidity      | b. Clouds |
| c. Precipitation |           |

#### 7. Ocean Movements:

- |             |          |
|-------------|----------|
| a. Currents | b. Tides |
| c. Waves    |          |

#### 8. Climatic Regions:

- |                                    |                              |
|------------------------------------|------------------------------|
| a. Introduction                    |                              |
| b. <b>Major Climatic Regions:-</b> |                              |
| i: Equatorial Climatic Region      | ii: Tropical Climatic Region |
| iii: Temperate Climatic Region     | iv: Polar Climatic Region    |

### LIST OF PRACTICALS FOR CLASS XI (PART-I)

1. **Location**
2. **Directions:** Methods of finding directions
3. **Scale:** Types of scale - Measurement of distance between two points by using map scale
4. **Introduction to GIS, GPS and Remote Sensing**
5. **Relief Features:** Methods of showing relief
6. **Convectional Signs**



Time:3:00 Hours

## MILITARY SCIENCE

(There will be two papers of 100 marks each)

(Outlines of tests)

<b>Marks : 100</b>	<b>(PART-I) WAR</b>	<b>Time : 3 Hours</b>
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**AIM:** To create in the students an elementary understanding of the various factors governing war and its conduct.

*Syllabus.*

1. **War:** Aim of war; causes of war, Explanation of terms; strategy, grand strategy, tactics.
2. **Nature of Modern War:** Impact of science on War, Explanation of the terms; total war, limited war, global war, cold war, shooting war.
3. **Principles of War:** Selection and maintenance of the aim, morale offensive action security; surprise; concentration of economy of effort; flexibility; co-operation administration (logistics).
4. **Modern Warfare:** Explanation of tactical concepts; linear warfare; positional warfare mobile warfare, pincer movement, Psychological warfare, Guerrilla warfare, Role of the three services.
5. **Operation of War:** Advance, attack, defence and withdrawal, explaining the terms patrolling out-flanking, vanguard, advance-guard, penetration, counter-penetration, counter-attack, rear-guard and mopping up.
6. **Sinews of War:** Moral, Social, economic, geographic and political.
7. **Modern Weapons of War.**
8. **Steps short of War:** The U.N. especially and General Assembly and the Security Council.
9. **Ethics of War:** The Hague Conferences; the Geneva Convention.

**Prescribed Textbook:-**

“Fundamentals of War” by Col: (Retd.) N.D. Hasan M.A. PCS (M/S National Textbook Corporation Ltd., Lahore) For Punjab Textbook Board, Lahore

**Recommended book:-**

“Jang Ka Ilm-o-Fun” by Maj Gen: Bashir Ahmad.

**Name of Book:** Defence of Pakistan by Major Muhammad Ali.

<b>Marks : 100</b>	<b>(PART-II) Defence of Pakistan</b>	<b>Time : 3 Hours</b>
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1. **The Defence Problems:**
  - a. Our geographical location, terrain and frontiers with the neighbours.
  - b. Relations with our neighbours, with particular reference to India Afghanistan and China. Outstanding disputes of Kashmir and Farrakka.
2. **Foreign Policy.**
  - a. The global situation of Pakistan.
  - b. Objectives of big powers/neighbours in this region and its effects on our defence.
  - c. The foreign policy as a consequence of our defence problem.
  - d. Need for Pakistan's participation in Defence and Regional Pacts.
  - e. Pakistan and the Muslim World. Our relation-ship with the Muslim countries, specially from the point of view of defence. Pakistan's stand for Arab cause. May mention all out help by Turkey Iran and Indonesia to us during the last war of 1965.
3. **Our Military Heritage.**
  - a. Islamic teachings on Jihad.
  - b. Valour of Muslim Armies in War

- c. A short account of War of 1965.
- d. Short narration of the acts of valour and bravery displayed by members of our Armed Forces.
- 4. **PAKISTAN ARMY**      { **Brief history, organization, development since independence and type of equipment held in each service.**
- 5. **PAKISTAN NAVY**
- 6. **PAKISTAN AIR FORCE**
- 7. **ECONOMY AND DEFENCE.**
  - a. Our resources and Industrial potential.
  - b. Defence on foreign supplies
  - c. Type of Industries to have defence bias to be useful in war from the point of view of Defence production.
  - d. Economic and Budgetary arrangements for the maintenance of Armed Forces.
  - e. The bearing of economic aid on Defence.
  - f. The effects of Defence expenditure on economic development.
  - g. Effects of War on Economy.
- 8. **Role of Armed Forces During Peace.**
  - a. Training and preparation for war.
  - b. In aid of Civil power during emergencies and calamities.
- 9. **National Service and Second Line Forces.**  
Importance and Organization.
- 10. **Civil Defence.**  
Organization in Pakistan and its duties in War.
- 11. **Qualities of a Military Leader.**
- 12. **Military Honour and Awards, rank structure.**

**Name of Book:**

Defence of Pakistan by Major Muhammad Ali.

**Prescribed textbook.**

Fundamentals of War by Major N.D. Hasan M.A, P.S,  
(M/S. National Textbook Corporation Ltd., Lahore).

**Recommended Book**

Jang Ka Ilm-o-Fua,  
by Major Geo: Bashir Ahmad.



## PHILOSOPHY

<b>Marks: 100</b>	<b>PART-I (Class- XI)</b>	<b>Time: 3.00 Hours</b>
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### CHAPTER-I INTRODUCTION

#### Concepts

1. Examined life (Truth, Wisdom, Goodness and Beauty)

#### Contents

- a. What is Philosophy?
- b. What are the specific philosophical questions?
- c. Philosophical Approaches Criticism/ Speculation.

### CHAPTER-II PHILOSOPHY AND RELIGION

#### Concepts

1. Relationship between Philosophy and Religion

#### Contents

- a. Questions asked in Philosophy and Religion
- b. Their treatment
- c. Differences
- d. Allama Muhammad Iqbal's Educational Philosophy

### CHAPTER-III PHILOSOPHY AND SCIENCE

#### Concepts

1. Relation between philosophy and Science

#### Contents

- a. What does science try to understand?
- b. How is it different from philosophy?
- c. What role does philosophy play in the growth of science?
  - i. Interprets
  - ii. Criticizes
  - iii. Resolves conflicts
  - iv. Justifies

### CHAPTER-IV KNOWLEDGE

#### Concepts

1. Theory of Knowledge

#### Contents

- a. Definition of knowledge
- b. Sources of knowledge:
 

Rationalism	Empiricism
Intuition and Revelation	Authority
- c. Introduction of basic philosophy of Imam Ghazali

### CHAPTER-V METAPHYSICS

#### Concepts

1. Nature of Reality  
Problem of substance

#### Contents

- a. Monism
- b. Dualism
- c. Pluralism
- d. School's of Idealism and Materialism

### CHAPTER-VI ETHICS

#### Concepts

1. Evaluation of Human action

#### Contents

- a. Meaning and scope of Ethics
- b. Ethical Theories:
 

Golden Mean, Utilitarianism, Good will
--
- c. Islamic theory of Ethics

### CHAPTER-VII ISLAMIC VALUES

#### Concepts

1. Meaning and nature of values in Islam

#### Contents

- a. Islamic concept of Allah.
- b. Relation between man and Allah
- c. Human rights & responsibilities and Social justice in Islam

### CHAPTER-VIII HIKMA: MEANING & SCOPE

#### Concepts

- Hikma:  
Meaning & Scope

#### Contents

- a. Meaning of Hikma
- b. Conceptual basis of Islam:
 

Tauhid-Unity and Solidarity of mankind
--
- c. Risalat respect for humanity, Social justice, Tolerance, Universal brotherhood

<b>Marks: 100</b>	<b>CLASS- XII (PART-II)</b>	<b>Time: 3.00 Hours</b>
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**LOGIC AND SCIENTIFIC METHOD****CHAPTER-I INTRODUCTION****Concepts**

1. Nature of Logic
2. Structure of Arguments

**Contents**

- a. Definition and scope of logic
- b. Proposition & Arguments
- c. Premises/ conclusion Indicators
- d. Types of Arguments: Inductive, Deductive
- e. Truth & Validity

**CHAPTER-II LANGUAGE****Concepts**

1. Nature and functions of Language

**Contents**

- a. Language as an Instrument
- b. Three Important uses of language: Informative, Expressive, Directive

**CHAPTER-III INFORMAL FALLACIES****Concepts**

1. Informal fallacies:  
Fallacies of Relevance

**Contents**

- a. What is meant by fallacy?
- b. Fallacies of Relevance: Appeal to emotions, Appeal to pity, Complex question, Adhominem
- c. Fallacies of ambiguity: Equivocation, Amphiboly, Accent

**CHAPTER-IV CATEGORICAL PROPOSITIONS****Concepts**

1. Standard form categorical propositions

**Contents**

- a. Four Categorical propositions
- b. Quantity, quality and distribution
- c. Traditional squares of opposition
- d. Three laws of thought

**CHAPTER-V CATEGORICAL SYLLOGISM AND SIMPLE ARGUMENTS****Concepts**

1. Validity of Categorical syllogism

**Contents**

- a. Categorical Syllogism  
Figure, Mood, Standard form, Rules, Venn diagram
- b. Simple argument forms and Truth Table

**CHAPTER-VI INDUCTIVE LOGIC****Concepts**

1. Inductive generalization inductive  
Analogy

**Contents**

- a. Forms of inductive Generalization Inductive Analogy
- b. Factors on which their strength depends

**CHAPTER-VII SCIENTIFIC METHOD EXPLANATION****Concepts**

1. Scientific method and explanation

**Contents**

Explanations: Scientific and unscientific  
Characteristics of a good hypothesis

**Recommended Book: Philosophy Part-I**

**Author:** Javed Iqbal Nadeem

**Publisher:** Maktaba Naumania, Lahore.

**Recommended Book: Philosophy Part-II**

**Author:** Javed Iqbal Nadeem

**Publisher:** Awais Book Center Urdu Bazar, Lahore



**PSYCHOLOGY**

<b>Marks: 85</b>	<b>CLASS-XI (PART –I)</b>	<b>Time: 3:00 Hours</b>
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**CHAPTER-I INTRODUCTION TO PSYCHOLOGY**

<b>Concepts</b>	<b>Contents</b>
1. Introduction of Psychology	1. Introduction Meaning and Definition of psychology as science of Behavior and mental processes
2. Science of Behavior	2. Goals of psychology
3. Areas of Modern Psychology	3. Clinical psychology
	4. Experimental psychology
	5. Educational psychology
	6. Environmental psychology
	7. Criminal psychology
	8. Business psychology

**CHAPTER-II METHODS OF RESEARCH**

<b>Concepts</b>	<b>Contents</b>
1. Research	1. Meaning and significance of research
2. Methods of Research	2. Types of Research:
	i. Observation Method      ii. Experimental Method
	iii. Survey Methods      iv. Case-study Method

**CHAPTER- III NERVOUS SYSTEM AND BEHAVIOUR**

<b>Concepts</b>	<b>Contents</b>
1. Nervous system and Behaviour	1. Meaning & relationship with behavior
2. The Nervous System	2. Neuron spinal cord
	3. Structure and Function of main parts of Brain

**CHAPTER- IV SENSATION AND PERCEPTION**

<b>Concepts</b>	<b>Contents</b>
1. Sensation and perception	1. Brief introduction of sensation
2. Basic Concept and Function of Eye malfunctioning of Eye and Ear	2. Anatomy of the Eye, what we see and how we see
	i. Factors deforming the sensation & perception, defects of Eye and Ear
	ii. Definition. Factors of Attention Fluctuation and Distraction of Attention. Gestalt laws of perceptual organization
3. Attention	1. Depth & Distance
4. Perceptual organization	2. Movement. Monocular cues for depth perception
i. Types of perception	Binocular Cues for depth perception. Definition.
ii. Consistency of visual Perception	Kinds of Illusion. Effects on the human life
iii. Illusion	

**CHAPTER-V LEARNING AND REMEMBERING**

<b>Concepts</b>	<b>Contents</b>
1. Learning and Remembering	1. Definition of learning
2. Learning and unadorned Behavior	2. Basic Principles of learning
3. Ways of learning	3. Learning by observing
4. Memory Processes	- Conditioning - Classical. - Operant.
	4. Definition of Memory: Sensory, Memory, Short-term Memory, Long-term Memory
5. Three stages Memory Model	5. Measuring Memory
	Recognitions Method, Recall Method, Saving Method, Method of Rearrangement
6. Measurement of Memory	6. Forgetting

**CHAPTER-VI MOTIVATIONAL BEHAVIOUR**

<b>Concepts</b>	<b>Contents</b>
1. Motivational Behaviour	1. Definition

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>2. Characteristics of motivation<br/>Instinct, Needs/Drives,<br/>Incentive, Balance or<br/>Equilibrium<br/>(Homeostasis)</li> <li>3. Types of Motives</li> </ol> | <ol style="list-style-type: none"> <li>2. How they direct our Behaviour</li> <li>3. Primary motives (unlearned/ Physiological)</li> <li>4. Hunger, thirst, temperature, sex</li> <li>5. Maternal secondary motives<br/>(learned/psychological)</li> <li>6. Achievement Motive</li> <li>7. Power Motive</li> <li>8. Affiliation Motive</li> <li>9. Aggression</li> <li>10. How to cope with stress, and emotive</li> <li>11. Elements affecting Motivation</li> </ol> |
|---|--|

**CHAPTER- VII PERSONALITY****Concepts**

1. Personality
2. Definition of Personality
3. Types & traits of personality
4. Personality Theories
5. Personality Assessment

**Contents**

1. Definition Ectomorph, Endomorph, Mesomorph types
  - i. Introvert, Extrovert & Ambivert
  - ii. Freudian theory
  - iii. Millar & Dollard's Behaviour theory
2. Introduction (contribution of Pakistani psychologist)
3. Objective techniques: Questionnaire, Interview, MMPI, Projective techniques, TAT, Rorschach, Inkblot
4. How to groom

**CHAPTER- VIII EMOTIONAL BEHAVIOUR****Concepts**

1. Emotional Behaviour
2. Introduction
3. Theories of Emotion
4. Environmental and cultural aspects of Emotion

**Contents**

1. Meaning and definition
2. Physiology of Emotion
3. James Lange Theory (Feelings are physical)
4. Cannon-Bard theory
5. Role of learning and Environment in Emotion

**CHAPTER-IX HIGHER COGNITIVE PROCESS****Concepts**

1. Higher Cognitive processes
2. Cognition
3. Cognitive Components  
Intelligence
4. Different Models of Intelligence
5. Measurement of Intelligence
6. Language and Problem solving
7. Problem solving strategies
8. What is language?
9. Describe the structure in  
Language
10. Language Acquisition

**Contents**

1. Meaning & definition of cognition
2. Intelligence, General or specific Abilities
3. Spearman Model, Guilford Model
4. Stanford-Binet Intelligence Scale, WAIS, WISC, Army Alpha and Beta Intelligence
5. Definition & significances
6. Cognitive operations in problem solving  
Understanding & Organizing
  - i. Discussion
  - ii. Cooperative Learning
7. Meaning of Language
8. Basic tools of communication Elements of  
Language
9. Language Development Process
10. Role & contribution

**LIST OF PRACTICALS FOR CLASS XI (Part –I)**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Blind Spot</li> <li>3. Effect of Suggestion on Perception</li> <li>5. Retroactive Inhibition</li> <li>7. Measurement of Memory</li> </ol> | <ol style="list-style-type: none"> <li>2. Muller-type-Illusion</li> <li>4. After Image</li> <li>6. Problem solving</li> <li>8. T.A.T. (Practical Journal &amp; Viva Voce)</li> </ol> |
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<b>Marks: 85</b>	<b>CLASS-XII (PART –II)</b>	<b>Time: 3:00 Hours</b>
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**CHAPTER-X DEVELOPMENTAL PSYCHOLOGY**

- |  |  |
|--|--|
| <ol style="list-style-type: none"> <li>1. Development of Psychology</li> <li>a. Cognitive Development</li> <li>b. Psychosocial Development</li> <li>c. Moral Development</li> <li>d. Developmental psychology in the light of Quraan and Hadith</li> </ol> | <ol style="list-style-type: none"> <li>1. Definition of Growth, Development and Maturation Difference between above mentioned terms Comparison Cognitive, physical and Social Development</li> <li>a. Piaget's theory of cognitive development (Brief introduction)</li> <li>b. Eriksson's psychosocial theory-of-development (Brief introduction) Physical development</li> <li>i. Kahlberg's theory of moral development (Brief introduction)</li> <li>ii. Sensory and perceptual development (Brief introduction)</li> <li>c. Quraan verse &amp; Hadiths</li> </ol> |
|--|--|

**CHAPTER-XI PSYCHOLOGY OF HEALTH**

- |   |  |
|---|--|
| <ol style="list-style-type: none"> <li>1. Psychology of Health and Adjustment</li> <li>2. Concept of Mental Health</li> <li>3. Muslim concept of Mental Health</li> <li>4. Abnormal Behavior</li> <li>5. Stress and its role</li> <li>6. Behavioral Disorders</li> <li>7. Eating Disorders</li> <li>8. Schizophrenia</li> </ol> | <ol style="list-style-type: none"> <li>1. Definition of Health and adjustment               <ol style="list-style-type: none"> <li>i. Requirement of Good health</li> <li>ii. Impact of good health</li> </ol> </li> <li>2. Different viewpoints of Mental Health</li> <li>3. Muslim point of views of Mental health, Imam Ghazali, Maulana Ashraf Ali Thanvi</li> <li>4. Difference between Normal and Abnormal Behavior</li> <li>5. Sources of stress, conflict, life Events, and Pressure &amp; Environmental conditions               <ol style="list-style-type: none"> <li>a. Anxiety Disorders</li> <li>b. Eating Disorders</li> </ol> </li> <li>6. Eating as a disorder, suggestions for improving Eating Habits               <ol style="list-style-type: none"> <li>i. Right Eating</li> <li>ii. Exercising</li> <li>iii. Advises by the Doctors for Eating</li> </ol> </li> <li>7. Definition, Causes, General Symptoms.               <p>Kinds:</p> <ul style="list-style-type: none"> <li>-Disorganized</li> <li>-Catatonic</li> <li>-Paranoid</li> </ul> </li> </ol> |
|---|--|

**CHAPTER-XII SOCIAL PSYCHOLOGY**

- |   |   |                         |             |                     |              |
|---|---|-------------------------|-------------|---------------------|--------------|
| <ol style="list-style-type: none"> <li>1. Social Psychology concept of socialization</li> <li>2. Social Problems. How to resolve?</li> <li>3. Attitude</li> <li>4. Public Opinion</li> <li>5. Leadership</li> </ol> | <ol style="list-style-type: none"> <li>1. Meaning &amp; definition</li> <li>2. Elements of Socialization</li> <li>3. Socialization Family influence on Socialization               <table border="0" style="width: 100%;"> <tr> <td style="width: 50%;">i. Antisocial Behaviour</td> <td style="width: 50%;">ii. Smoking</td> </tr> <tr> <td>iii. Drug Addiction</td> <td>iv. Violence</td> </tr> </table> </li> <li>v. Prejudice</li> <li>vi. Sexual Harassment</li> <li>4. Definition, Attitude formation</li> <li>5. Attitude change, Measurement of Attitude</li> <li>6. Definition, Formation, opinion change types/ styles and Qualities</li> </ol> | i. Antisocial Behaviour | ii. Smoking | iii. Drug Addiction | iv. Violence |
| i. Antisocial Behaviour   | ii. Smoking   |                         |             |                     |              |
| iii. Drug Addiction   | iv. Violence  |                         |             |                     |              |



**CHAPTER- XIII GUIDANCE AND COUNCELING**

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. Guidance and counseling</li> <li>2. Importance of guidance &amp; counseling in Islam</li> <li>3. Different Techniques of Counseling</li> </ol> | <ol style="list-style-type: none"> <li>1. Meaning and difference of Guidance and counseling</li> <li>2. Principles of Guidance</li> <li>3. Necessity of Guide up to Higher Secondary level. Qurranic verses &amp; Hadiths, Psychoanalysis, P.C.T. (Person Centered Techniques). R.E.B.T. (Rational Emotive Behaviour Techniques)</li> </ol> |
|--|---|

**LIST OF PRACTICALS FOR CLASS XII (Part –II)****1. STATISTICS.**

- a. Tabulation of Data
- b. Graphic Presentation of Data: Frequency Histogram, Frequency Polygon, Frequency Curve
- c. Measures of Central Tendency of groups X, U-Grouped Data: Arithmetic Mean, Median, Mode

**2. FIELD WORK**

- a. Measurement of Attitude/ Opinion
- b. Data Collection
- c. Report writing

**3. PRACTICAL JOURNAL & VIVA VOCE.****Recommended Book: Psychology ( Part-I)**

- |  |  |
|--|--|
| <b>Authors:</b> <ol style="list-style-type: none"> <li>1) Fakhi-ud-Din Hyder.</li> <li>3) Touqeer Saleem Khan</li> </ol> <b>Publisher:</b> Star Pblishers, Lahore. | <ol style="list-style-type: none"> <li>2) Shahida Razvi</li> <li>4) Asmat Ulah Cheema</li> </ol> |
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**Recommended Book: Psychology (Part-II)**

- |  |  |
|--|--|
| <b>Authors:</b> <ol style="list-style-type: none"> <li>1) Prof. Fakhi-ud-Din Hyder.</li> <li>3) Touqeer Saleem Khan</li> <li>5) Fareeda Sadaq</li> </ol> <b>Publisher:</b> Star Pblishers, Lahore. | <ol style="list-style-type: none"> <li>2) Prof. Zarin Bukhari</li> <li>4) Prof. Asmat Ulah Cheema</li> </ol> |
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## STATISTICS

Part-I (Class-XI)

Distribution of Marks:

Part-II (Class-XII)

Theory: 85

Theory: 85

Total Marks: 200

Practical: 30

<b>Marks: 85</b>	<b>CLASS-XI (PART-I)</b>	<b>Time:3:00 Hours</b>
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### **Syllabus**

#### **Chapter:1 INTRODUCTION TO STATISTICS**

Introduction, Definitions, Notations, Importance of Statistics in Various Disciplines, Social Sciences, Plant Sciences, Physical Sciences, Medical Sciences, Variables, Descriptive and Inferential Statistics, Sources of Data

#### **Chapter:2 REPRESENTATION OF DATA**

Introduction, Classification, Tabulation, Construction of tables, Frequency distribution, Cumulative Frequency Distribution, Graphic Representation of Data, Simple Bar Diagram, Multiple Bar Diagram, Sub-Divided Bar Diagram, Pie Diagram, Histogram, Frequency polygon and frequency curve, Scatter Plots, Bivariate Frequency Distribution.

#### **Chapter:3 MEASURES OF LOCATION**

Introduction, Arithmetic Mean and Weighted Mean, Updating or Correcting the mean, Calculation of A.M. by coding / short-cut method, Merits and Demerits of Arithmetic mean, Geometric Mean, Properties of Geometric mean, Merits and Demerits of geometric mean, Harmonic Mean, Merits and Demerits of Harmonic mean, Properties of Harmonic mean, Median, Properties of Median, Merits and Demerits of Median, Quantiles, Mode, Properties of Mode, Merits and Demerits of Mode, Empirical Relationship between Mean, Median and Mode, Selecting a Suitable Measure of Central Tendency.

#### **Chapter:4 MEASURES OF DISPERSION**

Introduction, Range, Merits and Demerits of Range, Quartile Deviation, Merits and Demerits of Quartile Deviation, Mean Deviation, Merits and Demerits of Mean Deviation, Properties of Mean Deviation, The Variance, Merits and Demerits of Variance, Standard Deviation, Properties of the Variance and standard Deviation, Co-efficient of Variation and other Relative Measures, Moments, Moment about Mean, Moment about an Arbitrary Value, Moments for grouped Data, Sheppard's Correction for Grouping Error, Skewness.

#### **Chapter:5 INDEX NUMBERS**

Introduction, Types of Index Numbers, Limitations of Index Numbers, Use of Index Numbers, Construction of price Index Numbers, Unweighted and Weighted Index Numbers, Consumer Price Index (CPI) and Wholesale Price Index (WPI), Construction of CPI, Sensitive Price Indicator (SPI).

#### **Chapter:6 PROBABILITY**

Introduction, Permutations, Combinations, Probability, Conditional Probability.

#### **Chapter:7 RANDOM VARIABLES**

Introduction, Random Numbers and their Generation, Application of Random Numbers, Concept of Random Variables and their Construction from Different Fields, Discrete and Continuous Random Variables.

#### **Chapter:8 PROBABILITY DISTRIBUTIONS**

Introduction, Probability Mass Function, Probability Density Function, Simple Univariate Discrete and Continuous Distributions, Properties of Probability Mass Function and Probability Density Function, Application, Drawing of Probability Mass Function and Probability Density Function, Expectation and Variance of the simple discrete Random Variable, Properties of Expectation, Distribution Function.

#### **Chapter:9 BINOMIAL AND HYPERGEOMETRIC PROBABILITY DISTRIBUTION**

Introduction, Binomial Probability Distribution, Mean and Variance of the Binomial Distribution, Hypergeometric Distribution and Hypergeometric Experiment, Properties, Hypergeometric Probability Distribution,

**List of Practicals for Class XI (Part-I)****Topics:**

1. Presentation of data
2. Measure of Location
3. Measure of description
4. Index Numbers
5. Probability
6. Random Variables
7. Discrete Probability distribution
8. Binomial and Hypergeometric Probability distribution

**Recommended Book: Statistics ( Part-I)****Authors:** 1) Dr. Faqir Muhammad 2) Mr. Amjad Mehmood**Editor:** Mazhar Hayat, SS, Punjab Textbook Board, Lahore**Publisher:** Saeed Book Center, Lahore.  
For Punjab Textbook Board, Lahore

<b>Marks : 85</b>	<b>CLASS-XII (PART – II)</b>	<b>Time: 3:00 Hours</b>
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**Syllabus****Chapter:10 NORMAL DISTRIBUTION**

Normal Distribution, Standard Normal Random Variable, Standard Normal Distribution, Standard Normal Cumulative Distribution Function, De-standardizing, Quantiles of Standard Normal Distribution, Use of Standard Normal Tables for any Normal Distribution, Finding the Values of  $\mu$  or  $\sigma$  or both.

**Chapter:11 SAMPLING TECHNIQUES AND SAMPLING DISTRIBUTIONS**

Population (Or Universe), Sample, Sampling design, Non-probability (Non-random) Sampling, Probability (Random) Sampling, Simple Random Sampling, Stratified Sampling, Errors, Simple Random Sampling and Sampling Distributions, Sampling Distribution of a Statistic, Sampling Distributions from General Populations, Sampling Distribution of the Sample Mean,  $\bar{X}$ , Sampling Distribution of the Difference Between two Sample Means,  $X_1 - X_2$ , Sampling Distribution of Sample Proportion,  $P$ , Sampling Distribution of the Difference Between two Sample Proportions,  $P_1 - P_2$ , Other Sampling Distributions, Sampling Distribution of the Sample Variance,  $S^2$

**Chapter:12 ESTIMATION**

Statistical Estimation, Point Estimation of a Parameter, Unbiasedness, Best Estimator, Pooled Estimators from two Samples, Interval Estimation, Confidence interval for Population Mean,  $\mu$ , Confidence interval for Population Proportion of Success,  $\pi$ , Comparative Studies, Confidence interval for Difference between two Population Means,  $\mu_1 - \mu_2$ , Confidence interval for difference between two Population Proportions,  $\pi_1 - \pi_2$

**Chapter:13 HYPOTHESIS TESTING**

The Elements of a Test of Hypothesis, Test of Hypothesis about a Population Mean,  $\mu$ , Test of Hypothesis about a Population Proportion,  $\pi$ , Test of Hypothesis about the difference between two Population Means-independent Samples, Inference about the difference between two Population Means-Dependent Samples, Test of Hypothesis about the Difference between two Population Proportions,  $\pi_1 - \pi_2$

**Chapter:14 SIMPLE LINEAR REGRESSION AND CORRELATION**

Relations between Variables, Regression analysis, Curve fitting, Simple Linear Regression, The Simple Linear Regression model, Simple Linear correlation, Correlation analysis

**Chapter:15 ASSOCIATION**

Multinomial Populations, Attribute (Qualitative Variable), Independence of Attributes, Association of Attributes, Two dimensional count Data: Contingency Table, Test for Statistical Independence, Rank correlation,

**Chapter:16 ANALYSIS OF TIME SERIES**

Time Series, Components of a time Series, Analysis of time Series, Estimation of secular trend

**Chapter:17 ORIENTATION OF COMPUTERS**

Introduction to Computer, History of Computer, Types of computers, Classification of Computers, Hardware and Software, Hardware components of a personal Computer, Input Devices and Output Devices, System Software, Operating System, Application Software, Programming Languages, Language Processors and Number system, How Computers Represent Data, Binary System as a foundation of Computer Programming

**List of Practicals for Class XII (Part-II)****Topics:**

Normal distribution  
Sampling  
Estimation  
Testing of Hypothesis  
Correlation  
Association  
Time series

**Recommended Book: Statistics ( Part-II)**

**Author:** Prof. Muhammad Rauf Chaudhary,  
Govt. College for Boys Gujranwala.

**Editors:** Prof. M. Khalid Director (Technical)  
Mr. Mazhar Hayat, Subject Specialist,

**Publisher:** Zeeshan Book Center, Lahore.  
For Punjab Textbook Board, Lahore





وقت: 3:00 گھنٹے	برائے جماعت بارہویں (پارٹ-II)	کل نمبر: 100
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## (الف) القرآن

- ۱۔ تعارف مطالعہ قرآن۔ نزول وحی۔ تدوین قرآن مجید۔ حفاظت قرآن مجید
- ۲۔ مطالعہ قرآن مجید۔ ترجمہ و تشریح سورۃ البقرہ (رکوع ۱ تا ۲۰)

10 نمبر

50 نمبر

## (ب) الحدیث

- ۱۔ تعارف مطالعہ حدیث۔ اہمیت حدیث۔ جمع و تدوین۔ کتاب حدیث
- ۲۔ مطالعہ حدیث۔ ترجمہ و تشریح۔ "اربعین امام نووی"

10 نمبر

20 نمبر

10 نمبر

## (ج) عربی گرامر

- ۱۔ ماضی مضارع۔ امر و نہی
- ۲۔ واحد۔ جمع اور مذکر مونث

کل نمبر: 100

## مجوزہ کتب:-

- ۱۔ تفسیر حقانی از مولانا عبدالحق حقانی
- ۲۔ تعارف قرآن و تعارف حدیث از شیخ محمد اقبال
- ۳۔ معلم عربی از مولانا عبدالستار خان



## OUTLINE OF HOME ECONOMICS

(Outline of tests)

Part-I: 85 Marks

Practical : 30 Marks

Part-II: 85 Marks

وقت: 3:00 گھنٹے	برائے جماعت گیارہویں (پارٹ-I)	کل نمبر: 85
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- حصہ الف:- بچوں کی نشوونما اور خاندان کے تعلقات ۱۔ بچوں کی نشوونما ۲۔ ذات کا تصور اور شخصیت کی نشوونما
- ۳۔ خاندان اور افراد خانہ کے باہمی تعلقات ۴۔ بچوں کو سمجھنا اور انکی راہنمائی کرنا
- حصہ ب:- انتظام خانہ داری ۱۔ انتظام خانہ داری کا تعارف و مقاصد ۲۔ وسائل و ذرائع
- ۳۔ تھکن اور اسکے اثرات ۴۔ تخمینہ آمدنی و خرچ
- ۵۔ صحت کی حفاظت ۶۔ گھروں میں فوری طبی امداد
- ۷۔ گھر میں آرٹ کے اصولوں کا استعمال ۲۔ ڈیزائن اور اسکے عناصر
- حصہ ج:- آرٹ ۱۔ ڈیزائن

### پریکٹیکل لسٹ برائے جماعت گیارہویں (پارٹ-I)

- ۱۔ فائل ۲۔ Viva ۳۔ سوال تخمینہ یا شخصیت کے متعلق ۴۔ سوال ڈیزائن یا آرٹ

وقت: 3:00 گھنٹے	برائے جماعت بارہویں (پارٹ-II)	کل نمبر: 85
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- حصہ الف:- غذا اور غذائیت ۱۔ غذائی اہمیت ۲۔ متوازن غذا ۳۔ غذائی ضروریات
- ۴۔ لحمیات ۵۔ کاربوہائیڈریٹ یا نشاستہ ۶۔ روغنیات یا چکنائی
- ۷۔ حیاتین ۸۔ معدنی نمکیات ۹۔ فہرست طعام کی ترتیب
- ۱۰۔ اشیاء خوردنی کی خریداری ۱۱۔ کھانا پکانے کے طریقے ۱۲۔ کھانا پیش کرنے کے طریقے
- حصہ ب:- پارچہ بانی اور لباس ۱۔ سلائی کے ابتدائی مراحل ۲۔ اچھی سیننگ کیلئے مناسب ناپ کی اہمیت ۳۔ ریشوں کے مطالعے کی اہمیت
- ۴۔ پارچہ بانی کے بنیادی طریقے ۵۔ کپڑوں کی منصوبہ بندی ۶۔ ذاتی زیبائش

### پریکٹیکل لسٹ برائے جماعت بارہویں (پارٹ-II)

- ۱۔ فائل ۲۔ Viva ۳۔ پکانے کے سوال ۴۔ ممتحنین کی سلائی
- ۵۔ ڈرافٹنگ ۶۔ فراک کی سلائی ۷۔ بنیادی سلائیاں

مجوزہ کتاب:- ہوم اکنامکس برائے انٹر میڈیٹ کلاسز

- مصنفین:- ۱۔ مسز کشور اسلم ۲۔ مسز سعیدہ غنی ۳۔ مسز صغیرہ ضیاء
- ایڈیٹر:- مسز زاہدہ شکور
- پبلشرز:- صادق پبلیکیشنز، لاہور (برائے پنجاب ٹیکسٹ بک بورڈ، لاہور)



**MUSIC***(Outlines of Tests)*

<b>Distribution of Marks:</b>	<b>Part-I (Class-XI)</b>	<b>Part-II (Class-XII)</b>	
	<b>Theory-I: 40</b>	<b>Theory-II: 40</b>	<b>Practical: 120</b>
			<b>Total: 200</b>

<b>Marks: 40</b>	<b>PART-I (CLASS XI)</b>	<b>Time: 1:30 hours</b>
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**Theory**

1. Definition of Music Sur, Thath, Raag, Arohi, Amrohi, Sabtak, Alap, Shurti, Taan, Meend and Gammak. Wadi Sumwadi
2. Complete Names of Sur (Note)
3. Sargams of Five Thaths: Bilawal, Kalyan, Bhairon, Bhairveen & Poorbi.
4. Definition of Matra, Lay, Sum, Tali and Khali.
5. Knowledge of the following Taals with Bols showing Sum, Zarb and Khali. Teental, Kehrva, Dadra, Rupak and Nakta.
6. Definition of Folk, Ghazal, Qavvali, Marsia, Khyal and Trana.
7. Contribution to Music by Amir Khusro.
8. Short Notes on the following instruments:- Tanpura, Sitar, Shehnai, Flute, Sarode, Taoos.

**Marks 60 LIST OF PRACTICAL FOR CLASS XI (PART-I) Time: 3 hours**

1. **Vocal Music:** Singing of Khayal Tarana, Thumri, Dadra of raags, Bilawal Kafi, Rageshri Bhairvin, Aimen (Technique style and expression to be emphasized).

**OR**

**Instrumental Music:** Playing of Sitar, Violin, dilruba, Flute, sarode, Shehnai, Sarangi in the raags mentioned above under vocal music (Technique style and skill in handling and tuning the musical instrument to be emphasized).

2. Qaumi Tarana (Vocal or any one of the instruments mentioned at No.1).
3. Three folk songs or tunes of Pakistan.
4. Ghazal and Film Songs.
5. Practical Book.

<b>Marks 40</b>	<b>PART-II (CLASS XII)</b>	<b>Time: 1:30 hours</b>
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1. Definition of Grah Sur, Nyes Sur, Alankar, Andolan, Kan, Pakar, BolTaan.
2. Sargams of Five Thaths: Khammach, Kafi, Assvri, Marva, Todi.
3. Definition of Taal and Lai.
4. Knowledge of the following Taals with Bols showing Sum, Zarb and Khali. Chanchal, Jhaptal, Ektal, Tilwara
5. Classical Music Gharanas and their famous Singers.
6. Definition of Thumri, Chatrang, Hori, Dhurped, Lakshan Geet and Dhadra.
7. Contribution to Music by Tansen and Sadarang.
8. Short notes on the following instruments: Veena, Sarangi, Rabab, Dilruba, Surbhar, Surmandal.

**Marks 60 LIST OF PRACTICAL FOR CLASS XII (PART-II) Time: 3 hours**

1. **Vocal Music:** Singing of Khayal Tarana, Thumri, Dadra of raags, Malkaus, Bheemplasi, Khamaj, Marva, Rag Darbari.

**OR**

**Instrumental Music:** Playing of Sitar, Violin, dilruba, Flute, sarode, Shehnai, Sarangi in the raags mentioned above under vocal music (Technique style and skill in handling and tuning the musical instrument to be emphasized).

2. Judgment of Talls.
3. Qaumi Tarana (Vocal or any one of the instruments mentioned at No.1).
4. Three folk songs or tunes of Pakistan.
5. Ghazal and Film Songs.
6. Practical Book.





**FINE ARTS**

Distribution of Marks:

**Part-I (Class-XI)**

Theory: 40

**Part-II (Class-XII)**

Theory: 40

**Practical**

Composition: 25

Still Life, Drawing: 25

Design: 25

Exhibition of Work: 45

Total: 200

<b>Marks 40</b>	<b>PART-I (CLASS XI)</b>	<b>Time: 1:30 hours</b>
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**SYLLABUS:****The Dawn of Civilization**

1. The Evolution of Ornament, Painting and Sculpture (Prehistoric and Primitive)
2. Egypt
3. Western Asiatic (Sumerian, Babylonian, Assyrian and Persian Eras).
4. Indus Valley Civilization

**LIST OF PRACTICAL FOR CLASS-XI (PART-I)**

1. **Design & Pattern making potato cut, Stenciling:** Traditional designs from different civilizations at least 12 Designs i.e. Egypt, Meso potamia, Greek, Roman, Indus Valley, Buddhist.
2. **Still life in water colour & pencil:** Best works in water colour, Best work in Pencil.
3. **Drawing from casts:** Study of different parts of human body from cast 8 Best work.
4. **Nature Study:** Plants flower trees etc, 8 Best work, Media to be taught water colour. Pen & Ink Char coal & Pastels.

<b>Marks 40</b>	<b>PART-II (CLASS XII)</b>	<b>Time: 1:30 hours</b>
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**SYLLABUS:****The Dawn of Civilization**

1. Greek
2. Roman (before Christian Eras)
3. Buddhist (a. Gandhara School. b. Ajanta school)  
Outline study Characteristic of each period must be cleared

**LIST OF PRACTICAL FOR CLASS-XII (PART-II)**

1. Still life in water colour **OR** Life in Pencil, Char-coal
2. **Composition:** In Water Colour OR Water Colour and Pen & Ink
3. **Exhibition of Work:** Land-landscape at least 4 Works,  
Composition at least 4 Works, Portrait /Life Drawing at least 4 Works,  
Still Life objects in Water Colour and other Media at least 8 Works.

**Media to be taught in II year.**

Water Colour  
Pen & Ink  
Pastels  
Char-coal.

**Recommended books:**

ART THROUGH THE AGES -1

2- قدیم انسان اور فن مصوری

مصنفین:- 1- پروفیسر ڈاکٹر مسرت حسن 2- پروفیسر یاسمین عرفان

3- پروفیسر محمود خالد 4- پروفیسر ثمنہ رشید



## ARABIC

(There will be Two papers of 100 Marks each)  
(Outline of test)

انٹرمیڈیٹ پارٹ I- اور پارٹ II- کے سوالات میں نمبروں کی تقسیم

۱- ”حدیقہ الادب“ (پرچہ الف الجز الاول سے اور پرچہ ب الجز الثانی سے مرتب ہوگا۔ دونوں پرچوں کا وقت تین تین گھنٹے ہوگا۔)

6+24

نثر۔ عربی عبارت کا اردو میں ترجمہ اور خط کشیدہ

الفاظ کی سادہ لغوی تشریح

5+15

نظم۔ اشعار کا اردو میں ترجمہ و تشریح

۲- ”حدیقہ الادب“ کے اسباق کے آخر میں دی گئی تماریں پر مبنی سوالات (سوالات کسی نوعیت کے بھی ہوں کتاب میں دی گئی تماریں

25

پر ہی مشتمل ہوں گے اور قواعد کے بارے میں سوال بھی تمرینات سے ہی کیا جائے گا۔

15

۳- اردو سے عربی میں ترجمہ

10

۴- مضمون / خط / درخواست۔

قواعد برائے گیارہویں جماعت

حروف مشبہ بالفعل، حروف جارہ، حروف ناصبہ، حروف جازمہ، حروف ندا، اسماء موصولہ، مرکبات ناقصہ، مرکب اضافی، مرکب توصیفی، مرکب اشاری، اوزان جمع، افعال صحیح سے ابواب ثلاثی مجرد اور ثلاثی مزید فیہ کے ابواب۔ افعال، تفعیل، مقاعد، تفعیل، انفعال، انفعال، استفعال۔

قواعد برائے بارہویں جماعت

اسماء عدد۔ سبتاء و خبر۔ معرب و مبنی۔ افعال ناقصہ۔ مفاعیل خمسہ۔ اسمائے ظرف (ظرف زمان / ظرف مکان)۔ غیر منصرف، مضاعف اور معتل افعال۔

نوٹ:- پارٹ I- میں درج ذیل عنوانات پر عربی میں مضمون جو کم از کم پچاس الفاظ پر مشتمل ہو۔

القرآن الکریم، خلق النبی، وطنی پاکستان، القائد الاعظم، کلیتی، استاذی، آمی، فی الحدیقہ، الدراجہ، الحجل۔

درخواست / خط پارٹ II- میں آئے گا۔ درخواست بنام پرنسپل صاحب برائے رخصت، بوجہ بیماری، ضروری کام، شادی میں شرکت اور فیس معافی، خط والد کے نام پیسے منگوانے کے لیے، والدہ کے نام امتحان میں کامیابی کی خبر دیتے ہوئے، چھوٹے بھائی کے نام پڑھائی کے سلسلے میں نصیحت کرتے ہوئے، دوست کے نام چھٹیوں میں اپنے ہاں آنے کی دعوت دیتے ہوئے، دوست کے نام اس کے کسی قریبی عزیز کی وفات پر تعزیت کرتے ہوئے۔

کتاب:- الحدیقہ الادب (الجز الاول، برائے گیارہویں جماعت الجز الثانی، برائے بارہویں جماعت)

مصنفین / ایڈیٹر ۱- ڈاکٹر ظہور احمد اظہر ۲- ڈاکٹر خورشید رضوی ۳- ڈاکٹر خالق داد ملک ۴- ڈاکٹر محمد قمر علی

۵- پروفیسر خان محمد چاولہ ۶- پروفیسر حسناہ لطافت ۷- ڈاکٹر محمد اسحاق قریشی ۸- طاہر رضا بخاری

## APPENDIX-II

## (LIBRARY BOOKS)

**Note:** Books given in Appendix II may be made available in the College Library for Supplementary Reading

دارالمعارف مصر	قصص الاير	اساطير العالم للاطفال	كامل الكيلاني
دارالمعارف مصر	خسرو شاء	قصص من الف ليلة	كامل الكيلاني
دارالمعارف مصر	نعمان	قصص فكاية للاطفال	كامل الكيلاني
دارالمعارف مصر	عمارة	قصص فكاية للاطفال	كامل الكيلاني
دارالمعارف مصر	بنت العباغ	قصص فكاية للاطفال	كامل الكيلاني
دارالمعارف مصر	حذاء الطنبورى	قصص فكاية للاطفال	كامل الكيلاني
دارالمعارف مصر	العرندس	قصص فكاية للاطفال	كامل الكيلاني
مطبعة سعد مصر	جزء اول و يابى	اقراءة المصورة	مصطفى ابوسنه
		المدارس الابتدائية	و عطيه محمد
مطبة معارف مصر	على بابا	قصص جديدة للاطفال	كامل الكيلاني
مطبة معارف مصر	عبدالله البرى	قصص جديدة للاطفال	كامل الكيلاني
	عبدالله البحرى		
مطبة معارف مصر	ابو صبر و ابو قير	قصص جديدة للاطفال	كامل الكيلاني
مطبة معارف مصر	بابا عبدالله	قصص جديدة للاطفال	كامل الكيلاني
	والد روبش		
مطبة معارف مصر	ياجر بغدا	قصص جديدة للاطفال	كامل الكيلاني
مكتبة دارالعلوم	قصص النبى	مطبوعات ندوة العلماء	سيد ابوالحسن
ندوة العلماء لكهنه			على الحسينى الندوى



**ENGLISH (Elective)**

(There will be two papers of 100 marks each)

Marks 100	PART-I (CLASS XI)	Time: 3:00 hours
-----------	-------------------	------------------

- |              |  |            |
|--------------|--|------------|
| 1.           | A new anthology of Poems (1 to 12) by Dr. M. Sadiq and Mrs. Riaz Hussain<br>Published by: Sh. Muhammad Ashraf, Publisher and Book Sellers, Kashmiri Bazar, Lahore. | 20         |
| 2.           | A new anthology of Essays by Dr. Imdad Hussain and Mrs. S.M. Sulehri.<br>Publishers and Book Sellers, Kashmiri Bazar, Lahore.                                      | 20         |
| 3.           | A passage of moderns prose for comprehension   | 20         |
| 4.           | Writing a letter on some important subject to a newspaper.   | 20         |
| 5.           | Writing a dialogue between two or three persons on a current topic.  | <u>20</u>  |
| <b>Total</b> |  | <b>100</b> |

**Note:-** Advanced Learners Dictionary by A.S. Hornby is recommended.

Marks 100	PART-II (CLASS XII)	Time: 3:00 hours
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- |              |   |            |
|--------------|---|------------|
| 1.           | A new anthology of Poems (13to24) by Dr.M.Sadiq and Mrs. Riaz Hussain<br>Published by: Sh, Muhammad Ashraf, Publisher and Book Sellers, Kashmiri Bazar, Lahore. | 20         |
| 2.           | 'Merchant of Venice' Edited by: John Russell Brown.<br>Publisher : M/s Oxford University Press, Lahore  | 20         |
| 3.           | Under the Green Wood Tree By Thomas Hardy,<br>Publisher : M/s Oxford University Press, Lahore   | 20         |
| 4.           | An essay of relatively advanced. Nature, preferably on a descriptive or narrative subject.  | 20         |
| 5.           | Writing a letter on some important subject to a newspaper   | <u>20</u>  |
| <b>Total</b> |   | <b>100</b> |

**Note:-** Advanced Learners Dictionary by A.S. Hornby is recommended.

**FRENCH**

(There will be two papers of 100 marks each)

<b>Marks 100</b>	<b>PART-I (CLASS XI)</b>	<b>Time: 3:00 hours</b>
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**SYLLABUS**

1. Grammar Exercises to be limited to those covered by “ French” for Intermediate Classes Part-I Chapter 1-13 (both inclusive) **40**
2. Translation (Seen) French into English / Urdu **20**
3. Translation (Seen) English / Urdu into French **25**
4. Questions (to be answered in French) to text comprehension of a given passage (Within studied vocabulary) **15**

**Note:-** Advanced Learners Dictionary by A.S. Hornby is recommended.

<b>Marks: 100</b>	<b>PART-II (CLASS XII)</b> Theory Marks:75 Viva Voice:25	<b>Time: 2:30 hours</b>
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1. Grammar Exercises from chapter 14-25 (both inclusive) from “ French” for Intermediate Classes, Part-II **25**
  2. Translation (Unseen) French into English **15**
  3. Translation (Unseen) English into French **15**
  4. An essay of about 150 words on a general topic within studied vocabulary. A letter may be included within the choice of subjects. **20**
  5. **Viva Voce: Dictation reading and conversion** **25**
- 100**

**Note:-** Advanced Learners Dictionary by A.S. Hornby is recommended.

**Prescribed textbooks:-**

French for Intermediate classes- Part-I& Part-II by Dr. S.H.A. Rasool



**GERMAN**

(There will be two papers of 100 marks each.)

<b>Marks 100</b>	<b>PART-I (CLASS XI)</b>	<b>Time: 2:30 hours</b>
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- |    |  |    |
|----|--|----|
| 1. | Applied Grammar                        | 40 |
| 2. | Translation: German into English/Urdu) | 20 |
| 3. | Translation: English/Urdu into German  | 40 |

<b>Marks 100</b>	<b>PART-II (CLASS XII)</b>	<b>Time: 2:30 hours</b>
------------------	----------------------------	-------------------------

- |    |  |    |
|----|--|----|
| 1. | Retelling of a story from the prescribed textbook or Questions on the stories in the prescribed textbooks to be answered in German | 35 |
| 2. | Composition  | 35 |
| 3. | Viva voce (Dictation, Conversation).   | 30 |

**Syllabus.****1. Grammar:**

- Articles** : Definite and indefinite.
- Nouns** : all declensions
- Verbs** : All tenses of the different types of verbs.
- Pronouns** : Personal, interrogative, demonstrative, possessive, reflexive, relative and indefinite pronouns.
- Adjectives** : Declensions, comparison, adjective as nouns.
- Prepositions** : Dependence of prepositions, combined prepositions. (Like "evon .. bis", "auf.. zu"  
preposition + personal pronouns "da" + preposition
- Numbers** : cardinal and ordinal numbers, the time :
- Moods** : Indicative and subjunctive I+II, Imperative
- Voices** : Active and passive voice
- Adverbs** : Adverbs of time
- Syntax** : Words order, principal and dependent clauses; infinitive constructions, conjunctions.
- Remarks** : The items on Grammar comprise the forms as well as their use in German.
- II Texts** : the main texts of the prescribed textbook

**Prescribed textbooks:**

(1) Schulz/Griesbach: Deutsche Sprachlehre für Ausländer, Grundstufe in einem Band

(2) Glossar ;Gennan-English-Urdu-Bengali all books; Max Huesber Verlag, Muenchea

**Remarks:** Every chapter of the prescribed textbooks has one main text (the beginning of each chapter) additional texts, numbered exercises within the chapters and additional exercises at the end of the Book. Additional texts and exercises are not compulsory, but may be used by the teacher as desired for fluency, practice and conversation.

**Note :** The textbooks will be provided by the respective colleges on nominal fee.



## پنجابی

وقت: 3:00 گھنٹے	برائے جماعت گیارہویں (پارٹ-I)	کل نمبر: 100
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سوال نمبر ۱۔ تھلے دتے ہوئے نثری پیریاں وچوں دودی تشریح سیاق و سباق دے حوالے نال کرو۔ نمبر ۳۰

ونڈ: لکھاری داناں ۲ نمبر  
سیاق ۲ نمبر  
سباق ۲ نمبر  
تشریح ۹ نمبر

سوال نمبر ۲۔ تھلے دتے گئے شعر ان دی تشریح۔ شاعر تے مصنف دے حوالے نال لکھو۔ نمبر ۳۰

۴ وچوں ۲ بنداں دی تشریح کرو  
ونڈ: شاعر داناں ۳ نمبر  
مصنف داناں ۳ نمبر  
تشریح ۹ نمبر

سوال نمبر ۳۔ کسے اک سبق دا خلاصہ لکھو۔ نمبر ۱۰

(۲ سبق دتے جان گے اوہناں وچوں اک سبق دا خلاصہ لکھنا)

سوال نمبر ۴۔ کسے اک صوفی شاعر دی حیاتی تے شاعری تے نوٹ لکھو۔ نمبر ۱۰

ونڈ: حیاتی ۵ نمبر  
شاعری ۵ نمبر

تناں وچوں کسے اک شاعر بارے پچھیا جائے۔

(شاعر) بابا فرید، شاہ حسین، سلطان باہو، علی حیدر ملتانی، سید بلھے شاہ، وارث شاہ، ہاشم شاہ، مولوی غلام رسول عالجپوری، خواجہ غلام فرید، میاں محمد بخش۔

سوال نمبر ۵۔ کسے اک عنوان تے پنجابی وچ مضمون لکھو۔ نمبر ۲۰

۴ مضموناں وچوں اک مضمون لکھا جائے۔

۱۔ پنجابی زبان تے ادب بارے۔

۲۔ اک مضمون صوفی شاعر اں بارے۔

۳۔ مضمون عام سرنانویں اتے ہوں۔

۴۔ سموگ دے نقصانات

وقت: 3:00 گھنٹے	برائے جماعت بارہویں (پارٹ-II)	کل نمبر: 100
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سوال نمبر ۱۔ ہیٹھ دتے ہوئے نثری پیریاں وچوں ۲ دی تشریح سیاق و سباق دے حوالے نال لکھو۔ لکھاری داناں وی دسو نمبر ۳۰

ونڈ: لکھاری داناں ۲ نمبر

سیاق ۲ نمبر

۴ وچوں ۲ پیرے کرو

سباق ۲ نمبر

تشریح ۹ نمبر

سوال نمبر ۲۔ ہیٹھ دتے بنداں وچوں صرف ۲ دی تشریح شاعر تے شاعری دی صنف دے حوالے نال کرو۔ نمبر ۳۰

ونڈ: شاعر دے نال دے ۳ نمبر

شعری صنف دے ۳ نمبر ۲ قدیم، ۲ جدید شاعری دے بند دتے جان

تشریح دے ۹ نمبر

سوال نمبر ۳۔ نثری سبھاں وچوں کردار (اتے) نوٹ یا کسے سبق دا جائز لکھیا جائے۔ نمبر ۱۰

سوال نمبر ۴۔ شاعراں (اتے) نوٹ لکھو۔ نمبر ۱۰

تتاں وچوں کسے اک شاعر (اتے)

ونڈ: حیاتی ۵ نمبر

شاعری ۵ نمبر

شاعر:- مولوی لطف علی بہاولپوری، راقب قصوری، کرم امرتسری، علامہ یعقوب انور، بشیر منزر، رشید انور، الطاف قریشی، فیروز

دین شرف، شرف کنجاہی

سوال نمبر ۵۔ گرامر (الف) چاروں وچوں دو اتے لکھو۔ نمبر ۲۰

(علم بیان) تشبیہ، استعارہ، کنایہ، قافیہ، ردیف

یا

(مرکبات) عطفی، عددی، ظرفی، اضافی، توصیفی نمبر ۱۰

(ب) لوک ادب مروجہ نصاب

تتاں وچوں دو (اتے) لکھو۔ نمبر ۱۰

لوری، ککلی، تھال، گدھا، بولی، گھوڑی، ماہیا، ڈھولا

کتاب ادب خزینے حصہ اول۔ دوم

مصنفین: ۱۔ ڈاکٹر سید اختر جعفری

۲۔ ڈاکٹر محمد اسلم رانا

۳۔ ڈاکٹر عصمت اللہ زاہد





**PASHTO**

(There will be two papers of 100 marks each)

<b>Marks : 100</b>	<b>CLASS –XI(PART-I)</b>	<b>Time : 3 Hours</b>
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1.	Classical Prose	20
2.	Modern prose	30
3.	Letter-writing	15
4.	Narrative	10
5.	Translation	15
6.	Grammar	10
		<b>Total:-100</b>

**Syllabus.****PART I**

1. Text (Prose)
2. Grammar مباحث اسم و فعل

**Prescribed Textbook.**

Pashto Hissa Nassar – Pashto Academy (Produced by Peshawar Board and Published by M/S. Azmat Bros, Peshawar)

<b>Marks : 100</b>	<b>CLASS –XII(PART-II)</b>	<b>Time : 3 Hours</b>
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1.	Classical Poetry	30
2.	Modern prose	20
3.	Essay	20
4.	Précis writing	10
5.	Simple criticism	10
6.	Grammar	10
		<b>Total:- 100</b>

**Syllabus.****PART II**

1. Text (Poetry)
2. Grammar مباحث حرف و مرکب

**Prescribed Textbook.**

Pashto Hissa Nazam – Pashto Academy (Produced by Peshawar Board and Published by M/S. University Book Agency, Peshawar)



## فارسی

وقت: 3:00 گھنٹے	برائے جماعت گیارہویں (پارٹ-I)	کل نمبر: 100
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- ۱۔ حصہ نثر۔ نثر کا سلیس اردو ترجمہ بحوالہ متن و مصنف ۳۰ نمبر
- ۲۔ حصہ نظم۔ اردو میں ترجمہ و تشریح ۲۵ نمبر
- ۳۔ مصنفین۔ سید علی گجویری، سدید الدین محمد عوفی، نور الدین محمد جہانگیر ۱۰ نمبر
- شعرا۔ نظامی گنجوی، حافظ شیرازی، علامہ اقبال حالات زندگی و ادبی خدمات
- ۴۔ کتاب فارسی۔ برائے گیارہویں جماعت کے اسباق کے آخر میں دی گئی تمارین پر مبنی سوالات ۱۵ نمبر
- ۵۔ خط یا درخواست (فارسی میں) ۱۰ نمبر
- ۶۔ اردو سے فارسی ترجمہ (متفرق جملے) ۱۰ نمبر

وقت: 3:00 گھنٹے	برائے جماعت بارہویں (پارٹ-II)	کل نمبر: 100
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- ۱۔ حصہ نثر۔ نثر کا سلیس اردو میں ترجمہ بحوالہ متن و مصنف ۳۰ نمبر
- ۲۔ حصہ نظم۔ اشعار کا اردو ترجمہ و تشریح ۲۵ نمبر
- ۳۔ مصنف اور شاعر کے حالات زندگی و ادبی خدمات ۱۰ نمبر
- مصنفین۔ ابوالفضل بیہقی۔ علی بن حسین واعظ کاشفی۔ محمد حجازی
- شعرا۔ ابوسعید ابوالخیر۔ غنیمت کنجاہی۔ نظیری نیشاپوری
- ۴۔ (i) نصابی کتاب کے اسباق کے آخر میں دی گئی پرسش پر مبنی سوالات ۵ نمبر
- (ii) نصابی کتاب کے اسباق کے آخر میں دی گئی تمارین پر مبنی سوالات ۱۰ نمبر
- ۵۔ متفرق اردو جملوں کا فارسی میں ترجمہ ۱۰ نمبر
- ۶۔ مضمون نویسی (فارسی میں) ۱۰ نمبر

مجوزہ کتب:-

- ۱۔ فارسی حصہ اول برائے گیارہویں جماعت
- ۲۔ فارسی حصہ دوم برائے بارہویں جماعت
- مصنفین:- ۱۔ خانم ڈاکٹر خالدہ آفتاب
- ۲۔ نوازش علی شیخ (مرحوم)
- ۳۔ محمد خان کلیم
- ۴۔ غلام معین الدین نظامی

Explanation reference to context. Translation from Persian into Urdu/ Bengali  
Biographical Notes on Authors and Poets.

ناشرین: 1۔ آزاد بک ڈپو اردو بازار، لاہور 2۔ پریکٹر بک ہاؤس اردو بازار، لاہور



**SINDHI**

(There will be two papers of 100 marks each)

<b>Marks : 100</b>	<b>CLASS-XI (PART-I)</b>	<b>Time : 3 Hours</b>
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- |                |  |            |
|----------------|--|------------|
| 1.             | Prescribed Textbook (Prose 40 + Poetry 40) | 80         |
| 2.             | Study of language and appreciation         | 20         |
| <b>Total:-</b> |  | <b>100</b> |

<b>Marks : 100</b>	<b>CLASS-XII (PART-II)</b>	<b>Time : 3 Hours</b>
--------------------	----------------------------	-----------------------

- |                |                            |            |
|----------------|----------------------------|------------|
| 1.             | Grammar                    | 20         |
| 2.             | Composition                | 30         |
| 3.             | History of Sindhi language | 25         |
| 4.             | History of Literature      | 25         |
| <b>Total:-</b> |                            | <b>100</b> |

**Syllabus:****PART-I****1. Prescribed Textbooks**

- |            |  |                             |
|------------|--|-----------------------------|
| a. Prose   | ۲۔ روحِ رحاٹ یا کثر بخشاٹھیا                       | ۱۔ طلسم عرف غازی صلاح الدین |
| b. Poetry: | ۲۔ سنتری نصاب (اختیاری) یارِ حسین تابارِ حسین کلاس | ۱۔ شاہ لطیف نوسر کاموز      |

**ھیٹ زیکاریل شعر پاڑھیادین**

- |                        |                       |                           |            |
|------------------------|-----------------------|---------------------------|------------|
| ۱6۔ حاجی سیو پوری      | غزل ۲                 | 1۔ اخلیفہ گل محمد         | غزل ۳ تا ۳ |
| 17۔ رشید لاشاری        | غزل ۲                 | 2۔ میر عبدالحسین ساگی     | غزل ۳ تا ۳ |
| 18۔ شیخ عبدالحلیم جوش  | غزل ۳ تا ۳            | 3۔ مرزا قلع بیگ           | غزل ۳ تا ۳ |
| 19۔ مرزا قلع بیگ حیاتی |                       | 4۔ میاں علی محمد قادری    | غزل ۳ تا ۳ |
| 20۔ حافظ عبد اللہ بمل  | سہوہ کلام             | 5۔ شمس الدین بلبل         | غزل ۲      |
| 21۔ کشپند بیوس         | تاج محل               | 6۔ محمد زمان حیات شاہ     | چار چیز    |
| 22۔ نیاز علی نیاز      | وطن جی حب تاجشن آزادی | 7۔ حافظ حیات شاہ          | غزل ۳ تا ۳ |
| 23۔ لبرہ منندی         | وقت جی پکار           | 8۔ فتح محمد سیوہائی       | غزل ۳ تا ۳ |
| 24۔ سلیم گاڑھوری       | مہراٹ جی ماتری        | 9۔ نواز علی نیاز          | غزل ۳ تا ۳ |
| 25۔ حیدر بخش چوٹی جون  | شیئی رباعیون          | 10۔ مولوی حاجی احمد ملاح  | غزل ۱      |
| 26۔ ایاز قادری         | عہد                   | 11۔ محمد ابراہیم          | غزل ۳ تا ۳ |
| 27۔ مصری شاہ جی        | کافی بسرہ             | 12۔ اللہ بخش سرستار عقیلی | غزل ۲      |
| 28۔ نیاز بر جی         | گیت                   | 13۔ شیخ عبد اللہ          | غزل ۱      |
| 29۔ تنویر عباسی جو گیت | دیک                   | 14۔ اختر ہالائی           | غزل ۱      |
| 30۔ منظور نقوی گیت     |                       | 15۔ طالب المولیٰ          | غزل ۳ تا ۳ |

**Study of Language and appreciation with reference to the test:**

1. Idioms Proverbs
2. Derivatives
3. Figures of speech
4. Elementary prosody and scansion of the main three meters namely, Mutaqarib, Hjaz and Remal

**The following books are recommended:**

1. Tankeed-e-Adab by Ibrahim Khalil
2. Ilam Badn by Sandelo.

**PART II**

This paper shall be devoted to the thorough study of Grammar, composition, language and literature.

**a. Grammar**

Thorough and complete study of Grammar on advance level including analysis, scansion etc.

**b. Composition:**

1. Essay-writing
2. Dialogues and debates
3. Story-writing
4. Petitions and memorandum writing

**c. History of Sindhi Language****d. Outlines of Sindhi literature upto pre-British period**

The following books may be used for the study of the above mentioned topics:

- |                      |                        |    |
|----------------------|------------------------|----|
| مرزا قليچ بيگ        | سنتری کد اموچا کو ۳، ۳ | -1 |
| ليکراج کشنچند عزيز   | ادبی آلو               | -2 |
| جا کثر نبی بخش بلوچ  | سنتری بولی جی تاریخ    | -3 |
| میر محمد نظامانی     | سنتری دواما            | -4 |
| پیر حسام الدین راشدی | سنتری ادب (از دوم)     | -5 |



## نصاب اردو (اختیاری)

وقت: 3:00 گھنٹے	برائے جماعت گیارہویں (پارٹ-I)	کل نمبر: 100
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حصہ نثر	حصہ نظم
نثر پاروں کی سیاق و سباق کے حوالے سے تشریح	شاعر کے حوالے سے ایک جز کی تشریح (نظم، مرثیہ)
اسباق پر سوالات	شاعر کے حوالے سے ایک جز کی تشریح (حمد و نعت،
کرداروں کے بارے میں نوٹ	منقبت، قطعہ، رباعی)
تاریخ و زبان ادب اردو (خاکہ)	شاعر پر تنقیدی نوٹ
نثر نگاروں کے بارے میں سوال	
قواعد	
اصناف نظم و نثر کی تعریف	
علم بیان و بدیع	

وقت: 3:00 گھنٹے	برائے جماعت بارہویں (پارٹ-II)	کل نمبر: 100
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حصہ نثر	حصہ نظم
نثر پاروں کی سیاق و سباق کے حوالے سے تشریح	غزل کے دو اجزائیں سے ایک کی تشریح
اسباق پر سوالات	نظم کے دو اجزائیں سے ایک کی تشریح
ناول پر سوالات	شاعر پر نوٹ
پاکستانی زبانوں کے تراجم	
نثر نگاروں کے بارے میں سوال	
انشا	
مضمون	

مرقع ادب (برائے گیارہویں / بارہویں جماعت)

مصنفین: 1۔ ڈاکٹر محمد خان اشرف

3۔ پروفیسر اشتیاق احمد

ناشر: ملک محمد افضل اینڈ سنز اردو بازار لاہور

2۔ پروفیسر سمیعہ جلیل صدیقی

4۔ پروفیسر ایاز اصغر شاہین



## HEALTH AND PHYSICAL EDUCATION

(Outlines of tests)

Part-I (Class-XI)  
Part-II (Class-XII)  
Practical

Marks: 85  
Marks: 85  
Marks: 30

وقت: 3:00 گھنٹے	برائے جماعت گیارہویں (پارٹ-I)	کل نمبر: 85
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### حصہ اول

- ۱۔ تعلیم جسمانی کی تعریف اور اہمیت
- ۲۔ تعلیم جسمانی کے اغراض و مقاصد
- ۳۔ جسمانی سرگرمیوں کا دائرہ کار
- ۴۔ منظم کھیل
- ۵۔ کسرتی کھیل
- ۱۔ تعلیمی جمناسٹک
- ۲۔ تفریحی مشاغل
- ۳۔ قامت اور قامتی نقائص
- لڑکوں کے لیے: فٹ بال، والی بال
- لڑکیوں کے لیے: نیٹ بال، والی بال
- لڑکوں کے لیے: ۱۔ گولہ پھینکنا
- ۲۔ سہ جست
- ۳۔ 4x100 میٹر ڈاک دوڑ (ان کی مہارتیں)
- لڑکیوں کے لیے: ۱۔ گولہ پھینکنا
- ۲۔ تھالی پھینکنا
- ۳۔ 4x100 میٹر ڈاک دوڑ (ان کی مہارتیں)

### حصہ دوم

- ۱۔ صحت کی تعریف اور تعلیم جسمانی سے اس کا تعلق
- ۲۔ انسانی جسم اور اس کی کارکردگی
- ۱۔ نظام دوران خون
- ۲۔ نظام تنفس
- ۳۔ قامت اور قامتی نقائص اور ان کی اصلاحی ورزشیں
- ۴۔ ابتدائی طبی امداد
- ۱۔ کسرتی ضربیں
- ۲۔ شکستگی اور اقسام شکستگی
- ۵۔ متعدی امراض کے اسباب اور
- چھپک، چھوٹی چھپک، خسرہ، ہیضہ، تپ مخرقہ (ٹائی فائیڈ)
- روک تھام

نوٹ:- معروضی حصہ میں لڑکوں اور لڑکیوں کے لیے برابر چوائس (Choice) دیا جائے گا۔

پریکٹیکل لسٹ برائے فزیکل ایجوکیشن پارٹ-I پارٹ-II یونیفارم اچھا کھلاڑی اور عملی کاپی کے

- ۱۔ تعلیمی جمناسٹک
- ۲۔ منظم کھیل
- ۳۔ کسرتی کھیل
- ۱۔ بازوں کی ورزشیں
- ۲۔ ٹانگوں کی ورزشیں
- ۳۔ دھڑکی ورزشیں
- ۴۔ سیدھی قلابازی
- ۵۔ الٹی قلابازی
- لڑکوں کے لیے: فٹ بال، والی بال (ان کی مہارتیں)، لڑکیوں کے لیے: نیٹ بال، والی بال (ان کی مہارتیں)
- لڑکوں کے لیے: ۱۔ گولہ پھینکنا
- ۲۔ سہ جست
- ۳۔ 4x100 میٹر ڈاک دوڑ (ان کی مہارتیں)
- لڑکیوں کے لیے: ۱۔ گولہ پھینکنا
- ۲۔ تھالی پھینکنا
- ۳۔ 4x100 میٹر ڈاک دوڑ (ان کی مہارتیں)

وقت: 3:00 گھنٹے	برائے جماعت بارہویں (پارٹ-II)	کل نمبر: 85
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## حصہ اول

- ۱۔ کھیلوں کی افادیت کھلاڑی کے اوصاف
- ۲۔ منظم کھیل (لڑکوں کے لیے: ہاکی، باسکٹ بال) (لڑکیوں کے لیے: بیڈمنٹن، ٹیبل ٹینس)
- ۳۔ کسرتی کھیل لڑکوں کے لیے: ۱۔ نیزہ پھینکا ۲۔ اونچی چھلانگ ۳۔ لمبی چھلانگ ۴۔ 400 میٹر کی دوڑ
- لڑکیوں کے لیے: ۱۔ نیزہ پھینکا ۲۔ اونچی چھلانگ ۳۔ 400 میٹر کی دوڑ

## حصہ دوم

- ۱۔ جسمانی نظام ۱۔ نظام انہضام ۲۔ نظام عضلات
- ۲۔ خوراک اور غذا ۱۔ خوراک کے اجزاء ۲۔ متوازن خوراک ۳۔ مشروبات
- ۳۔ منشیات اور ان کے اثرات افیون + نکوٹین + خواب آور گولیاں اور مارفیا، سکنکھیا
- ۴۔ جنسی حفظان صحت کی تعلیم
- ۵۔ ابتدائی طبی امداد (آگ، زہر، مصنوعی تنفس)

## پریکٹیکل لسٹ برائے فزیکل ایجوکیشن پارٹ-II

- یونیفارم اچھا کھلاڑی اور عملی کاپی
- ۱۔ تعلیمی جناسٹک ۱۔ پیٹ کی ورزشیں ۲۔ پہلوؤں کی ورزشیں ۳۔ توازن کی ورزشیں ۴۔ سر کے بل کھڑے ہونا۔ ۵۔ محراب بنانا
- ۲۔ منظم کھیل لڑکوں کے لیے: ۱۔ ہاکی ۲۔ باسکٹ بال (ان کی مہارتیں)
- لڑکیوں کے لیے: ۱۔ بیڈمنٹن ۲۔ ٹیبل ٹینس (ان کی مہارتیں)
- ۳۔ کسرتی کھیل لڑکوں کے لیے: ۱۔ نیزہ پھینکا ۲۔ اونچی چھلانگ ۳۔ لمبی چھلانگ ۴۔ تیز دوڑ کا سٹارٹ (ان کی مہارتیں)
- لڑکیوں کے لیے: ۱۔ نیزہ پھینکا ۲۔ اونچی چھلانگ ۳۔ تیز دوڑ کا سٹارٹ (ان کی مہارتیں)

- مجوزہ کتاب: ہیلتھ اینڈ فزیکل ایجوکیشن
- پبلشر: طارق پبلشنگ ہاؤس برائے ٹیکسٹ بک بورڈ، لاہور۔
- مصنفین: ۱۔ مس صابرہ اعظم ۲۔ مس ای۔ یو خان
- ایڈیٹر: ونگ کمانڈر (ریٹائرڈ) حمید علی صوفی



## EDUCATION

<b>Marks: 100</b>	<b>PART-I (Class- XI)</b>	<b>Time: 3:00 Hours</b>
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### UNIT-I

**Weightage 40%**

#### CHAPTER-I EDUCATION

##### Concepts

1. Introduction to Education
2. Elements of Education
3. Functions of Education

##### Contents

1. Importance and description of Education
2. Role and Scope of Education as a subject/discipline, Teachers, Students, Content areas, Milieu, Environment Culture
3. Function of Education
4. Model of Education. Formal, informal and non-formal, Conversation, Transmission, Reformation

#### CHAPTER-II AIMS OF EDUCATION

##### Concepts

1. Aims of Education

##### Contents

1. Spiritual and Moral aims
2. Intellectual aims
3. Economic / Vocational aims
4. Citizenship (Socio-cultural) aims
5. Types of Education: Specific, General

#### CHAPTER-III FOUNDATIONS OF EDUCATION

##### Concepts

1. Foundation of Education
2. Islamic Foundation
3. Philosophical foundation
4. Psychological foundation

##### Contents

1. Introduction
2. Islamic Foundation of Education
3. Importance of Education in Islam
4. Sources of knowledge Philosophical foundations
5. What is Philosophy, Philosophical Foundation, Ideology, Religious, Customs, norms & students
6. Relationship between philosophy and Education
7. Contribution of Philosophy to Education
- Psychological foundations
8. What is Psychology?
9. Relationship between Education and Psychology
10. Contribution of Psychology of Education
11. Meaning of Sociology and Economics
12. Relationship and Contribution of Sociology and Economics to Education Social benefits, Economics benefits

### UNIT-II

**Weightage 20%**

#### CHAPTER-IV HUMAN DEVELOPMENT

##### Concepts

1. Human development
2. Factors effecting Development
3. Individual differences (meaning and definition)
4. Causes of individual differences

##### Contents

1. Explanation of the concepts of Human Development and Growth
2. Difference between growth and development with examples Principles of Development. Nature, Nurture, Family Care, Food, Climate, Heredity, Environment
3. Individual differences and teaching learning process

#### CHAPTER-V LEARNING

##### Concepts

1. Learning
2. Methods of learning
3. Laws of Learning
4. Conditions of learning
5. Theories of learning

##### Contents

1. Meaning and definitions
2. Trial and error, imitation, insight (arising from intellectual rigour, learning by doing)
3. Law of readiness
4. Law of Exercise
5. Law of Effective



6. Readiness, motivation, interest Attention, meaningful / relevant, attitude
7. Behaviorist theories
8. Cognitive theories

**UNIT-III****Weightage 30%****CHAPTER-VI SOCIETY COMMUNITY AND EDUCATION**

<b>Concepts</b>	<b>Contents</b>
1. Society Community and Education	1. Society and community (meaning and definition)
2. Development	2. Explain the Interrelationship of society and Education
3. Progress	3. Description of the role of education in the development of individual and society

**CHAPTER-VII GUIDANCE AND COUNSELING**

<b>Concepts</b>	<b>Contents</b>
1. Guidance and counseling	1. Guidance and counseling (meaning and definition)
2. Methods	2. Needs & role of guidance and counseling in school
	3. Forms of guidance (Education and Career)
	4. Need and importance of counseling in schools
	5. Types and methods of counseling

**CHAPTER-VIII CURRICULUM, SYLLABUS AND TEXTBOOK**

<b>Concepts</b>	<b>Contents</b>
1. Curriculum, syllabus and textbooks	1. Meaning and definition of curriculum
2. Curriculum development	2. Differences between curriculum, syllabus and textbooks
3. Impact of teaching learning process	3. Components of curriculum and their interrelationship
4. Discussion regarding characteristics of good curriculum	4. Importance of Assessment and evolution
5. Characteristics of good textbooks	
6. Impact of curriculum on effective teaching learning process	

<b>Marks: 100</b>	<b>PART-II (Class- XII)</b>	<b>Time: 3.00 Hours</b>
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**UNIT-I****Weightage 47%****CHAPTER-IX MUSLIM EDUCATION IN SUB-CONTINENT**

<b>Concepts</b>	<b>Contents</b>
1. Salient features of Education System of Muslim Era	1. Historic back ground (Maktab, Madrassa Education)
	2. Contribution of Muslim thinkers towards education with special reference to: Al-Ghazali, Ibni-Khaldon, Ibni-Seena, Al-Zurnuzi
	3. Concept of knowledge
	4. Aims & objective of education
	5. Curriculum
	6. Methods of teaching
	7. Student training relationship
	8. Salient feature, of the Muslim system of Education in Indo-Pak. Objectives, Curriculum and Content , Administration, Teaching Methods , Evaluation

**CHAPTER-X BRITISH EDUCATION SYSTEM IN SUB-CONTINENT**

<b>Concepts</b>	<b>Contents</b>
1. British Education system in the sub- continent	1. <b>Introduction</b>
	2. Beginning of East Indian Company Charter act (1813), Woods dispatch (1854), Sergeant Report (1944)

**3. Muslim Education Movements:**

Deoband Movement, Ali Garh Movement

**CHAPTER- XI POLICIES AND PLANS OF EDUCATION IN PAKISTAN****Concepts**

1. Policies and plans of Education in Pakistan

**Contents****1. Introduction:**

Implications of Ideology of Pakistan for Education, Salient feature of the following Education policy, First Educational Conference 1947, Report of the commission on NE, 1959, Education Policy 1970, Education Policy 1972. Education Policy 1972-80. NEP and Implemental Programme 1979. National Education Policy 1992-2002. National Education Policy 1998-2010.

**UNIT-II Weightage 43%****CHAPTER-XII EDUCATIONAL PROBLEMS IN PAKISTAN****Concepts**

Issues and problems.

**Contents**

Educational issues and problems in Pakistan: Population growth, Low Enrolment and heavy drop out, Low literacy, Indiscipline, Female Education, Economic and social conditions, Physical condition of educational institutions, Quality of Education, Investment in Education, General attitude towards education

**CHAPTER-XIII ROLE OF VARIOUS ORGANIZATIONS CONTRIBUTING TOWARDS EDUCATION****Concepts**

1. Organization.
2. Administration.
3. Management.
4. Public Private Sectors

**Contents****1. Administration:**

University Education  
Provincial Department of Education  
District level Management.  
Private Sector organizations

**2. Curriculum and textual material development**

Federal Ministry of Education Curriculum Wing  
Provincial Bureaus of Curriculum  
Textbook Boards  
Private Sector organization

**3. Staff Development**

Colleges of Education, Government Elementary  
College of Education, Private Sector Organization

**4. Examination:**

Federal Board of Intermediate and Secondary Education (FBISE)  
Provincial Boards of Intermediate and Secondary Education (BISES)  
Boards of Technical Education (BTE)  
Rural Development Education

**Recommended Book:****Authors:****Publisher:**

Education Part-I &amp; II

1) Prof. Dr. Irshad Ahmad Farakh  
Raza Book Depot, Lahore.

2) Abdul Salam Ch.



**GEOLOGY**

Distribution of Marks:

Part-I (Class-XI)

Theory Marks: 85

Part-II (Class-XII)

Theory Marks: 85

Practical: 30

**Total : 200**

<b>Marks: 85</b>	<b>PART –I (CLASS-XI)</b>	<b>Time: 3:00 Hours</b>
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**1. PHYSICAL GEOLOGY**

**Rivers and Landscape:** Geological Processes. Weathering and Erosion. Processes of Stream Erosion; Transportation by streams. Competence and Capacity of Streams. Drainage Basin. Valley Growth. Base level; Groded Stream. Cross Profile, Drainage Pattern, Meandering. Cycle of Erosion. Land forms like Questa, Escarpment, Dipslope. Mesa.

**Groundwater:** Porosity and Permeability: Groundwater zones; Movement and Discharge of Groundwater; Erosion and Transportation due to Groundwater; Deposition by Groundwater; Water-logging and Salinity in Pakistan.

**2. CRYSTALLOGRAPHY**

Elements of symmetry, plane, axis and centre of symmetry. Symmetry of normal classes only. An outline study of the six systems of symmetry.

**3. MINERALOGY**

The common rock-forming minerals; their physical characters, chemical composition and modes of origin and occurrence; Quartz, Felspar Mica. (Muscovite and Biotite), Olivine, Augite, Hornblende, Garnet, Tourmaline, Eepidote, Chlorite, Apatite, Zircon, Kyanite.

Economic minerals, and rocks, their chemical composition, occurrence and uses; Diamond, Graphite, Sulphur, Gold, Silver, Copper, Magnetite, Haematite, Limonite, Galena, Zincblende, Cinnabar, Stibnite, Chalcopyritc, pyrite, Orpiment, Argentite, Corundum, Cassiterite, Chromite, Spinel, Rutile, Bauxite, Pyrolusite Psilomelane, Magnesite, Siderite, Aragonite, Malachite, Apatite, Halite, Magnganite, Rhodocrosite, Calcite, Dolemite, Flourite, Barytes, Celestite, Gypsum.

**4. PETROLOGY**

What is magma? What are igneous rocks and how they are formed What are sedimentary rocks. How they are formed. Classification of Sedimentary rocks. What is metamorphism? What are the main types of metamorphism and how the metamorphic rocks are formed? Outline classification of igneous rocks. An outline of their modes of origin and their recognition. Granite, Aplite, Pegmatite, Granite Porphyry, Felsite, Felsite porphyry, Obsidian, Pitchstone, Pertite, Pumice, Volcanic ash, Tuff, Breccia, Agglomerate, Diorite, Quartz Diorite, Diorite porphyry, Basalt Porphyry, Melaphyre, Basalt Trap, Trap, Andesite, Gabbro Diabase, Quartz Gabbro, porphyry, Pyroxenite, Dunite, Hornblendite/Peridotite, Serpentine.

Common sandstone, Graywacke, Limestone, Dolomite, Marl, Conglomerate, Shale, Mudstone, Siltstone.

Quartzite, Chlorite acdnolite schists, Biotite Schist, Garnet Mica Sohist, Gneiss, Granite Gneiss, Kyanite, Amphi bolite, Talc schist, Serpentinite, Hornfelse.

<b>Marks: 85</b>	<b>PART –II (CLASS-XI)</b>	<b>Time: 3:00 Hours</b>
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### 1. PALAEOLOGY

General Introduction to animal kingdom. Brief resume of Invertebrate Palaeontology. Classification of Vertebrates upto class level. Brief outline of Jawless Vertebrates, Fishes, Amphibians, Reptiles, Birds and Mammals. Sequence of vertebrates through time. Cainozoic fossil vertebrates.

### 2. STRATIGRAPHY:

Introduction to stratigraphy, Principles of Stratigraphy. Standard Time Scale. Significance of terms used in Time Scale. Distribution of Vertebrate fossils in Siwalik Group of Pakistan and its important Vertebrate fossils. Brief description of the Indus Basin.

### 3. PHYSIOGRAPHY

Physical features of Pakistan.

**Geological Structures:** Structures produced by diastrophism.

**Nature of Earth Movements:** Orogenesis. Epeirogenesis, Folded mountain, Geosynclines, Mountain building,

**Faulting:** Elements of faults. Simple classification of faults (displacement and slip-classifications).

**Joints and Cleavage:** Elementary concepts.

### LIST OF PRACTICAL FOR PART-I & II

Interpretation of morphology from toposheets including profile drawing. Definition of Outcrop, dip and strike. Simple completion of outcrop and determination of dip. Drawing of simple geological sections.

Determination of the hardness of minerals, determination of specific gravity of minerals and rocks by Walker's and Jolly's balance.

### **Recommended Books:**

1. Geology: An Introduction to Principles of Physical and Historical Geology (Second Edition) by Richard M. Pearl.
2. Geology by Richard M. Field (Fourth Edition).
3. An Introduction to Geology by Sir Arthur E. Trueman.
4. Rutley's elements of Mineralogy by H.H. Read.



**SOCIOLOGY**

(There will be two papers of 100 marks each)

<b>Marks: 100</b>	<b>PART –I (CLASS-XI)</b>	<b>Time: 3 Hours</b>
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**GENERAL SOCIOLOGY****Syllabus**

- 1. Introduction:**  
Definition of Sociology, Sociology as a scientific discipline, Important fields of Sociology, Sociology in every day life
- 2. Social Action and Social Interaction**  
Definition, Distinction
- 3. Social Group**  
Definition, Formation of Social Groups, Types: primary group; secondary group membership group, non-membership groups in-group, out group; locality group, formal and informal group
- 4. Role and Status :**  
Definition, Types: ascribed, achieved, Role conflict.
- 5. Norms, Sanctions and Values;**  
Definition, Types of norms: folkways, mores, laws, Types of sanctions: positive, negative; formal, informal, Non-conformity and Social control, Value conflict.
- 6. Origin and Development of Society:**  
Nature of man, Difference between animal and human society, Important factors in the development of society, Types: rural-urban nomadic-sedentary; traditional-modern.
- 7. Culture:**  
Definition, Uniformities and variabilities of culture, Cultural change and its processes: diffusion, acculturation, accommodation assimilation, Cultural Relativism and Ethnocentrism
- 8. Social Institutions:**  
Definition, Major institutions: Family education, religion, polity, economy
- 9. Social Stratification:**  
Definition, Class and caste, Social mobility, Determinants of social stratification.
- 10. Social Change:**  
Definition, Social change and its processes.

<b>Marks: 100</b>	<b>PART –II (CLASS-XII)</b>	<b>Time: 3 Hours</b>
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**PAKISTANI SOCIETY AND CULTURE**

- 1. Introduction:**  
Ethnic origin of Pakistani people, Cultural heritage, ideological foundations of Pakistan.
- 2. Pakistani society -Sub - Cultural Composition**  
Major sub-cultural groups in Pakistan, Similarities and differences among different Sub-cultural groups, Problems of national integration
- 3. Village Life in Punjab:**  
Village settlement, Major Institutions: Family and Braderi, Political relations, Economic relations, Religion Education.
- 4. Population of Pakistan:**  
Size, Current Growth patterns, Composition: age, sex, education, Distribution - Regional and rural-urban, Growth of cities.
- 5. Social Problems in Pakistan:**  
Over population, its implications and remedies, Poverty, its causes and possible remedies, Illiteracy, its implications and remedies.



## PHYSICS

Distribution of Marks:

Part-I (Class-XI)

Theory Marks: 85

Part-II (Class-XII)

Theory Marks: 85

Practical: 30

**Total : 200**

<b>Marks: 85</b>	<b>PART –I (CLASS-XI)</b>	<b>Time: 3:00 Hours</b>
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### CHAPTER:1 Measurements

- 1.1 Physical Quantities and Their Units
- 1.2 International System of Units
- 1.3 Uncertainty In Measurement
- 1.4 Use of Significant Figures
- 1.5 Precision And Accuracy
- 1.6 Assessment of Total Uncertainty In The Final Result
- 1.7 Dimensions of Physical Quantities

### CHAPTER:2 Force and Motion

- 2.1 Scalars
- 2.2 Vectors
- 2.3 Product of Two Vectors
- 2.4 Equations of Motions
- 2.5 Motion Under Gravity
- 2.6 Projectile Motion
- 2.7 Momentum
- 2.8 Elastic And Inelastic Collisions
- 2.9 Inelastic Collision in One Dimension
- 2.10 Elastic Collision In Two Dimensions
- 2.11 Inelastic Collision in Two Dimensions
- 2.12 Rocket Propulsion

### CHAPTER:3 Circular and Rotational Motion

- 3.1 Angular Measurements
- 3.2 Centripetal Force
- 3.3 Artificial Satellites
- 3.4 Moment of Inertia
- 3.5 Angular Momentum
- 3.6 Law of Conservation of Angular Momentum

### CHAPTER:4 WORK , ENERGY and Power

- 4.1 Work Done By a Constant Force
- 4.2 Work Done By a Variable Force
- 4.3 Conservative And NON-Conservative Forces
- 4.4 Power
- 4.5 Energy
- 4.6 Escape Velocity
- 4.7 Work-Energy Theorem
- 4.8 Interconversion Of Potential Energy And Kinetic Energy

### CHAPTER:5 Solids and Fluid Dynamics

- 5.1 Classification Of Solids
- 5.2 Mechanical Properties Of Solids
- 5.3 Stress, Strain And Young,s Modulus
- 5.4 Determination Of Young's Modulus Of a Wire
- 5.5 Elastic Deformation, Plastic Deformation And Elastic Limit
- 5.6 Strain Energy In Deformed Materials
- 5.7 Archimedes' Principle And Floatation
- 5.8 Steady, Non-Viscous And Ideal Fluid
- 5.9 Equation Of Continuity
- 5.10 Increase in Flow Velocity
- 5.11 Bernoulli's Equation

5.12	Uses Of Bernoulli's Equation
5.13	Viscous Drag And Stokes' Law
5.14	Terminal Velocity
5.15	Real Fluids Are Viscous Fluids
5.16	Superfluids
<b>CHAPTER:6</b>	<b>Heat and Thermodynamics</b>
6.1	Assumptions Of The Kinetic Theory Of Gases
6.2	Internal Energy
6.3	Heat And Work
6.4	First Law Of Thermodynamics
6.5	Reversible and Irreversible Processes
6.6	Heat Engine
6.7	Second Law of Thermodynamics
6.8	Carnot Engine And Carnot's Theorem
6.9	Refrigerator
6.10	Entropy
<b>CHAPTER:7</b>	<b>Waves and Vibrations</b>
7.1	Waves
7.2	Principle of Superposition of Waves
7.3	Interference and Its Types
7.4	Stationary Waves & Their Formation
7.5	Stationary Waves On a Stretched String
7.6	Stationary Waves In Air Columns
7.7	Experiment Demonstrating Stationary Waves Using Microwaves
7.8	Diffraction of Waves
7.9	Beats
7.10	Intensity (I) Of A Wave
7.11	Doppler Effect
7.12	Applications Of Doppler Effect
<b>CHAPTER:8</b>	<b>Physical Optics And Gravitational Waves</b>
8.1	Polarization of Light
8.2	Types Of Polarization
8.3	Production and Detection Of Plane Polarized Lights
8.4	Polarization Of Light By The Method Of Reflection
8.5	Malus's Law
8.6	Gravitational Waves (GWs)
8.7	Interferometer
<b>CHAPTER:9</b>	<b>Electrostatics and Current Electricity</b>
9.1	Coulomb's law
9.2	Electric Field Strength
9.3	Electric Flux
9.4	Gauss's Law
9.5	Electric Potential
9.6	Electron Volt
9.7	Motion Of Charged Particles In a Uniform Electric Field
9.8	Path Of a Charged Particle
9.9	Shielding From External Electric Field
9.10	Electric Current
9.11	Current Through A Conductor
9.12	Ohm's Law
9.13	Resistivity And Its Dependence Upon Temperature
9.14	Electrical Power
9.15	Electromotive Force (EMF) And Potential Difference
9.16	KIRCHHOFF'S Rules
9.17	Wheatstone Bridge
9.18	Potentiometer
9.19	Use of A Galvanometer
9.20	Thermistors

- 9.21 Light Dependent Resistor
- CHAPTER:10 Electromagnetism**
- 10.1 Force On a Current-Carrying Conductor In a Uniform Magnetic Field
- 10.2 Magnetic Flux And Flux Density
- 10.3 Magnetic Flux Linkage
- 10.4 Motion Of a Charged Particle In a Magnetic Field
- 10.5 Velocity Selector
- 10.6 Induced EMF And FARADAY's Law
- 10.7 LENZ'S Law And Direction Of Induced EMF
- 10.8 Factors Affecting EMF
- 10.9 Ferrofluids
- 10.10 A Seismometer
- CHAPTER:11 Special Theory Of Relativity**
- 11.1 Relative Motion
- 11.2 Frames Of Reference
- 11.3 Special Theory Of Relativity
- 11.4 The Equivalence Between Mass and Energy
- 11.5 Space-Time In Relativity
- CHAPTER:12 Nuclear and Particle Physics**
- 12.1 Structure And Properties Of The Nucleus
- 12.2 Fundamental Forces Of Nature
- 12.3 Matter And Anti-Matter
- 12.4 Radioactivity
- 12.5 Fundamental Particles
- 12.6 Quarks
- 12.7 Higgs Boson
- 12.8 Conservation Laws
- 12.9 The Asymmetry Of Matter And Anti-Matter In The Universe
- 12.10 Most of The Matter in The Observable Universe Is Plasma
- 12.11 The Theories About The Forces Between The Masses Of Particles
- 12.12 The Standard Model

**Recommended Book:** Physics Part-I

- |                 |   |                                |
|-----------------|---|--------------------------------|
| <b>Authors:</b> | 1. Prof. (Rtd.) Muhammad Ali Shahid (Izaz-i-Fazeelat) | 2. Prof. (Rtd.) Muhammad Nisar |
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**Punjab Education , Curriculum, Training And Assessment Authority**



<b>Marks: 85</b>	<b>PART –II(CLASS-XII)</b>	<b>Time: 3:00 Hours</b>
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**CHAPTER:12 ELECTROSTATICS**

Coulomb's Law. Fields of Force. Electric Field Lines. Applications of Electrostatics. Electric Flux. Electric Flux through a Surface enclosing a Charge. Gauss's Law. Applications of Gauss's Law. Electric Potential. Electron Volt. Electric and Gravitational Forces (A Comparison). Charge on an Electron by Millikan's Method. Capacitor. Capacitance of a Parallel Plate Capacitor. Electric Polarization of Dielectrics. Energy Stored in a Capacitor. Charging and Discharging Capacitor

**CHAPTER:13 CURRENT ELECTRICITY**

Electric Current. Source of Current. Effects of Current. Ohm's Law. Resistivity and its Dependence upon Temperature. Colour code for Carbon Resistances. Electrical Power and Power Dissipation in Resistors. Electromotive force (EMF) and Potential Difference. Kirchhoff's Rules. Wheatstone Bridge. Potentiometer

**CHAPTER:14 ELECTROMAGNETISM**

Magnetic Field due to Current in a long Straight Wire. Force on a Current Carrying Conductor in a Uniform Magnetic Field. Magnetic Flux and Flux Density. Ampere's Law and Determination of Flux Density B. Force on a Moving Charge in a Magnetic Field. Motion of Charged Particle in an Electric and Magnetic Field. Determination of e/m of an Electron. Cathode ray Oscilloscope

Torque on a Current Carrying Coil. Galvanometer. Avo Meter - Multimeter

**CHAPTER:15 ELECTROMAGNETIC INDUCTION**

Induced EMF and Induced Current. Motional EMF. Faraday's Law and Induced EMF. Lenz's Law and Direction of Induced EMF. Mutual Induction. Self Induction. Energy Stored in an Inductor. Alternating Current Generator. D.C. Generator. Back Motor Effect in Generators. D.C. Motor. Back EMF Effect in Motors. Transformer

**CHAPTER:16 ALTERNATING CURRENT**

Alternating Current. A.C. Circuits. A.C. through a Resistor. A.C. through a Capacitor. A.C. through an Inductor. Impedance. R-C and R-L Series Circuits

Power in A.C. Circuits. Series Resonance Circuit. Parallel Resonance Circuit

Three Phase A.C. Supply. Principle of Metal Detectors. Choke. Electromagnetic Waves. Principle of Generation, Transmission and Reception of Electromagnetic Waves. Modulation

**CHAPTER:17 PHYSICS OF SOLIDS**

Classification of Solids. Mechanical Properties of Solids. Electrical Properties of Solids. Superconductors. Magnetic Properties of Solid

**CHAPTER:18 ELECTRONICS**

Brief Review of p-n Junction and its Characteristics. Rectification. Specially Designed p-n Junctions. Transistors. Transistor as an Amplifier. Transistor as a Switch. Operational Amplifier. Op-Amp as Inverting Amplifier. Op-Amp as Non-Inverting Amplifier. Op-Amp as A Comparator. Comparator as a Night Switch

Digital Systems. Fundamental Logic Gates. Other Logic Gates. Application of Gates in control Systems

**CHAPTER:19 DAWN OF MODERN PHYSICS**

Relative Motion. Inertial Frame of Reference. Special Theory of Relativity. Black Body Radiation. Interaction of Electromagnetic Radiation with matter. Annihilation of Matter. Wave Nature of Particles. Uncertainty Principle

**CHAPTER:20 ATOMIC SPECTRA**

**CHAPTER:21**

Atomic Spectra. Bohr's Model of the Hydrogen Atom. Inner Shell Transitions and Characteristic X-Rays. Uncertainty within the Atom. Laser

**NUCLEAR PHYSICS**

Atomic Nucleus. Isotopes. Mass Defect and Binding Energy. Radioactivity

Half Life. Interaction of Radiation with matter. Radiation Detectors. Nuclear Reactions. Nuclear Fission. Fusion Reaction. Radiation Exposure. Biological Effects of Radiation. Biological and Medical uses of Radiation. Basic Forces of Nature. Building Blocks of Matter

**LIST OF EXPERIMENTS IN PHYSICS  
FOR CLASS XII (PART-II)**

- 1 To determine the resistance of wire by Slide Wire Bridge. Also calculate specific resistance of material of wire.
- 2 To determine the resistance of galvanometer by half deflection method. Also calculate the current for full scale deflection (or for 30 divisions).
- 3 To determine the resistance of a voltmeter by drawing a graph between  $R$  and  $\frac{1}{V}$ .
- 4 To study the variation of resistance of thermistor with temperature.
- 5 To convert a moving coil galvanometer into an ammeter of range (0 – 1 amp).
- 6 To convert a moving coil galvanometer into a voltmeter of range (0 – 3 volts).
- 7 To study the relation between current passing through a tungsten filament bulb and potential difference applied across it.
- 8 To determine the internal resistance of a cell by using potentiometer.
- 9 To determine the EMF of a cell by using potentiometer.
- 10 To compare EMF's of two cells by using potentiometer.
- 11 To study the charging and discharging of a capacitor and to measure time constant.
- 12 To study the relation between current and capacitance when different capacitors are used in A.C circuit.
- 13 To study the characteristics of semiconductor diode and to calculate forward and reverse current resistance.
- 14 To study the characteristics of N-P-N transistor.
- 15 To verify the truth table for basic logic gates.
- 16 To make burglar alarm by using NAND gates.
- 17 To make a fire alarm by using NOT gate.
- 18 To study the variation of electric current with intensity of light using a photo cell.
- 19 To measure the high resistance by Neon Flash Lamp.

**ESTIMATED TIME ALLOCATION AND WEIGHTAGE FOR VARIOUS CHAPTERS  
PHYSICS CLASS XII (PART-II)**

Theory	Content	Periods	Weightage,
Chapter 12	Electrostatic	18	12%
Chapter 13	Current electricity	15	10% •
Chapter 14	Electro Magnetism	16	10%
Chapter 15	Electromagnetism Induction	12	8%
Chapter 16	Alternating current	18	12%
Chapter 17	Physics of solids	8	5%
Chapter 18	Electronics	10	7%
Chapter 19	Dawn of Modern Physics	18	12%
Chapter 20	Atomic Spectra	15	10%
Chapter 21	Nuclear Physics	20	14%
<b>Total</b>	*	<b>150</b>	<b>100% .</b>



**CHEMISTRY**

Distribution of Marks:

Part-I (Class-XI)

Theory Marks: 85

Part-II (Class-XII)

Theory Marks: 85

Practical: 30

**Total : 200**

<b>Marks: 85</b>	<b>PART –I (CLASS-XI)</b>	<b>Time: 3:00 Hours</b>
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**CHAPTER:1 Periodic Table and Periodic Properties**

- 1.1 Historical Background
- 1.2 Modern Periodic Table-Main Features
- 1.3 Metals, Non-Metals and Metalloids
- 1.4 Blocks In Periodic Table
- 1.5 Families In Periodic Table
- 1.6 Periodic Arrangement And Electronic Configuration
- 1.7 Periodicity Of Properties
- 1.8 Reactions of Sodium And Magnesium
- 1.9 Trends in Bonding In Oxides and Chlorides Of Period 3
- 1.10 Variation In oxidation Number In Oxides And Chlorides

**CHAPTER:2 Atomic Structure**

- 2.1 Atomic Number, Proton Number And Nucleon Number; Identity Of an Element
- 2.2 Effect Of Electric Field On Fundamental Particles
- 2.3 Experimental Evidences For The Electronic Configuration
- 2.4 Quantum Numbers
- 2.5 Shapes Of Atomic Orbitals
- 2.6 Electronic Configuration
- 2.7 Electronic Configuration And The Periodic Table
- 2.8 Electronic Configuration Of IONS and Free Radicals
- 2.9 Electronic Configuration And The Formation Of Semiconductors

**CHAPTER:3 Chemical Bonding**

- 3.1 Types Of Bonding
- 3.2 Electronegativity And the Type of Bond
- 3.3 Intermolecular Forces
- 3.4 Bond Energy And Bond Length
- 3.5 A Comparison Among IONIC, Covalent, Metallic Bonds and Intermolecular Forces
- 3.6 Valence Bond Theory (VBT)
- 3.7 Atomic Orbital Hybridization
- 3.8 Valence Shell Electron Pair Repulsion Model (VSEPR)
- 3.9 Molecular Orbital Theory(MOT)

**CHAPTER:4 Stoichiometry**

- 4.1 Concept Of Mole
- 4.2 Relationship Between Mole, Molar Mass And Avogadro's Number
- 4.3 Molar Volume
- 4.4 Molar Mass And Density Of gases
- 4.5 Molar Concentration
- 4.6 Stoichiometric Relationships
- 4.7 Limiting And Excess Reactant
- 4.8 Theoretical Yield And Actual Yield
- 4.9 Importance Of Stoichiometry in Production And Dosage Of Medicine

**CHAPTER:5 States and Phases of Matter**

- 5.1 Properties Of Gases
- 5.2 Ideal Gas Equation
- 5.3 Properties of Liquids
- 5.4 Intermolecular Forces
- 5.5 Surface Tension Of Liquids

5.6	Viscosity Of Liquids
5.7	Evaporation
5.8	Vapour Pressure
5.9	Boiling Point
5.10	Energetics Of Phase Changes
5.11	Solids
5.12	Types of Solids
5.13	Liquid Crystals
<b>CHAPTER:6</b>	<b>Chemical Energetics</b>
6.1	Enthalpy Change
6.2	Energy Profile Diagram
6.3	Standard Enthalpy Changes
6.4	Bond Energy (Bond Dissociation Energy) And Enthalpy Changes
6.5	Enthalpy Change Of Reaction ( $\Delta H_r$ ) And Chemical Bonds
6.6	Measurement Of Enthalpy Change Of a Reaction
6.7	Enthalpy Change And Calorie Content Of Food
6.8	HESS' LAW Of Heat Summation
6.9	Energetics Of Solution
6.10	Born-Haber Cycle
6.11	Entropy
6.12	The Free Energy Change, $\Delta G$
<b>CHAPTER:7</b>	<b>Reaction Kinetics</b>
7.1	Collision Theory
7.2	Rate Of Reaction
7.3	Factors Affecting Rate Of a Chemical Reaction
7.4	Rate Law, Rate Constant And Order Of Reaction
7.5	Determination Of Rate Constant
7.6	Reaction Mechanism
<b>CHAPTER:8</b>	<b>Chemical Equilibrium</b>
8.1	Macroscopic Events And Microscopic Events
8.2	Reversible Reactions, Microscopic Events And Dynamic Equilibrium
8.3	Relation Between Macroscopic and Microscopic Events
8.4	Dynamic Equilibrium Between Two Physical States
8.5	Conditions For Equilibrium
8.6	Characteristics Of Chemical Equilibrium
8.7	Types of Equilibrium
8.8	Equilibrium Constant And Position of equilibrium
8.9	Relationships Between Various Equilibrium Constants
8.10	Position Of Equilibrium And Reaction Conditions
8.11	LE-CHATELIER'S Principle
8.12	The Effect Of Change Of Concentrations
8.13	The Effect Of Change In Pressure Or Volume
8.14	The Effect Of Change In Temperature
8.15	Effect Of Catalyst On Equilibrium
8.16	Industrial Applications Of Chemical Equilibrium
<b>CHAPTER:9</b>	<b>Acid-Base Chemistry</b>
9.1	Bronsted-Lowry Concept
9.2	Lewis Concept Of Acids And Bases
9.3	IONIC Product Of Water
9.4	pH And pOH
9.5	Ionization Constants Of Acids( $K_a$ )
9.6	Common Ion Effect
9.7	Buffer Solutions
9.8	Solubility Product
9.9	Salt Hydrolysis
9.10	Acid-Base Indicators
<b>CHAPTER:10</b>	<b>ELECTROCHEMISTRY</b>
10.1	Oxidation, Reduction, And Redox Reactions

- 10.2 Oxidation Number And Its Significance
- 10.3 Disproportionation Reaction
- 10.4 Oxidizing Agent (Oxidant) And Reducing Agent (Reductant)
- 10.5 Balancing Of redox Equations By Oxidation Number Method
- 10.6 Electrolytic Cell
- 10.7 Redox Reactions In Electrolysis
- 10.8 Mass Of a Substance Deposited During Electrolysis
- 10.9 Amount of Substance Produced During Electrolysis
- 10.10 Avogadro's Constant by The Electrolytic Method
- 10.11 Electrode Potentials
- 10.12 Standard Hydrogen Electrode (SHE)
- 10.13 Standard Electrode Potential( $E^\circ$ )
- 10.14 Measuring Standard Electrode Potentials
- 10.15 Electrochemical Cell (Galvanic Cell)
- 10.16 Applications Of ( $E^\circ$ ) Values
- 10.17 Variation Of ( $E^\circ$ ) With ION Concentration
- 10.18 Nernst Equation
- 10.19 Activity Series Of Metals
- 10.20 Feasibility Of Redox Reaction From Activity Series Or Reaction Data
- 10.21 Photovoltaic Cells
- 10.22 Winkler Method, BOD and DO
- CHAPTER:11 Hydrocarbons**
  - 11.1 Aliphatic And Aromatic Hydrocarbons
  - 11.2 Nomenclature
  - 11.3 Reaction Mechanism And Modes Of Bond Breaking
  - 11.4 Unreactive Nature Of Alkanes Towards Polar Reagents
  - 11.5 Reactions Of Alkanes
  - 11.6 Alkenes
  - 11.7 Structure And Reactivity Of Alkenes
  - 11.8 Reactions OF Alkenes
  - 11.9 Conjugated Dienes
  - 11.10 Isomerism
  - 11.11 Organic Redox Reactions
- CHAPTER:12 Nitrogen and Sulfur**
  - 12.1 Reactivity Of Nitrogen( $N_2$ )
  - 12.2 Ammonia( $NH_3$ )
  - 12.3 Oxides Of Nitrogen
  - 12.4 Sources Of Oxides Of Nitrogen
  - 12.5 Role Of  $NO$  &  $NO_2$  In Smog & Pan Formation
  - 12.6 Catalytic Converter
  - 12.7 Intrification and Denitrification
  - 12.8 Sulfur
  - 12.9 Stability of Oxidation States Of Sulfur
  - 12.10 Reactions Of Sulfur
  - 12.11 Uses Of Sulfur And Its Compounds
  - 12.12 Role Of Sulfur In Organic Synthesis
  - 12.13 Sulfuric Acid( $H_2SO_4$ )
- CHAPTER:13 Halogens**
  - 13.1 Volatility of Chlorine, Bromine And Iodine
  - 13.2 Trend In Volatility Of The Halogens
  - 13.3 The Bond Strength Of Halogen Molecules
  - 13.4 Relative Reactivities Of The Halogens as Oxidizing Agents
  - 13.5 Reactions Of the halogens With Hydrogen
  - 13.6 Relative Thermal Stabilities Of Hydrogen Halides In Terms Of their Bond strength
  - 13.7 Relative Reactivity Of Halide IONS as Reducing Agents
  - 13.8 Reactions Of Halides With Aqueous Silver Ion Followed By Aqueous Ammonia

- 13.9 Reactions Of Halides ( $X^-$ ) With Concentrated Sulfuric Acid
- 13.10 Reactions Of Chlorine With Cold and Hot Aqueous Sodium Hydroxide
- 13.11 Use of Chlorine In Water Purification
- CAPTER:14 Atmosphere**
- 14.1 Layers Of The Atmospheres
- 14.2 Air Pollutants
- 14.3 Sources Of Air Pollution
- 14.4 Sources Of Air Pollutants
- 14.5 Impact of Human Activities On Atmosphere
- 14.6 Effects Of Air Pollutants
- 14.7 Greenhouse Effect and Global Warming
- 14.8 Air Quality
- 14.9 Air Quality and Human Health
- 14.10 Air Pollution And Health Risk
- 14.11 Methods & Techniques To Measure & Monitor Air Quality
- 14.12 Experiments and Data Collection To Test Hypothesis About Air Quality
- 14.13 Analyze Data And Interpret Air Quality
- 14.14 Strategies Used To Reduce Air Pollution
- 14.15 Laws and Regulations Related To Atmosphere
- 14.16 Economics, Social & Political Issues
- CHAPTER:15 Basic Separation Techniques**
- 15.1 Methods of Separation Of Mixures
- 15.2 Crystallization
- 15.3 Separation Through Distillation
- 15.4 Chromatography
- 15.5 How to Check The Purity Of The Product?
- CHAPTER:16 Lab Safety and Practical Skills**
- 16.1 General Instructions To the Students
- 16.2 Common Types Of Hazards In a Laboratory
- 16.3 Waste Disposal System For Chemicals
- 16.4 First aid In Laboratory
- 16.5 Acid-Base titration
- 16.6 Tests for Indentification Of anions
- 16.7 Test For Indentification of Basic Radicals

- Authors:**
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**PUNJAB EDUCATION, CURRICULUM, TRAINING AND ASSESSMENT AUTHORITY**

Marks: 85	PART –II(CLASS-XII)	Time: 3:00 Hours
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**CHAPTER:1 PERIODIC CLASSIFICATION OF ELEMENTS AND PERIODICITY**

**Introduction:** Historical Background, Improvements in Mendeleev's Periodic Table

**The Modern Periodic Table:** Group and Periods, Some More Families in the Periodic Table, Block in the Periodic Table, Metals, Non-metals and Metalloids

**Periodic Trends in Physical Properties:** Atomic Size, Ionization Energy, Electron Affinity, Metallic and Non-Metallic Character, Melting and Boiling Points, Oxidation State, Electrical Conductance, Hydration Energy

**Periodic Relationship in compounds**

**The Position of Hydrogen**

**CHAPTER:2 BLOCK ELEMENTS**

**Introduction:** Electronic Configurations of s-Block Elements, Occurrence of Alkali Metals, Occurrence of Alkaline-Earth Metals, Peculiar Behaviour of Lithium, Peculiar Behaviour of Beryllium

**General Behaviour of Alkali Metals**

Trends in Chemical Properties of Alkali Metals, Trends in Chemical Properties of Alkaline-Earth Metals, General Trends in Properties of Compounds of Alkali and Alkaline-Earth Metals

**Commercial Preparation of Sodium by Downs Cell**

**Commercial Preparation of Sodium Hydroxide by the Diaphragm cell**

**Role of Gypsum in Agriculture and Industry**

Role of Gypsum in Agriculture, Role of Gypsum in Industries

**Role of Lime in Agriculture and Industry**

Role of Lime in Agriculture, Role of Lime in Industries

**CHAPTER:3 GROUP IIIA AND GROUP IVA ELEMENTS**

**Group IIIA Elements:** Occurrence (Boron and Aluminium), Peculiar Behaviour of Boron

**Compounds of Boron:** Borax (Sodium Tetraborate  $\text{Na}_2\text{B}_4\text{O}_7 \cdot 10\text{H}_2\text{O}$ ), Boric Acids,

**Reactions of aluminium:** Reaction with Air, Reaction with Non-Metals, Reaction with Acids and Alkalies

**Group IVA Elements:** Occurrence of Carbon, Peculiar Behaviour of Carbon

**Compounds of Carbon and Silicon**

Oxides of Silicon, Silicates and their Uses, Silicones

**Semiconductors**

**Uses of Lead Compounds in Paints**

Lead Suboxide,  $\text{Pb}_2\text{O}$ , Lead Monoxide (Litharge, Massicot)  $\text{PbO}$ , Triplumbic Tetra Oxide, (red lead, minium),  $\text{Pb}_3\text{O}_4$ , Lead Dioxide,  $\text{PbO}_2$ , white Lead, Lead Chromate ( $\text{PbCrO}_4$ )

**CHAPTER:4 GROUP VA AND VIA ELEMENTS**

**Group VA Elements:** Introduction, General Characteristics

**Nitrogen And Its Compounds:** Occurrence, Oxides of Nitrogen, Oxyacids of Nitrogen

**Phosphorus and its Compounds:** Occurrence, Allotropes of Phosphorus, Halides of Phosphorus, Oxides of Phosphorus, Oxyacids of Phosphorus

**Group VIA Elements:** Group VIA Elements, General Characteristics, Occurrence, Comparison of Oxygen and Sulphur,

**Sulphuric Acid ( $\text{H}_2\text{SO}_4$ ):** Manufacture of Sulphuric Acid, Properties, Uses of Sulphuric Acid

**CHAPTER:5 THE HALOGENS AND THE NOBLE GASES**

**Introduction**

**Occurrence**

**Peculiar Behaviour of Fluorine**

**Oxidizing Properties**

- Compounds of Halogens:** Hydrides (hydrogen halides, HX), Oxides of Halogens, Reactions of Chlorine with Cold and Hot NaOH, Oxyacids, Bleaching Powder,  $(\text{Ca}(\text{OCl})\text{Cl})$
- Commercial Uses of Halogens and Their Compounds**
- Noble Gases:** Introduction, Compounds of Xenon, Fluorides of Xenon, Xenon Oxyfluorides, Oxides of Xenon, Applications of the Noble Gases
- CHAPTER:6 TRANSITION ELEMENTS**
- Introduction:** Typical and Non-Typical Transition Elements
- Properties of Transition Elements:** General characteristics
- Complex Compounds:** Components of Complex Compounds, Chelates, Nomenclature, Geometry of Complexes
- Iron:** Commercial Forms of Iron, Wrought Iron, Manufacture of Wrought Iron from Cast Iron, Steel, Manufacture of Steel, Open Hearth Process, Bessemer's Process
- Corrosion:** Electrochemical Theory, Prevention from Corrosion, Tin Plating or Coating Iron with Tin (cathode coating), Galvanizing or Zinc Coating (anode coating)
- Chromates and Dichromates:** Potassium Chromate ( $\text{K}_2\text{CrO}_4$ ), Properties, Potassium Dichromate ( $\text{K}_2\text{Cr}_2\text{O}_7$ ), Properties
- Potassium Permanganate ( $\text{KMnO}_4$ ):** Properties
- CHAPTER:7 FUNDAMENTAL PRINCIPLES OF ORGANIC CHEMISTRY**
- Introduction:** Modern Definition of Organic Chemistry
- Some Features of Organic Compounds**
- Importance of Organic Chemistry**
- Sources of Organic Compounds:** Coal, Natural Gas, Petroleum
- Cracking of Petroleum**
- Reforming**
- Classifications of Organic Compounds**
- Functional Group**
- Hybridization of Orbitals and The Shapes of Molecules**
- Isomerism:** Types of Isomerism
- CHAPTER:8 ALIPHATIC HYDROCARBONS**
- Introduction**
- Nomenclature:** Common or Trivial Names, IUPAC Names, Nomenclature of Alkenes, Nomenclature of Alkynes
- Alkanes or Paraffins:** General Methods of Preparations, Physical Properties, Reactivity of Alkanes, Reactions, Uses of Methane
- Alkenes:** General Methods of Preparation, Physical Properties, Reactivity of a  $\pi$ -bond, Reactions of Alkenes, Uses of Ethene
- Alkynes:** General Methods of Preparation, Physical Characteristics, Reactivity of Alkynes, Reactions, Uses of Ethyne, Comparison of Reactivities of Alkanes, Alkenes and Alkynes
- CHAPTER:9 AROMATIC HYDROCARBONS**
- Introduction**
- Nomenclature**
- Benzene:** Structure of Benzene, Straight Chain Structures Ruled Out, Kekule's Structure, X-Ray Studies of Benzene Structure, Modern Concepts about the Structure of Benzene Atomic Orbital Treatment of Benzene, The Stability of Benzene, The Resonance Method
- Preparation of Benzene**
- Reactions of Benzene:** General Pattern of Reactivity of Benzene towards Electrophiles, Electrophilic Substitution Reactions, Reactions in which Benzene Ring is involved, Orientation in Electrophilic Substitution reactions
- Comparison of Reactivities of Alkanes, Alkenes and Benzene**
- CHAPTER:10 ALKYL HALIDES**
- Introduction**
- Nomenclature of Alkyl Halides**
- Methods of Preparation of Alkyl Halides**



**Reactivity of Alkyl Halides**

**Reactions of Alkyl Halides:** Nucleophilic Substitution Reactions, Mechanism of Nucleophilic Substitution Reactions, Elimination Reactions

**Grignard Reagent****CHAPTER:11 ALCOHOLS, PHENOLS AND ETHERS****Introduction**

**Alcohols:** Nomenclature of Alcohols, Industrial Preparation of Alcohols, Physical Properties, Reactions of Alcohols, Reactions in which C — O Bond is Broken, Reactions involving the Cleavage of O — H bond, Some other Reactions of Alcohols

**Distinction Between Primary, Secondary and Tertiary Alcohols****Uses of Alcohols**

**Phenol:** Preparation of Phenol, Physical Properties, Reactions of Phenol, Acidic behaviour of Phenol, Reactions of Phenol due to -OH Group, Reactions of Phenol due to Benzene Ring

**Ethers:** Nomenclature, Preparation of Ethers, Physical Properties, Chemical Reactivity

**CHAPTER:12 ALDEHYDES AND KETONES****Introduction****Nomenclature****Preparation of Aldehydes and Ketones****Reactivity of Carbonyl Group**

**Reactions of Carbonyl Compounds:** Nucleophilic addition Reactions, Reduction Reactions, Oxidation Reactions

**Identification of Carbonyl Compounds****Uses****CHAPTER:13 CARBOXYLIC ACIDS****Introduction**

**Nomenclature of Carboxylic Acids:** Common or Trivial names, The IUPAC Nomenclature

**General Methods of Preparation****Physical Characteristics****Reactivity of Carboxyl Group****Reactions of Carboxylic Acids**

**Acetic Acid:** Laboratory Methods, Manufacture of Acetic Acid, Physical Characteristics, Reactions of Acetic Acid, Uses of Acetic Acid

**Amino Acids:** Essential and Non-essential Amino Acids, Nomenclature of Amino Acids, Structure of Amino Acids, Acidic and Basic Characters of Amino Acids, Synthesis of Amino Acids, Reactions of Amino Acids, Test of Amino Acids, Peptides and Proteins

**CHAPTER:14 MACROMOLECULES****Introduction****Structure of Polymers****Types of Polymers****Polymerization Process****Brief Description of Synthetic Polymers****Biopolymers**

Carbohydrates, Classification of Carbohydrates, Proteins, Classification of Proteins, Structure of Proteins, Denaturation of Proteins, Importance of Proteins, Lipids, Sources of Fats and Oils, Structure and Composition of Fats and Oils, Classification, Physical Properties, Chemical Properties, Saponification Number, Rancidity of Fats or Oils, Iodine Number, Acid Number, Steroids, Importance of Lipids, Enzymes, Classification of Enzyme, Properties of Enzymes, Factors Affecting Enzyme Activity, Importance of Enzymes, Nucleic Acids, Components of Nucleic Acids

**CHAPTER:15 COMMON CHEMICAL INDUSTRIES IN PAKISTAN****Introduction**

**Fertilizers:** Early History, What are Fertilizers

**Elements Essential for Plant Growth:** Micro-nutrients (Trace elements), Macro-nutrients, Requirement of a Fertilizer, Essential Qualities of a Good Fertilizer

**Classification of Fertilizers:** Nitrogenous Fertilizers, Phosphatic Fertilizers, Potassium Fertilizers, Fertilizer Industry in Pakistan

**Cement:** Early History, Definition, Raw Materials, Manufacturing Process of Cement, Wet Process, Setting of Cement, Cement industry in Pakistan

**Paper Industry:** Early History, Definition, Brief Description of the Process, Pulping Processes, Neutral Sulphite Semi Chemical Process

## CHAPTER:16 ENVIRONMENTAL CHEMISTRY

**Introduction:** Components of the Environment

**Types of Pollution:** Air Pollution, The Effects of Polluted Air on Environment, Water Pollution

**Factors Affecting the Quality of Water:** Purification of Water

**Solid Waste Management:** Effects of Dumping Waste in Sea and Rivers, Landfill, Incineration of the Municipal Solid Waste, Treatment of Industrial Waste, Incineration of Industrial and Hazardous Waste, Recycling of Waste

### CONTENTS OF PRACTICAL FOR CLASS XII (PART-II)

1. Preparation of copper ammine complex.
2. Prepare a pure sample of glucosazone.
3. Preparation of a pure sample of iodoform.
4. Preparation of aspirin.
5. Estimation of barium in the given sample solution gravimetrically.
6. Find out the elements present in given organic compound.
7. Write the tests for identification of following functional groups in the given organic compound. (i) Carboxylic acid (ii) Aldehyde (iii) Phenol
8. Preparation of some important solutions used as reagents
9. Acid radical's classification
10. Salt analysis (Groups and radical identification)
11. Scheme for dilute sulphuric acid group
12. Scheme for conc. sulphuric acid group
13. Scheme for special group
14. Detection of the radicals of dilute acid group
15. Detection of the radicals of concentrated acid group
16. Detection of the radicals of special group
17. List of basic radicals
18. Analysis for basic radicals
19. Dry tests for the basic radical
20. Scheme for detection of the radicals of Group-I
21. Scheme for detection of the radicals of Group-II
22. Scheme for detection of the radicals of Group-III
23. Scheme for detection of the radicals of Group-IV
24. Scheme for detection of the radicals of Group-V
25. Scheme for detection of the radicals of Group-VI
26. Detection of the radicals of Group-I
27. Detection of the radicals of Group-II
28. Detection of the radicals of Group-III
29. Detection of the radicals of Group-IV
30. Detection of the radicals of Group-V
31. Detection of the radicals of Group-VI

## Theory Periods CHEMISTRY XII

Chapter	Content	Periods	Weightage
1	Periodic classification of elements	12	6%
2	s-Block elements	8	4%
3	Group III and IV elements	8	4%
4	Group V and VI elements	10	5%
5	The halogens and noble gases	10	5%
6	The transition elements	12	6%
7	Fundamental principles of organic chemistry	10	5%
8.	Aliphatic hydrocarbons	10	5%
9	Aromatic hydrocarbons	8	4%
10	Alkyl halides	8	4%
11	Alcohol, phenols and ethers	10	5%
12	Aldehydes and ketones	8	4 %
13	Carboxylic Acids and their derivatives	6	3%
14	Macromolecules	8	4%
15	Common chemical industries	8	4%
16	Environmental chemistry	14	7%
	<b>Total</b>	<b>150</b>	<b>75%</b>

**Recommended Book:** Chemistry Part-II

**Authors:**

- |                          |                              |                          |
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| 1. Dr. Jameel Anwar      | 2. Dr. Imtiaz Ahmad          | 3. Dr. Shaukat Ali       |
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**Publisher:** Nazriya-e-Pakistan Trust, Lahore. (for Punjab TextBook Board, Lahore.)



**BIOLOGY**

Distribution of Marks:

Part-I (Class-XI)

Theory Marks: 85

Part-II (Class-XII)

Theory Marks: 85

Practical: 30

**Total : 200**

<b>Marks: 85</b>	<b>PART –I (CLASS-XI)</b>	<b>Time: 3:00 Hours</b>
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**CHAPTER:1 BIODIVERSITY & CLASSIFICATION**

- 1.1 Three-Domain System of Classification
- 1.2 Taxonomic Hierarchy
- 1.3 Salient Features of Kingdoms of Domain Eukarya
- 1.4 Classification of Kingdom Animalia
- 1.5 Classification of Vertebrates
- 1.6 Classification of Viruses
- 1.7 Biodiversity
- 1.8 Species and Speciation

**CHAPTER:2 BACTERIA AND VIRUSES**

- 2.1 Structure of Bacteria
- 2.2 Endospore Formation in Bacteria
- 2.3 Motility in Bacteria
- 2.4 Flagella
- 2.5 Bacteria; Ecology And Diversity
- 2.6 Importance of Bacteria
- 2.7 Normal Flora
- 2.8 Virus

**CHAPTER:3 CELLS AND SUBCELLULAR ORGANELLES**

- 3.1 Cells – The Basic Unit Of Life
- 3.2 Cell Theory
- 3.3 Microscopy
- 3.4 Structure of Cell
- 3.5 Prokaryotic And Eukaryotic Cells
- 3.6 Cell Signalling
- 3.7 Membrane Transport Mechanisms
- 3.8 Stem Cells

**CHAPTER:4 BIOMOLECULES**

- 4.1 Biological Molecules
- 4.2 Types of Bonds In Biology
- 4.3 Condensation (Synthesis) And Hydrolysis
- 4.4 Importance of Water
- 4.5 Carbohydrates
- 4.6 Proteins
- 4.7 Lipids
- 4.8 Nucleic Acids
- 4.9 Conjugated Molecules

**CHAPTER:5 ENZYMES**

- 5.1 Enzymes
- 5.2 Cofactors And Coenzymes
- 5.3 Mechanism Of Enzyme Action
- 5.4 Factors Affecting The Rate Of Enzyme Action
- 5.5 Enzyme Inhibition
- 5.6 Classification of Enzymes

**CHAPTER:6 BIOENERGETICS**

- 6.1 Photosynthesis
- 6.2 Cellular Respiration
- 6.3 Photorespiration

**CHAPTER:7 STRUCTURAL AND COMPUTATIONAL BIOLOGY**

- 7.1 Applications of Structural Biology  
 7.2 X-Ray Crystallography  
 7.3 Computational Biology  
 7.4 Sequence Homology  
**CHAPTER:8 PLANT PHYSIOLOGY**  
 8.1 Nutrition In Plants  
 8.2 Gas Exchange In Plants  
 8.3 Support In Plants  
 8.4 Water Potential  
 8.5 Transport Of Water In Plants  
 8.6 Translocation of Food In Plants  
 8.7 Growth in Plants  
 8.8 Osmoregulation in Plants  
 8.9 Thermoregulation In Plants  
 8.10 Movements In Plants  
 8.11 Photoperiodism  
 8.12 Vernalisation  
**CHAPTER:9 HUMAN DIGESTIVE SYSTEM**  
 9.1 Anatomy and Physiology of Digestive System  
**CHAPTER:10 HUMAN RESPIRATORY SYSTEM**  
 10.1 Respiratory System of Man  
 10.2 Transport Of Gases  
 10.3 Respiratory Pigments  
 10.4 Respiratory Disorders  
**CHAPTER:11 HUMAN CIRCULATORY SYSTEM**  
 11.1 Structure And Functioning Of Heart  
 11.2 Blood Vessels  
 11.3 Blood Pressure  
 11.4 Cardiovascular Disorders  
 11.5 Lymphatic System Of Human  
**CHAPTER:12 HUMAN SKELETAL & MUSCULAR SYSTEMS**  
 12.1 Bones And Cartilage  
 12.2 Disorders of Skeletal System  
 12.3 Muscles

**Authors:** 1. Muhammad Nadeem 2. Prof. Dr. Farkhanda Manzoor  
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**Editor:** Prof. Dr. Abdul Rauf Shakoori  
 Dt. Robeela Shabir  
 Zunnorain Ahmed

**PUNJAB EDUCATION, CURRICULUM, TRAINING AND ASSESSMENT AUTHORITY**

Marks: 85

PART –II(CLASS-XII)

Time: 3:00 Hours

**CHAPTER:15 HOMEOSTASIS****Concepts in Homeostasis****Osmoregulation**

Water relations of cell, Balance of water and solutes in the body, Osmoregulation in Plants, Osmoregulation in Animals, Osmoregulation in Different Environments, Excretion, Excretion in Plants, Excretion in Animals, Nature of Excretory Products in Relation to Habitats

**Excretion in Representative Animals:** Excretion in Hydra, Excretion in Planaria, Excretion in Earthworm, Excretion in Cockroach

**Excretion in Vertebrates:** Excretion in Human, Excretory Organs, Urinary System, Concentration of Excretory Products, Kidney as Osmoregulatory Organ, Kidney Problems and Cures

**Thermoregulation:** Adaptations in Plants to Low and High Temperature

**Mechanisms in Animals**

Body Heat, Heat Gain and Loss, Temperature Classification of Animals, Regulation of Heat Exchange between Animals and Environment

**Thermoregulation in Mammals (Human)**

Regulatory Strategies, Thermostat Function and Feedback Controls in Human, Temperature in fever (Pyrexia)

**CHAPTER:16 SUPPORT AND MOVEMENTS****Concept and Need**

**Support in Plants:** Significance of Secondary Growth

**Movements in Plants:** Types of Movements, Role of Plants Growth Substances in Plant Movement

**Support and Movements in Animals:** Hydrostatic Skeleton, Exoskeleton, Endoskeleton

**Human Skeleton:** Axial Skeleton, Appendicular Skeleton, Joints

**Deformities of Skeleton:** Genetic Causes, Hormonal Causes, Nutritional Causes

**Repair of Broken Bones**

**Muscles:** Smooth Muscles, Cardiac Muscles, Skeletal Muscles, Sliding Filament Model, Controlling the Actin-Myosin Interaction by  $Ca^{++}$  ions, Energy for Muscles Contraction, Muscles Fatigue, Tetany, Cramp

**Arrangement of Skeletal Muscles for Movement of Skeleton**

Movement of Bones,

**Locomotion in Protoctista and Invertebrates**

Locomotion in Euglena, Locomotion in Paramecium, Locomotion in Amoeba, Locomotion in Jelly Fish, Locomotion in Earthworm, Locomotion in Cockroach, Locomotion in Snail, Locomotion in Star Fish

**Locomotion and Skeleton in Vertebrates:** Swimming in Fishes, Locomotion in Amphibian, Locomotion in Reptiles, Locomotion in Air, Locomotion in Mammals, Evolutionary changes in the arrangement of bones and related mode of locomotion in major groups of vertebrates

**CHAPTER:17 COORDINATION AND CONTROL: Introduction**

**Coordination in Plants:** Control Through Hormones,

**Plant Movements****Responses to Environmental Stresses in Plants****Defense against Pathogens in Plants****Biological Clocks and Circadian Rhythms**

**Plant Hormones:** Auxins, Gibberellins, Cytokinins, Abscissic Acid, Ethene

**Co-ordination in Animals**

**Nervous Co-ordination:** Receptors, Working of Sensory Receptors with Special Reference to Skin, Neurons, Effectors, Reflex Arc, Nerve Impulse, Synapse, Evolution of Nervous System

**Human Nervous System:** Central Nervous System (CNS), Peripheral Nervous System (PNS), Autonomic Nervous System, Nervous Disorders, Effect of Drugs on Coordination

**Chemical Coordination:** Hormones

**Endocrine Glands of Mammals:** Hypothalamus, The Pituitary Gland, Thyroid gland, Parathyroids, Islets of Langerhans (Pancreas), Adrenals, Gut, Gonads, Feedback Mechanism, Comparison of Nervous Coordination and Chemical Coordination

**Behaviour:** Innate Behaviour, Instincts & Learning, Learning Behaviour (Modification through experience)

**CHAPTER:18 REPRODUCTION: Introduction**

**Reproduction in Plants:** Parthenocarpy, Seed Dormancy, Fruit set and Fruit ripening, Photoperiodism, Vernalisation

**Reproduction in Animals:** Asexual Reproduction

**Tissue Culturing and Cloning**

**Identical Twins**

**Sexual Reproduction**

**Reproduction in Man:** Male Reproductive System, Female Reproductive System

**Test Tube Babies**

**Sexually Transmitted Diseases (STD):** Gonorrhea, Syphilis, Genital Herpes, AIDS

**CHAPTER:19 GROWTH AND DEVELOPMENT: Introduction**

**Growth and Development in Plants**

Apical Meristems, Intercalary Meristems, Lateral Meristems

**Types of Growth:** Conditions of Growth, External factors, Internal Factors, Differentiation, Growth Correlations

**Growth and Development in Animals:** Development of Chick, Mechanisms of Development, Role of Cytoplasm in Development, Role of Nucleus in Development, Concept of Differentiation, Embryonic Induction

**Aging**

**Regeneration**

**Abnormal Development**

**CHAPTER:20 CHROMOSOMES AND DNA: Introduction**

**Types of Chromosomes**

**Composition of Chromosome**

**The Chromosomal Theory of Inheritance**

**DNA as Hereditary Material:** Chemical Nature of DNA, DNA Replication, The Meselson-Stahl Experiment, The Replication Process

**What is a Gene:** One-gene / one – polypeptide, How DNA encodes protein structure

**Cells Use RNA to Make Protein:** Three types of RNA, Transcription

**Genetic Code**

**Translation**

**Mutations**

**CHAPTER:21 CELL CYCLE : Introduction**

**Interphase**

**Mitosis:** Karyokinesis, Prophase, Metaphase, Anaphase, Telophase, Cytokinesis, Importance of mitosis, Cancer (uncontrolled cell division)

**Meiosis:** ProphaseI, MetaphaseI, AnaphaseI, TelophaseI, MeiosisII, Importance of Meiosis

**Meiotic Errors (Non-disjunction):** Down's Syndrome (Mongolism), Klinefelter's Syndrome, Turner's Syndrome, Necrosis and Apoptosis

**CHAPTER:22 VARIATION AND GENETICS**

**Genes, Alleles and Gene Pool**

**Mendel's Laws of Inheritance:** Mendel's Interpretations, Test Cross, Dihybrid and Dihybrid Cross

**Dominance Relations:** Complete Dominance, Incomplete Dominance, Codominance, MN Blood Type or Blood Group System, Over Dominance

**Multiple Alleles:** ABO-The First Discovered Multiple Allelic Blood Group System in Man, Rh Blood Group System

**Epistasis:** Bombay Phenotype

**Pleiotropy**

**Continuously Varying Traits**

**Gene Linkage**

**Crossing Over:** Cross Over or Recombination Frequency

**Sex Determination:** Sex Chromosomes, Patterns of Sex Determination, Comparison of chromosomal determination of sex between *Drosophila* and Humans, Sex Determination in Plants

**Sex Linkage:** Sex Linkage in *Drosophila*, Sex-linkage in Humans, Sex Limited Trait, Sex Influenced Trait

**Diabetes Mellitus and its Genetic Basis**

#### CHAPTER:23 **BIOTECHNOLOGY: Introduction**

**Cloning of a Gene:** Recombinant DNA Technology, how to get a gene? Molecular Scissors: Restriction Endonucleases, Molecular Carrier: Vector, Recombinant DNA, Expression of the Recombinant DNA, Genomic Library, The Polymerase Chain Reaction, Analyzing DNA, Gene Sequencing

**The Human Genome Project**

**Biotechnology Products:** Transgenic Bacteria, Transgenic Plants, Transgenic Animals, Cloning of Transgenic Animals

**Gene Therapy**

**Tissue Culture:** Genetic Engineering of Plants, Agricultural Plants with improved Traits, Production of Products

#### CHAPTER:24 **EVOLUTION**

**Introduction, Concept of Evolution Vs Special Creation**

**Evolution from Prokaryotes to Eukaryotes**

**Inheritance of acquired Characteristics:** Charles Darwin, Neo-Darwinism-The modern evolutionary synthesis, Evidences of Evolution

**Natural Selection and artificial Selection**

**Population, Gene Pool, allele and Genotype Frequencies**

Hardy-Weinberg Theorem, Factors affecting gene frequency

**Endangered Species**

#### CHAPTER:25 **ECOSYSTEM : Introduction**

**Ecosystem, Biosphere Autecology, Synecology**

**Components of Ecosystem:** Biotic Components, Abiotic Components, Processes in Ecosystem and interaction between Biotic and Abiotic Components

**Succession:** Two Major Forms of Succession, Predation and its Significance, Parasitism and its Significance, Symbiosis, Mutualism, Commensalism, Grazing

**Biogeochemical Cycles:** The Nitrogen Cycle, Nitrogen Depletion and its Remedies, The flow of Energy in Food Chain of an Ecosystem

#### CHAPTER:26 **SOME MAJOR ECOSYSTEMS**

**Climate**

**Aquatic or Hydrospheric Ecosystem:** Productivity of Aquatic Ecosystem, Fresh Water Lakes, Intervention of Man in Aquatic Ecosystem

**Terrestrial or Lithospheric Ecosystem:** Light, Nutrients and Water, Adaptations for Terrestrial Ecosystem, Division of Terrestrial Ecosystem

**Some Major Ecosystems in Pakistan:** Temperate Deciduous Forests, Coniferous Alpine and Boreal Forests, The Grass Land Ecosystem, Desert Ecosystem, Tundra Ecosystem, Humans and Ecosystems

#### CHAPTER:27 **MAN AND HIS ENVIRONMENT**

**Renewable and Non-renewable Resources:** Renewable Resources

**Degradation and Depletion of Resources:** Modification of Environment

**Man's Impact on Environment:** Population, Food and need of Population Control, Importance of Forests, Forest and Climate, Forest and Biodiversity

**Pollution:** Types of Pollution, Air or Atmospheric Pollution, Greenhouse Effect, Acid Rain, Water Pollution, Eutrophication or Algal Bloom, Industrial Effluents, Insecticides & Herbicides and Fertilizers

**Health and Diseases:** Classification and Causes of Diseases



**WEIGHTAGE OF VARIOUS THEMES/SECTION OF SYLLABUS FOR CLASS XII**

		No. of practicals
(vi)	Functional Biology (Chapter 15-19)	48%
(vii)	Continuity of life (Chapter 20-22)	20%
(viii)	Genetic Frontiers (Chapter 23)	4%
(ix)	Life through ages (Chapter 24)	8%
(x)	Organisms and their Environment (Chapter 25-27)	20%
<b>Total:</b>		<b>100</b>

**LIST OF PRACTICALS FOR CLASS XII (PART-II)**

- Investigation of Adaptive Features of Hydrophytes, Halophytes, Exrophytes and Mesophytes from Fresh Material and Prepared Slides.
- Exposure of Urinogenital System of Frog.
- Study of Simple Muscle Twitch Using Frog's Muscle.
- Study of Prepared Slides of Skeletal, Smooth & Cardiac Muscles & Preparation of Slide of Striated Muscle.
- Expose of Nervous System of Cockroach.
- Investigations of Effect of Indole Acetic Acid (IAA) on Growth of Oat Coleoptile or Germinated Barley Seeds.
- Study of Ductless Glands (Pancreas, Thyroid) Using Microscopic Sections.
- Study of Skeleton of Frog.
- Study of Skeleton of Hen's Egg.
- Study of Development of Chick Embryo 48/72 Hours after Incubation.
- Study from Prepared Slides of Plant Supporting Tissues such as Sclerenchyma & Collenchyma.
- Investigation of Plant Movement.
- Preparation of Root Tips Squashes to Study Stages of Mitosis.
- Preparation of Squashes of Rheodiscolor Floral Buds to Study Meiosis & Observation of Stages of Meiosis from Prepared Slides & Study of Polytene Chromosomes.
- Continuous Variations.
- Investigation of Water Content of Soil.
- Investigation of Approximate Soil Texture (Rough Estimate) of Proportion of Particles of Different Sizes in a Soil.
- Investigation of Food Chain and Food Web of a Pond Ecosystem.
- Sampling of Grassland Community by Quadrature Method.
- Estimation of Pyramids of Number Using Simple Techniques.

**BIOLOGY TOPIC WISE WEIGHTAGE**

Chapter No.	Topic	Weightage (%age)	No. of period.
15	Homeostasis Osmoregulation excretion	10%	15
16	Support and Movements	10%	15
17	Coordination and Control	10%	15
18	Reproduction	12%	18
19	Growth and Development	6%	9
20	Chromosomes and DNA	8%	12
21	Cell Cycle	4%	6
22	Variations and Genetics.	8%	12
23	Biotechnology	4%	6
24	Evolution	8%	12
25	Ecosystem	8%	12
26	Some major ecosystems	4%	6
27	Man and-his environment	8%	12
<b>TOTAL</b>			<b>150</b>

**Recommended Book: Biology Part-I & II**

- Authors:**
- |                              |  |
|------------------------------|--|
| 1. Prof. Dr. A.R. Shakoori   | 2. Prof. Dr. Abdul Majeed Cheema           |
| 3. Asso.Prof. Hamid Saeed    | 4. Assoc.Prof. Dr. Rass Masood Khan        |
| 5. Assoc.Prof. Nauman Usmani | 6. Assoc.Prof. A.R. Saeed                  |
| 7. Dr. Javed Iqbal Qazi      | 8. Assoc.Prof. Javed Akhtar Wahla          |
| 9. Asst.Prof.Dr. Farkhanda   | 10. Sub.Specialist Mrs. Syeda Saira Hameed |

**Publisher: Maktaba Sayeedia Lahore**



**MATHEMATICS**

PART - I	100
PART – II	<u>100</u>
TOTAL:	200

<b>Marks: 100</b>	<b>PART –I (CLASS-XI)</b>	<b>Time: 3:00 Hours</b>
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**UNIT-1 Complex Numbers**

- 1.1 Complex Numbers
- 1.2 Equality of Two Complex Numbers
- 1.3 Complex Polynomials as a Product of Linear Factors
- 1.4 Three Cube Roots of Unity /Polar Coordinates System
- 1.5 Complex Numbers in the Real World

**UNIT-2 Functions and Graphs**

- 2.1 Concept of Function
- 2.2 Finding the Intersecting Point(s) Graphically
- 2.3 Graph of the Square Root Function
- 2.4 Graph of the Cube Root Function
- 2.5 Real Life Applications

**UNIT-3 Theory of Quadratic Functions**

- 3.1 Quadratic Function
- 3.2 Inverse of Quadratic Function
- 3.3 Absolute Value
- 3.4 Solutions of Equations Reducible to the Quadratic Equation
- 3.5 Real World Problems of Quadratic Equations and Inequalities

**UNIT-4 Matrices and Determinants**

- 4.1 Matrix
- 4.2 Matrix Operations
- 4.3 Properties of Matrix Addition, Scalar Multiplication and Matrix Multiplication
- 4.4 Determinants
- 4.5 Adjoint and Inverse of a Square Matrix
- 4.6 Elementary Row Operations on a Matrix
- 4.7 Echelon and Reduced Echelon Forms of Matrices
- 4.8 System of Non-Homogeneous Linear Equations
- 4.9 System of Homogeneous Linear Equations
- 4.10 Applications of Matrices in Real World

**UNIT-5 Partial Fractions**

- 5.1 Rational Fraction

**UNIT-6 Sequences and Series**

- 6.1 Sequence
- 6.2 Arithmetic Progression or Arithmetic Sequence (A.P)
- 6.3 Arithmetic Mean (A.M)
- 6.4 Series
- 6.5 Geometric Progression (G.P)
- 6.6 Geometric Mean (G.M.)
- 6.7 Geometric Series
- 6.8 Arithmetico-Geometric Progression (A.G.P.)
- 6.9 Harmonic Progression (H.P)
- 6.10 Miscellaneous Series
- 6.11 Real Life Problems involving Sequences and Series

**UNIT-7 Permutations and Combinations**

- 7.1 Fundamental Principle of Counting
- 7.2 Permutations
- 7.3 Permutation of Objects Not All Different
- 7.4 Combinations

**UNIT-8 Mathematical Inductions and Binomial Theorem**

- 8.1 Principle of Mathematical Induction
- 8.2 Binomial Theorem

- 8.3 The Binomial Theorem (when the Index  $n$  is a Negative Integer or a Fraction)
- 8.4 Binomial Coefficients Using Pascal's Triangle
- 8.5 Applications of Binomial Theorem
- UNIT-9 Division of Polynomials**
- 9.1 Polynomial Function
- 9.2 Real Life Applications of Remainder and Factor Theorems
- UNIT-10 Trigonometric Identities**
- 10.1 Distance Formula:(Recall)
- 10.2 Trigonometric Ratios of Allied Angles
- 10.3 Further Applications of Basic Identities
- 10.4 Double Angle Identities
- 10.5 Half Angle Identities
- 10.6 Triple Angle Identities
- 10.7 Express the Product (of sines and cosines) as Sums or Differences (of sines and cosines)
- UNIT-11 Trigonometric Functions and their Graphs**
- 11.1 Domains and Ranges of Sine and Cosine Functions
- 11.2 Even and Odd Functions
- 11.3 Period of Trigonometric Functions
- 11.4 Values of Trigonometric Functions
- 11.5 Maximum and Minimum Values of Given Functions of the Type
- UNIT-12 Limit and Continuity**
- 12.1 Limit of a Function
- 12.2 Limits of Important Functions
- 12.3 Continuity and Discontinuity of Functions
- 12.4 Application of Transcendental Functions to Limits and Continuity on Real World Problems
- UNIT-13 Differentiation**
- 13.1 Tangent to a Curve at a Point
- 13.2 Derivative as the Limit of a Difference Quotient
- 13.3 Process of Finding Derivative  $f'(x)$  by the Definition
- 13.4 Derivation of  $x^n$  Where  $n \in \mathbb{Z}$
- 13.5 Connection Between Derivatives and Continuity
- 13.6 Theorems on Differentiation
- 13.7 Application of Differentiation
- UNIT-14 Vectors in Space**
- 14.1 Vectors (Recall)
- 14.2 Dot or Scalar Product
- 14.3 Cross Product or Vector Product
- 14.4 Scalar Triple Product

**Authors:**

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- |                                       |                               |
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**PUNJAB EDUCATION, CURRICULUM, TRAINING AND ASSESSMENT AUTHORITY**

Marks : 100	PART – II (CLASS-XII)	Time: 3 Hours
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**UNIT-1 FUNCTIONS AND LIMITS****Introduction**

Concept of Function, Definition (Function – Domain – Range), Notation and Value of a Function, Graphs of Algebraic Functions, Graph of Functions Defined Piece-wise.

**Types of Functions**

Algebraic Functions, Trigonometric Function, Inverse Trigonometric Functions, Exponential Function, Logarithmic Function, Hyperbolic Functions, Inverse Hyperbolic Functions, Explicit Function, Implicit Function, Even Function, Odd Function

**Composition of Functions and Inverse of a Function**

Composition of Functions, Inverse of a Function, Algebraic Method to find the Inverse Function

**Limit of a Function and Theorems on Limits**

Meaning of the Phrase “x approaches zero”, Meaning of the Phrase “x approaches infinity”, Meaning of the Phrase “x approaches a”, Concept of Limit of a Function, Limit of a Function, Theorems on Limits of Function

**Limits of Important Functions**

$\lim_{x \rightarrow a} \frac{x^n - a^n}{x - a} = na^{n-1}$  where n is an integer and  $a > 0$ ,  $\lim_{x \rightarrow 0} \frac{\sqrt{x+a} - \sqrt{a}}{x} = \frac{1}{2\sqrt{a}}$  Limit at Infinity,

Method for Evaluating the Limits at Infinity,  $\lim_{x \rightarrow +\infty} \left[1 + \frac{1}{n}\right] = e$ ,  $\lim_{x \rightarrow 0} \frac{a^x - 1}{x} = \log_e a$  The

Sandwich Theorem, If  $\theta$  is measured in radian, then  $\lim_{\theta \rightarrow 0} \frac{\sin \theta}{\theta} = 1$ .

**Continuous and Discontinuous Functions**

One-Sided Limits, Criterion for Existence of Limit of a Function, Continuity of a function at a number

**Graphs**

Graph of the Exponential Function  $f(x) = a^x$ , Graph of the Exponential Function  $f(x) = e^x$ , Graph of Common Logarithmic Function  $f(x) = \lg x$ , Graphs of Natural Logarithmic Function  $f(x) = \ln x$ , Graphs of Implicit Functions, Graph of Parametric Equations, Graphs of Discontinuous Functions, Graphical Solution of the Equation

**UNIT-2 DIFFERENTIATION : Introduction**

Average Rate of Change, Derivative of a Function

**Finding  $f'(x)$  from definition of derivative**

Derivation of  $x^n$  where  $n \in \mathbb{Z}$ , Differentiation of Expressions of the Types

**Theorems on Differentiation****The chain rule****Derivatives of inverse functions****Derivative of a Function given in the form of parametric equations****Differentiation of Implicit Relations****Derivatives of Trigonometric Functions****Derivatives of inverse Trigonometric functions****Derivative of exponential functions****Derivative of the logarithmic function****Logarithmic differentiation****Derivative of Hyperbolic functions****Derivatives of the inverse hyperbolic functions****Successive Differentiation (or Higher derivatives)****Series expansions of functions****Taylor series expansions of functions****Geometrical interpretation of a derivative****Increasing and decreasing functions****Relative extrema****Critical values and critical points****UNIT-3 INTEGRATION: Introduction**

Differentials of Variables, Distinguishing between  $dy$  and  $\delta y$ ,

Finding  $\frac{dy}{dx}$  by using differentials, Simple application of differentials

**Integration as anti-derivative (Inverse of derivative)**

Some Standard Formulae for Anti-Derivatives, Theorems on Anti-Derivatives, Anti-Derivatives of  $[f(x)]^n f'(x)$  and  $[f(x)]^{-1} f'(x)$ .

**Integration by method of substitution****Some useful substitutions****Integration by parts****Integration involving partial fractions****The definite integrals**

The area Under the curve, Fundamental theorem and properties of Definite Integrals

**Application of definite integrals****Differential equations**

Solution of a differential equation of first order, Initial conditions

**UNIT-4 INTRODUCTION TO ANALYTIC GEOMETRY: Introduction**

The Distance Formula, Point dividing the join of two points in a given ratio

**Translation and rotation of axes****Equations of straight lines**

Slope or gradient of a straight line joining two points, Equation of a straight line parallel to the x-axis (or perpendicular to the y-axis), Equation of a straight line parallel to the y-axis (or perpendicular to the x-axis), Derivation of standard forms of equations of straight lines, A linear equation in two variables represents a straight line, To transform the general linear equation to standard forms, Position of a point with respect to a line

**Two and three straight lines**

The Point of intersection of two Straight Lines, Condition of concurrency of three Straight Lines, Equation of Lines through the Point of Intersection of Two Lines, Distance of a Point from a Line, Distance between two Parallel Lines, Area of a Triangular region whose vertices are given

**Angle between two lines**

Equation of a straight line in Matrix form

**Homogeneous equation of the second degree in two variables**

Homogeneous Equation, To find measure of the Angle between the Lines represented by  $ax^2 + 2hxy + by^2 = 0$

**UNIT-5 LINEAR INEQUALITIES AND LINEAR PROGRAMMING: Introduction****Linear Inequalities**

Graphing of a linear inequality in two variables

**Region bounded by 2 or 3 simultaneous Inequalities****Problem Constraints****Feasible solution set****Linear Programming****Linear Programming Problems****UNIT-6 CONIC SECTION: Introduction**

Equation of a Circle, General form of an Equation of a Circle, Equations of Circles determined by given conditions

**Tangents and Normals**

Length of the Tangent to a Circle (Tangential Distance)

**Analytic proofs of important Properties of a Circle****Parabola**

General form of an Equation of a Parabola, Other standard Parabolas, Graph of the Parabola

**Ellipse and its Elements**

Standard form of an Ellipse, Graph of an Ellipse

**Hyperbola and its Elements**

Standard equation of Hyperbola, Graph of the Hyperbola

**Tangents and normals****Translation and Rotation of Axes****The General Equation of Second Degree**

Classification of conics by the discriminant

**UNIT-7 VECTORS: Introduction**

Geometric interpretation of Vector, Multiplication of Vector by a Scalar, Addition and Subtraction of two Vectors, Position Vector, Vectors in a plane, Properties of magnitude of a Vector, Another notation for representing vector in plane. A unit Vector in the direction of another given Vector, The ratio formula, Vector Geometry

**Introduction of Vector in Space**

Concept of a vector in space, properties of Vectors, Another notation for representing Vectors in space, Distance between two points in space, Direction Angles and Direction Cosines of a Vector

**The Scalar product of two Vectors**

Deductions of the important results, Perpendicular (Orthogonal) Vectors, Properties of dot product, Analytical expression of dot product  $\underline{u} \cdot \underline{v}$ , Angle between two Vectors, Projection of one Vector upon another Vector

**The cross product or vector product of two vectors**

Derivation of useful results of cross products, Properties of cross product, Analytical Expression of  $\underline{u} \times \underline{v}$ , Parallel Vectors, Area of Parallelogram, Area of Triangle

**Scalar Triple product of Vectors**

Analytical expression of  $\underline{u} \cdot (\underline{v} \times \underline{w})$ , The volume of the Parallelepiped, The volume of the Tetrahedron, Application of Vectors in Physics and engineering.

**TOPIC-WISE WEIGHTAGE & TIME (XII)**

UNIT	TOPIC		WEIGHT AGE	PERIODS (45 minutes each)
I	Functions & limits		6%	11
II	Differentiation of Functions	Polynomial & Algebraic Trigonometry and Inverse Trigonometric Logarithmic & Exponential	15%	07 07 07
	Successive differentiation and theorems and Maximum/Minimum		5%	07
III	Integration (Indefinite Integrals)	Standard forms By partial fractions By Substitution	29%	07 07 05
	Definite Integrals	By parts Area under the curve Differential Equations		07 07
IV	Introduction to Analytic Geometry		8%	13
V	Linear In-Equalities Linear Programming		7%	07 05
VI	Conic Sections	Circle Parabola Ellipse Hyperbola General Equation	17%	12 04 04 04 04
VII	Vectors	Introduction to vector & Scalar Product Vector product Scalar triple Product	13%	07 07 04
			100%	150 (6 periods a week)

**Recommended Book: "MATHEMATICS Part-II"**

**Author :** 1. Prof. Muhammad Amin Chaudhary 2. Prof. Muhammad Sharif Ghauri  
3. Prof. Muhammad Khalid Saleem 4. Mr. Mazhar Hayat

**Published by :** Ch. Ghulam Rasul & Sons, Lahore. (for: Punjab Textbook Board, Lahore)



<b>COMMERCE GROUP</b>	
<b>PART – I</b>	
<b>Principles of Accounting Paper – I</b>	<b>100</b>
<b>Principles of Economics</b>	<b>75</b>
<b>Principles of Commerce</b>	<b>75</b>
<b>Business Mathematics</b>	<b>50</b>
<b>PART – II</b>	
<b>Principles of Accounting Paper – II</b>	<b>100</b>
<b>Commercial Geography</b>	<b>75</b>
<b>Computer Studies / Banking</b>	<b>75</b>
<b>Statistics</b>	<b>50</b>

## PRINCIPLES OF ACCOUNTING

<b>Marks: 100</b>	<b>PART –I(CLASS-XI)</b>	<b>Time: 3:00 Hours</b>
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1. **Introduction.**—Definition, Basic concepts, Double Entry System of Book Keeping, its objectives and advantages.
2. **Accounting Cycle.**—Accounting equation Journal, Ledger and Trial balance.
3. **Subsidiary Books Journals.**—Cash Book, Petty Cash Book. Purchases, Sales: purchases>Returns: Sales Returns; Bills-Receiveable and Bill payable books.
4. **Banking Transactions.**—Kind of bank accounts and procedure of recording of banking transactions: cheques; Cheque Register; Bank Reconciliation Statement, its objectives and preparation.
5. **Accounting for Bills of Exchange.**—Definition and procedure.
6. **Capital and Revenue.**—Meaning—Distinction between Capital and Revenue items: Receipts and Payments, Profits and Losses, Income and Expenses.
7. **Rectificaion of Errors.** – Kinds of errors – correction of errors after and before closing the books of accounts, suspense account.
8. **Financial Statement.** – Trading and profit and loss Account Income Statement and Balance Sheet-form and its preparation.
9. **Adjustments and Closing Process.** Prepaid and Outstanding expenses Accrued and unearned income; provision for Bad and Doubtful Debt; Provisions for Discount; Depreciation interest on capital and drawing, work Sheet.

<b>Marks: 100</b>	<b>PART –II(CLASS-XII)</b>	<b>Time: 3:00 Hours</b>
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1. **Accounting for Non Profit easing concerns.** – Income and Expenditure and Payments Account; Receipts and payments Accounts and Balance Sheet.
2. **Accounting for Incomplete Records.**– Calculation of profit and loss statement of Affairs conversion of Single Entry into Double Entry account.
3. Depreciation Nature, methods straight line and diminishing balance.
4. Accounting for surplus, Reserves and Funds. Nature-types and creation.
5. **Accounting for Consignments.** Fully and partly sold goods excluding invoice price method, Account Sale Statement.
6. **Accounting for Partnership.** Definition – partnership, agreement, division of profit and loss-valuation and treatment of goodwill admission, retirement and death of partner – Dissolution.
7. **Accounting for Joint Stock Companies.** Formation-Kinds of companies company documents-types of shares-issue of shares at per, at premium at discount over-subscription, for feature and re-issue of share, Issue of debentures Bond at per, at premium and at discount-redemption of debentures.

**List of equipment, Lab-requirements.**

Book keeping machines, Overhead Projectors, Slide Projector, Scientific electric calculators, Amount perforator on Cheque, Bank Draft, Business film through T.V.

**Available Books.**

Principles of Accounting by M.A. Ghani.  
 Principles of Accounting by Aftab A. Khan.  
 Book keeping and Accounting by S.A. Siddiqui.  
 Principles of Accounting by Gul Zaman Qazi.  
 Asool-e-Mahasbi by Mubeen A. Khan.  
 Intermediate Accounting by Rauf Baig.  
 Introduction to Accounting by Nisaruddin.





## PRINCIPLES OF ECONOMICS

<b>Marks: 75</b>	<b>PART –I(CLASS-XI)</b>	<b>Time: 2:30 Hours</b>
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What is Economics about?

The nature, scope and methods of economics analysis. Importance of economics.

1. **Demand and supply:** Individual demand, aggregate or market demand, law of demand, changes in demand, elasticity of demand, measurement of elasticity of demand. What is supply, law of supply, and stock, elasticity of supply. Equilibrium between demand and supply.
2. **Consumer, Demand Theory:** Law of diminishing and marginal utility. Consumer's equilibrium (cardinal approach).
3. **The Costs and Revenues of a Firm:** Classification of costs, fixed cost, variable cost, total average cost, marginal cost, opportunity cost, total revenue, marginal and average revenue.
4. **Laws of Returns:** The law of diminishing returns. The law of increasing returns. The law of constant returns. The law of costs.
5. **Price and output Determination:** Pure competition, concept and occurrences, price and output determination under perfect competition and monopoly.
6. **Resource Pricing:** Marginal productivity theory of resource demand. Factors of production (brief introduction).

<b>Marks: 75</b>	<b>PART –II(CLASS-XII)</b>	<b>Time: 2:30 Hours</b>
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1. **National Income:** Measurement of National Income. National Income at factor earning. National Income at market price. Expenditure approach to income measurement. The flow of National Income, other social accounts. GDP = Gross Domestic Product. GNP = Gross National Product. NNP = Net National Product. NI = National Income. PI = Personal Income. DPI = Disposable Personal Income.
2. **Money:** What is money? Functions of Money. Quantity theory of money. Inflation, Deflation and their effects.
3. **Business Cycle:** Phase of Business cycle. Theories of business cycle.
4. **International Trade:** Importance of World Trade, International Specialization comparative advantage, balance of trade and balance of payment.
5. **Public Finance:** Meaning of public finance, canons of taxation, Zakat and Usher.

### List of Recommended Books, References, Reading etc.

Introduction to Modern Economics Part I and II by Dr. S.M. Akhtar  
 Economics and Commercial Geography By Gul Zaman Qazi.  
 Usool-e-Muashiat by Awais Ahmad Adib  
 Ibtidai Muashiat by Abdul Hameed Dar.  
 Economics by Khadim Hussain  
 Principles of Economics by Prof. Sirajuddin Qureshi.  
 Usool-e-Muashiat by Manzoor Ali.



**PRINCIPLES OF COMMERCE***(CONTENT OUTLINES)*

<b>Marks: 75</b>	<b>Class XI (Part-I)</b>	<b>Time: 2:30 Hours</b>
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- 1. Introduction:** Definition of Commerce, its importance and scope. Branches of Commerce, Trade, Insurance, Finance, Marketing, Warehousing and Industry. Essentials of establishing a business house and qualities of a good Business-man.
- 2. Types of Commercial Organizations:** Sole Proprietorship. Definition, Features, merits and demerits. Partnership. Formation Features, Partnership Agreement / Deed Advantages, Disadvantages and Dissolution. Joint Stock Company / Corporation. Special Feature, Kinds, Formation: Memorandum of Association, Articles of Association, Certificate of Registration, Prospectus, Certificate of Commencement of Business, Management: Shareholders, Directors and Managing Director, Winding up. Cooperative Society: Features, Kinds, advantages and disadvantages: Basic concepts of Musharqa, Mudarba.
- 3. Office Organization:** Office Roles, its organization, Handling incoming and outgoing mail, basic postal information, Filing, duplicating, copying and indexing, Office equipments and machines.
- 4. Trade and its Kinds:** Home Trade. Whole sale, Retails, Middlemen, Salesmanship and Advertisement. Channel of distribution and Chamber of Commerce. Purchase and Sales of Goods. – Procedure, documents used in home trade price list, Invoice, transportation and Railway receipts.  
Foreign Trade Import. – Import procedure, Documents used.  
**Export:** Export procedure, documents used and role of export promotion Bureau.
- 5. Commercial Correspondence:** Essentials of a good business letters, writing of letters and their replies, Types of letters, trade and status enquiries, indents, letters of claim, collection and donning letters, Circulars-officials and semi-officials, telegram including modification, cyphering and decyphering.
- 6. Auxillaries to Commerce:** Insurance – Kinds, Advantages to Commerce, Transportation/Mean-Air, Rail, Road and Sea, Warehousing-Kinds and advantages, Warehouse receipts, Business Finance – types and importance

**Available Books**

- |   |   |
|---|---|
| 1. <b>Principles of Commerce</b><br>S. Askari Zardi.<br>A.H. Hashmi and Matin.      | 2. <b>Principles of Commerce</b><br>Khadim Hussain,<br>Navid publishers, Lahore |
| 3. <b>Principles of Commerce</b><br>Ali Hassan Muzafar,<br>Ilme Kutabkhana, Lahore. | 4. <b>Principles of Commerce</b><br>Azeem Academy Urdu Bazar Lahore             |
| 5. <b>Principles of Commerce</b><br>Orient Publishers Urdu Bazar Lahore             |   |



## BUSINESS MATHEMATICS

<b>Marks: 50</b>	<b>PART –I MATHEMATICS</b>	<b>Time: 2:00 Hours</b>
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1. Business Arithmetic, Ratios Proportion and percentage, Computation of annuities.
2. Functions and their Graphs.
3. Linear and quadratic Equations, Simultaneous Equations.
4. Binary Number System and its operation.
5. Matrices-Identity, Matrices, Addition, Subtracion multiplicative of matrices. Solution of Simultaneous equations through matrices.

<b>Marks: 50</b>	<b>PART –II STATISTICS</b>	<b>Time: 2:00 Hours</b>
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1. **Nature of Statistics:** What is statistics, Subject matter, fields of statistics and the types of questions it can answer. Importance of statistics in different fields.
2. **Statistical Data:** Types of data – Primary and secondary, Sources of data and Methods of Collection.
3. **Presentation of Data:** Classification – the bases of classification, Tabulation-Simple and compound Tables, Representation of data through diagrams and charts. Bar diagrams, Circular diagrams. Graphs of Frequency Distirbution.
4. **Averages of the First Order:** Mean, Mode, Median
5. **Index Numbers**
6. **Probability Theory:** An elementary treatment, excluding probablility distributions (Brief Introduction)

### BOOKS AVAILABLE

1. Rahber Business Statistics by Aizaz Ahmad Khan, Qureshi Brothers
2. Business Statistics by Nadeem Akhtar Siddiqui, Azeem Academy Urdu Bazar Lahore
3. Business Statistics by Aqdas Abbas, Iqra Book Depot Urdu Bazar Lahore
4. Business Mathematics by Nadeem Akhtar Siddiqui, Azeem Academy Urdu Bazar Lahore



## COMMERCIAL GEOGRAPHY

<b>Marks: 75</b>	<b>Class XII (Part-II)</b>	<b>Time: 2:30 Hours</b>
<b>L World</b>	<b>[Marks – 45 for Part I&amp;II]</b>	

### **PART-I Definition of world Commercial activities and their response to different environments.**

-Primary/ Primitive activities, -Fishing, -Hunting, -Lumbering, -Agricultural Activities, -Advent of agricultural activities, -Animal Husbandary / Herding, -Farming-Subsistence, Industries and Handicrafts, Skills and factors of manufacturing, Types and products, Iron & Steel, Textiles, Fertilizers, Population growth-its global distribution, trends and its effects on various commercial activities, Growth-world-wide, Distribution, Trends and effects on Commerce, Orientation of Commercial activities and their modern trends, Choices of different countries, Inter-relationship of choices and commercial activities, Impact of the latest technology on existing commercial activities and the resultant trends.

### **Part-II World resources and their distributions**

- Agricultural resources with special emphasis on food resources and rate of consumption:** -Wheat, Rice, Sugar – Cane, Tea, edible oils, -Cotton, Rubber and Wool, -Commodity Flow and consumption.
- Mineral resources and their reserve estimates:** -Iron-Ore, -Gold, -Uranium.
- Energy resources and their application:** -Coal, -Electricity Thermal / Hydro-electricity / Nuclear, -Natural Oil and Gas.
- Human resources and their utilization:** -Types according to various occupations, -Utilization – Optimum and under utilization, -Effects on Socio – Economic conditions.

### **Pakistan.**

**30 Marks**

- Location and physical environments:** - Geographical location and physical features, -Climate and Natural vegetation, -Soils and Irrigation.
- Resources and their exploitation:** -Agricultural commodities – Wheat, Rice, Maize, Sugar-cane, Cotton, Tobacco, -Power – Electricity, Nuclear, Solar Energy & Bio-gas.
- Population, its involvement and options for various commercial activities and its impact on national, regional and international trade:** -Distribution and Occupation, Migration-immigration and emigration, -Influence upon nations, regional and international trade.
- Logistics for the transfer of various resources:** -Roads, -Railway, -Airways and Water ways.
- Priorities and identity of the commercial needs of Pakistan:** -Food autarky, -Technology know-how and its application in various fields of commercial activities, -Perspective needs and their fulfilment, by adding facilities like augmenting the existing irrigation system, power resources etc.

### **RECOMMENDATIONS**

#### **LIST OF EQUIPMENT, LAB, REQUIREMENTS ETC.**

-Maps and Map-rooms, A.V. Aids, Charts. Graphs, Globes, Atlases and out door study tours. At present no single book is likely to cover the recommended course. It is, therefore, suggested that a few books on commercial Geography be got prepared and published for the convenience of the students. Meanwhile the following books may be useful as a stop gap arrangements.

#### **Available Books:**

- Pakistan by Col. K.U. Qureshy
- Economic and Commercial Geography by Gul Zaman Qazi.
- Commercial Geography by Mian Muhammad Anwar.
- Regional and Commercial Geography by Col K.U.Qureshy and Dr. Miss. M.K. Elahi.
- Economic and Commercial Geography by Prof. Nazeer Ahmad Khalid
- Azeem Academy Urdu Bazar Lahore
- Economic Geography by F.K.Khan.
- Pakistan Atlas Oxford.
- Economic and Commercial Geography by Gul Zaman Qazi



**COMPUTER STUDIES/ COMPUTER SCIENCE**

Theory Marks: 50		Practical Marks: 25
<b>Marks: 50</b>	<b>Part-II (Class-XII)</b>	<b>Time: 2:00 Hours</b>

**1. Definition of Computer and usefulness in Commerce**

**Types of Computers:** Differentiation among Digital, Analog and Hybrid computers, Classification of digital computers; Micro Computers, Mini Computers, Mainframe

**Elements of Data Processing:** Familiarization with terminology and brief descriptions of various fields, within computer science i.e. Hardware, software (System Software and Application Software) System analysis Programming etc.

**2. Components of Digital Computer Systems and Their Functions.**

**Central Processing Unit:** Control Unit, Arithmetic and Logic Unit, Main Memory

**Input / Output Devices:** Functioning, advantages and disadvantages of various input / output Devices i.e. Terminals Printers, Card Readers, Diskette Readers etc.

**Secondary Storage Devices:** Disk Drives fixed (Winchester), removable, Floppy, Magnetic Tape drive etc, Usage and suitability of various secondary storage devices according to their speed and volume should be explained.

**3. Information Representation in Computers**

**Number System:** Decimal, Binary, Octal and Hexadecimal, Arithmetic operations i.e. Addition, subtraction, Multiplication and Division etc.

**Machine Representation:** Representation of positive and Negative integers using two's complement, Bits, Bytes, Words, representation of Characters, representation of Instructions.

**4. Elements of Data Processing**

**Problems Solving and various stages involved:** Defining the Problem, Analyzing of the problem, Algorithm, Flow-charting, Coding (Programming) the Problem, Processing the Problem, Debugging the Problem, Final Output (Showing results of Problems)

**5. Programming Languages**

—Classification of languages (Low Level, Intermediate level and high level).—Low level language (Machine Language).—Intermediate level language (Assembly Language).—High Level languages (Fortran, Cobol, Pascal and Basic etc).—Suitability of a programming language according to the nature of problem

**6. Elements and Programming in Basic Language**

—Assignment Statements —Control statements. —Input/Output statements —Specification statements.—Usage of Basic statements in developing programmes for simple problems.

**7. Major Applications**

**For Research Development in:** Commercial, accounting, banking, insurance, shipping, census, immigration, taxation, communications, examinations, inventory (stores) personal information system.

**Available Book:**

Computer Studies / Computer Science  
by Kashif Shahzad Ch. & Rabia Shahzad Ch.  
Azeem Academy Urdu Bazar Lahore



**BANKING**

<b>Marks : 75</b>	<b>Class XII(Part-II)</b>	<b>Time : 2-30 Hours</b>
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**Course Outlines:** Definition and origin of banking.

1. **Kinds of Banks:** Central Bank, Commercial Bank, Industrial Bank—IDBP, NDFC, Agricultural Bank, Investment Bank—ICP, Saving Bank, Cooperative Bank.
2. **Commercial Banks:** Scheduled and non-scheduled Banks, Functions, Importance and services performed by a modern commercial bank.
3. **Kinds of Bank Account:** Saving, Current, Fixed, PLS, Operation of above accounts (Practical Demonstrations).
4. **Credit Instruments:** Cheques, Bill of Exchange, Promissory note, Letter of credit.
5. **Bank advances:** Over draft, Cash credit, Loans — Secured and unsecured, Credit creation by Commercial Banks.—their powers and limitations.
6. **Central Bank:** Origin and growth, Functions of a central bank, Credit control measures, State Bank of Pakistan—its relation with scheduled banks and its role in the national economy.
7. **Foreign Exchange:** Meaning—exchange rates, exchange control and trade, foreign remittances, Note,—These course outlines may be adopted for similar course of Banking in D Com. scheme of Studies.

**Evaluation**

**Internal:** For internal evaluation, monthly tests be conducted to assess the knowledge of the students regularly, Quiz programmes be arranged to encourage competitive spirit among the students.

**External:** Ten questions may be set and the students be asked to attempt any five questions carrying equal marks, Guest speakers from different banks may be invited to deliver lectures, Students visit in batches to various banks branches be arranged.

**Available Textbooks**

Principles of Banking by Mohammad Hanif.  
 Principles of Banking by Qazi Shahzad  
 Azeem Academy Urdu Bazar Lahore  
 Law and practice of Banking in Pakistan by Asrar H. Siddiqi.  
 Money Banking and Credit by Saeed Nasir.  
 Banking by S. Qavi Ahmad  
 Banking in Pakistan by S.A.Meenai  
 (Economic News letters, of banks.), (Journal of Institute of Bankers in Pakistan.)



### HOME ECONOMICS GROUP

(There will be two papers of 100 marks each.)

<b>PART-I (CLASS-XI)</b>		<b>Marks</b>
1. <b>PAPER I.</b> Biology and Chemistry Section A : Biology (Theory : 35   Practical : 15) Section B : Chemistry (Theory : 35   Practical : 15)		<b>100</b>
2. <b>PAPER II.</b> Home Management (Theory : 85   Practical : 15)		<b>100</b>
3. <b>PAPER III.</b> Clothing & Textiles (Theory : 85   Practical : 15)		<b>100</b>
<b>PART-II (CLASS-XII)</b>		
4. <b>PAPER IV</b> Applied Art (Theory : 85   Practical : 15)		<b>100</b>
5. <b>PAPER V</b> Food and Nutrition (Theory : 85   Practical : 15)		<b>100</b>
6. <b>PAPER VI</b> Child Development and Family life (Theory : 85 Practical : 15)		<b>100</b>
<b>Total Marks</b>		<b>600</b>

## PAPER I (PART-I) (CLASS-XI)

### Section A-Biology Marks: 35

1. **Zoology:** Study of the basic animal science, Cytology, i.e. protoplasm, cell structure, divisions and Fertilization, Histology of the simple and compound tissues in general, Brief classification of the animal kingdom, Study of the characteristics of parasites and their effects on human beings.
2. **Physiology of the human body:** Muscular system, movements and levers, Skeletal system and joints, A general study of the structure and function of the digestive, respiratory, circulatory, nervous, excretory and reproductive systems of the body, Structure and function of the eye, ear, nose, skin and tongue.
3. **Botany:** Classification of plants, Parts of plants and their functions, Root-absorption of water and nutrient salts from the soil, holding the plant in position, storage of food, Stem-carrying water and food-storage of food, Leaves- manufacture of food and loss of water, Flowers-formation of fruits and seeds, Special uses of plants and trees to man. Their fundamental values as food including vitamins and uses for latex and rubber, tobacco, perfumes, spices and condiments, tea, coffee and cocoa, medicines-drug-ex—castor ,oil iodine from sea weed, building materials, fuel and timber, Conservation-importance in the prevention of erosion.

### Section B - Chemistry

**Marks: 35**

1. **Physical Chemistry:**Physical and chemical changes, Elements, mixtures and compounds, Chemical symbols, formulas and chemical equations, Dalton's atomic theory ; laws of chemical combination, Elementary idea of electron, proton and neutron and electronics structure of atom, Definition of atomic weight, molecular weight and equivalent weight, Elements of thermo-chemistry and thermo-chemical equations, Calculations based on chemical equations, Oxidation; reduction, Elementary study of reversible reactions and chemical equilibrium; elementary ideas of Law of Mass action, Electrolysis and ionization, Catalysis and colloids.
2. **Inorganic Chemistry:** Water as a solvent; change in its density with temperature; its high specific heat, high heat of vaporization-relation of each of these to health; softening of hard water; purification of water for drinking purposes and for laundry, Preparation, properties and uses of hydrogen peroxide and ozone, Air and its composition; respiration and combustion; flame, Natural gas, coke and other fuels; carbon monoxide poisoning, Carbon dioxide; preparation, properties and uses (fire extinguishers), Acids, bases and salts, general characteristics of each class, Action of air, water, acids and alkalies on the following metals and alloys: Silver, gold, copper, brass, bronze, tin, aluminium, iron, chromium and nickel, Composition and properties of common salt sodium thiosulphate, baking powder, bleaching powder lime, copper sulphate, white lead, silver-nitrate, common alum, potassium permanganate, Elementary study of the following processes:- Photography; electroplating; silvering of mirrors and tinning.
3. **Organic Chemistry:** Elementary study of the following:- Hydrocarbons (methane, ethane and acetylene), Ethyl alcohol, Acids: Organic acids in common domestic use – acetic, oxalic, tartaric and citric acids, Carbohydrates – glucose, cane sugar, starch, study of cellulose with special reference to its industrial importance in rayon, paper, cellophane and synthetic materials, Fats and oils – soap and saponification, Proteins, Dyeing acid – fats and alkali- fast dyes, mordant; bleaching and use of anti-colour, Fermentation of food by different methods and pasteurization of milk.

### LIST OF PRACTICAL FOR PAPER-I “BIOLOGY & CHEMISTRY”

Practical Paper-I Part-I with the help of models students will be instructed in the identification of :-

**Section-A:** Different types of Plants, Different Parts of Plants, Parts of skeletal system, Parts of Eyes & Ears.

**Section –B:** Demonstrations the difference in a physical and chemical change, Demonstrations the effect of heat on water change in state and temperature, Characteristics of acids, bases and salts, General Characteristics of carbohydrates, fats and Proteins-colour reactions-solubility, effect of heat.



## PAPER II (PART-I) HOME MANAGEMENT

*(Outlines of tests)*

<b>Marks: 85</b>	Part-I Theory (Class-XI)	<b>Time: 3:00 Hours</b>
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1. **Management and its relationship to family goals, values and resources.**  
Family goals and values as related to management, Developing and understanding of resources to be managed:— Types of resources —human and material, Inter-relationship of resources, Control, evaluation and planning of resources, Scarcity of resources for management.
2. **Comfort and beauty in the home.**  
Planning houses to meet family needs, Selection and functional arrangement of furniture and furnishings, Improvement of household storage, Study of heights of working surfaces.
3. **Protection of health in the home.**  
Sanitation in the home, Constructional features of housing in relation to the health of the family:— Ventilation, Lighting, Drainage, Disposal of refuse, Insulation, Arrangement for areas of recreation in the home.
4. **Household equipment.**  
Household equipment used in Pakistani homes, Amount and kind of equipment needed for maintenance of a home, Selection of household equipment in relation to the design and function of equipment, Care and storage of equipment.

### LIST OF PRACTICAL FOR CLASS –XI (PART-I)

Plan time-table for different family members, Compare simple account books, report on money expenditure in a family and keep a record of personal accounts, Plan household storage in own homes, Experiment with adjustable work heights, Make a study of the health and sanitary members in the community, Evaluate and suggest improvement for the equipment commonly and in Pakistan homes in relation to design, function, use, efficiency and care.

**Note:** Field trips will be arranged for the students in connection with their Practicals.

## PAPER III (PART I) (CLOTHING AND TEXTILES)

*(Outlines of tests)*

<b>Marks: 85</b>	Part-I Theory (Class-XI)	<b>Time: 3:00 Hours</b>
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1. **Selection, construction and storage of clothes.**
  - a. **Principle of art applied to selection of clothes and fabric:**—Analysis of personal characteristics, Study of design elements in dress, Selection of appropriate dress and accessories.
  - b. **Shopping practices and consumer ethics:**—Study of marks and prices, Effective shopping practices, Ethical and unethical practices in shopping.
  - c. **Principles of wardrobe planning:**—Planning individual wardrobe in terms of family, social economic status and the economy of Pakistan, Factors that determine wardrobe planning such as family budget, activities, personality, season of the year, age, set and occasion in terms of social customs of the country.
  - d. **Construction of clothes :**—Drafting individual bodies block—taking accurate measurements and considering correct drafting procedures, Construction of a minimum of two garments for the students herself based on her wardrobe analysis and incorporating at least five new techniques and learning, Sewing equipment, its proper use and care; choice of fabrics for garments: construction processes.
  - e. **Methods for care and storage of clothing.** Values and basic principle of laundering, stain removal ironing and pressing, Principle of storing clothes, such as cleanliness, neatness, orderliness and protection from wrinkling, dust, dampness, insects, Mending methods in the context of appropriateness to the fabric, in relation to time, energy and worth of the garments repairing, patching and darning.
2. **Study of Textile Fibres.**  
 Classification of textile fibres, A comparative study of the characteristics of textile fibres, identification of textile fibres of common use; microscopic Structure; simple methods of fibre identification such as the burning test and the feelings test, simple chemical tests for identifying fibres, The three basic weaves and their characteristics: Plain, twill and satin weave, Finishing processes such as mercerization, napping calendering, pre-shrinking.

### LIST OF PRACTICAL FOR CLASS-XI (PART-I)

Drafting individual bodies block, Construction of a minimum of two garments based on own wardrobe analysis and incorporating at least five new techniques and learnings, Principles of Stain removal, Ironing and pressing cloths, common mending methods; patching; darning, Examination and collection of a variety of Fabrics made from different textile fibres, Identification of fibres using simple methods, Natural, man made, synthetic burning test, physical test, chemical and microscopic.

**PAPER IV (PART-II)**  
**(APPLIED ART)**  
*(Outlines of tests)*

<b>Marks: 85</b>	<b>PART –II(CLASS-XII)</b>	<b>Time: 3:00 Hours</b>
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**Application of Art in everyday living.**

1. Application of design through planning, designing and construction of any five of the following crafts:  
Tied and dyed and stencilled dupattas or scarves, batik- curtain, kamiz, sari, Leather work, pocket-books, sandals. Basketery — two types of basket, Straw-weaving mats for table, block printing, weaving, carving of carvings and engraving, Composition using natural material e.g. flowers, grasses branches, fruit, Selection and arrangement of pictures and wall hangings, Construction of frames.
2. Principles of art applied to all planning and construction; harmony, rhythm, balance, proportion, emphasis.
3. Elements of art applied to all creative work:— Colour, texture, line form.
4. Demonstration of arrangement of space, line and colour on posters illustrative material for other classes, bulletin boards, decoration for parties.

**PRACTICALS**

Students will submit five creative projects for evaluation with an analysis of how the principles of art and the elements of art are used. At least one project should illustrate the use of colour and colour harmony.

**PAPER V (PART-II)**  
**(FOOD AND NUTRITION)**

*(Outlines of tests)*

<b>Marks: 85</b>	<b>PART –II(CLASS-XII)</b>	<b>Time: 3:00 Hours</b>
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**1. Understanding the nutritional importance of food.**

Definition of nutrition, Classification and functions of food nutrients: Carbohydrates, fats, proteins, minerals, vitamins and water, Composition and nutritional value of vegetables, fruits, eggs, milk, meat and other common foods, Conservation of nutrients in food preparation-

**2. Family meal management.**

**a. Points to be considered in meal management:**—Personal nutritional needs, Factors governing nutritional requirements in respect of age sex, activity, Adequate diet for the family; infant nutrition, invalid diets and others, Adapting receipts to number of persons to be served.

**b. Food preparation:**—Use of weights, measures and equivalents, Methods and principles of cookery: Meat, vegetables, fruit and sugar, Effects of cooking on nutrients palatability, texture, colour.

**c. Study, care and use of equipment used in food preparation.**

**3. Food Fads and fallacies.**

Relation of food and fallacies to personal food selection such as superstition, religion, special days.

**4. Home Gardening and food production.**

Value of planning for producing food at home—nutritional, recreational and educational, Soil preparation and management of the garden, Selecting vegetables, fruits and flowers suited to the area selected for gardening, Protecting vegetables, fruits and flowers from pests, heat, excessive rain, Care and use of fresh, home produced food, Poultry and other sources of protein-rich food for the family.

**LIST OF PRACTICALS FOR CLASS-XII (PART-II)**

Record food intake and activity for a given period of time (two days or more) and evaluate dietary in relation to energy requirement, Learn to measure 100 calorie portions of food. Compare the dietary adequacy of rice, eggs, dal, atta, fruits, vegetables. Compare nutritional value of polished and unpolished rice, maida and atta, Estimate number of servings from a prepared receipt (keep in mind the amount of adequate servings), Plan a menu which will furnish the daily food requirements for a family. Prepare one meal from this menu.

**Prescribed textbook-**

**“FOOD AND NUTRITION”**

**Author:** Mrs. D. N. Dastur

**Editor:** Miss Razia Noor Muhammad

**Published by:** M/s Ilmi Kitab Khan, Urdu Bazar, Lahore (For Punjab Textbook Board, Lahore)

## PAPER VI (PART II) (CHILD DEVELOPMENT AND FAMILY LIFE)

(Outlines of tests)

Marks: 85	PART –II(CLASS-XII)	Time: 3:00 Hours
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### 1. Understanding helping family members

**Care of the mother during pregnancy:** Care of the mother during pregnancy to ensure a good start in life for the baby, Helping the mother to understand her needs and giving her information about agencies and persons able to help her.

**Preparation for the arrival of a new baby:** Preparing parents and other family members for welcoming the new baby, Helping parents to understand the characteristics and needs of the infant.

**Understanding the growing child:** Characteristics of the pre-school child, school child and pre-adolescent. Aspects of growth and development, physical, emotional, social and mental. Inter-relationship of all aspects of growth.

**Care of children from infancy through pre-adolescence:** Explanation of the importance of observation of children of home and directed observation of children in the nursery, primary and middle schools. Discussion of guidance principles related to observation.

### 2. Care of the health of the family.

**Requirement of good health:** Adequate food, sleep, fresh air, sun shine, comfortable clothing, exercise, safety from home hazards: fire, poisons, sharp instrument and other.

**Development of individuality:** Relationship of the child to family members, teachers, class-mates and others, Child's needs for developing his potentialities at home and outside the home, Behaviour problems and how to deal with them, Characteristics behaviour accompanying growth changes; guiding children towards desirable behaviour, Acceptance of the whole child co-operation between family members and others understanding the child and guiding him towards maturity, The role of play in the child's development. Principles underlying the selection, care and use of equipment and play material. Understanding child's interest and activities—book's pictures, music, individual and group play, importance of the peer group.

#### LIST OF PRACTICALS FOR CLASS-XII (PART-II)

Preparation of a file on observations in the college nursery school (or of a child at home or in the neighborhood), primary and middle school, Field trips, Audio-visual aids to be developed during the year. Guide sheets will be furnished for these reports for the file. This file will also include a chart showing play materials for each developmental level from infancy through pre-adolescence.

#### Prescribed textbook-

#### “CHILD DEVELOPMENT”

**Author:** Dr. Mrs. M. Ahmad.

**Editor :** Miss Razia Noor Muhammad

**Published by:** M/s Ilmi Kitab Khan, Urdu Bazar, Lahore (For Punjab Textbook Board, Lahore)



## NURSING

(There will be two papers of 100 marks each.)

(Outlines of tests)

Marks : 85	CLASS-XI (PART I)	Time : 3.00 hours
<b>Syllabus.</b>	1. Anatomy, Physiology and Hygiene	35 marks
	2. Nursing and First Aid	50 marks

### ANATOMY AND PHYSIOLOGY

1. **Introduction to the Body.**  
Cells and tissues: structure and function, Body as a whole; chief cavities and contents
2. **Skeleton.**  
**Bones:** Structure and growth, types of bones.  
**Skull:** Name and position of bones of cranium and face.  
**Teeth.** Spinal column and Thorax: Spinal column as a whole, general structure of vertebrate and their types.  
Sternum and ribs, Shoulder girdle and upper extremity, Pelvic girdle and lower extremity.
3. **Joint and Muscles:**  
**Joints:** (general structure varieties, chief joints of the body.  
**Muscles:** general features of voluntary muscle. Position and action of the chief muscles of the body.  
**Blood and Circulatory System**  
**Blood:** Composition, function and coagulation.  
**Heart:** Position structure and function.  
**Blood Vessels:** Arteries, veins, arterioles and capillaries including their structural differences. Names and positions of the chief blood vessels.  
**Circulation of Blood:** General, pulmonary and portal circulations. Pulse and blood pressure.  
**Lymphatic System:** Lymph, lymphatic vessels and glands. Spleen
5. **Respiratory System:**  
**Organ of Respiration:** Position, structure and functions.  
**Mechanism and process of respiration;** Chief muscles of respiration.  
Purpose of respiration.

### HYGIENE

1. **Personal, family and community health.**  
**Concept of health:** Definition and general principles, Physical, mental and social factors influencing health, Effects of environmental and economic factors, Human behavior and motivation.  
**Personal health**  
**Personal hygiene:** Habits, posture, exercise, sleep, rest, and recreation, Cleanliness of the whole body.  
**Mental and social health:** Normal recreation, emotional adjustments, effects of social and physical environments, behavior and attitudes (including attitudes towards birth, life and death).
2. **Domestic and Community Hygiene**
  - i. **Milk;** Composition, Contamination and adulteration, pasteurization and sterilization.
  - ii. **Food:** storage and preservation.
  - iii. **Home Safety.**
  - iv. **Air and ventilation:** Composition and impurities of air, principles of natural and artificial ventilation, application to the home and institutions.
  - v. **Water;** Sources of water supply in Pakistan, purification and storage of water for domestic purposes,
  - vi. **Disposal of refuse and sewage:** Water carriage and conservancy systems, purification of sewage by septic tank and activated sludge process.
  - vii. **Microbiology**

- a. **Type of micro:** Organisms, main characteristics and mode of life.
- b. **Infection:** Portals of entry, spread of infection and its control,
- c. **Immunity:** Active and passive.
- viii. Spread of infection by means of water, food and air in cholera dysentery and the enteric fevers.
- ix. **Spread of infection by insects:** Flies; mosquitoes, sandflies, lice, bedbugs and fleas.
- x. **Intestinal parasites;** Threadworms, roundworms, hookworms and tapeworms.
- xi. **Pest control.**

## HISTORY OF NURSING

### 1. Islamic Heritage in Nursing and Medicine.

Nursing and Hygiene in the Prophet's time, Outline of the growth of Arabic medicine from the 5th century, Work of famous Islamic Physicians and surgeons Al-Razi, Ibn-Sina, Ibn-Zuhr, Al-Zahrawi, Famous Muslim hospitals during the 8<sup>th</sup> -13<sup>th</sup> centuries in Baghdad, Cairo, Damascus and Cordova.

- i. **Florence Nightingale:** Her life and work in the Crimea, founding of modern nursing.
- a. **Brief history of nursing in Pakistan to the present day:** Pakistan Nursing Council, West Pakistan Nursing Services Council, Pakistan Nurses Federation and International Council of Nurses
- b. Future of nursing; careers open to nurses.
- c. **Work of other health services to-day:** Red Cross.

### 2. NURSING ETHICS AND ETIQUETTE

- i. The need for a special code of behavior for nurse, The qualities of a good nurse, The nurses relationship to: The patient and his relations, Nursing Staff, Medical Staff, The international code of nursing ethics.

### 3. DOMESTIC WARD MANAGEMENT

Methods of cleaning, Care of the sickroom and its furniture, Care of bedding, linen, blankets, waterproof, plastic goods, glass-ware, rubber goods and china goods, Care and sanitary methods of cleaning utensils, baths and lavatories, Disposal and disinfection of soiled linen and dressings, Disinfectants in common use, Sterilization of utensils, rubber and plastic goods

### 4. NURSING CARE OF THE PATIENT (*Theory and Practical*)

- i. Bed making, admission bed, changing sheets from side to side with the patient in bed, operation bed, Fracture bed and use of Bed Cradles, Lifting and turning of patient, Bathing in bed and the bathroom, Care of pressure areas, causes, prevention and treatment of bedsores, Care of the mouth and teeth including those of a helpless patient, Care of the hair washing, fine combing, treatment for pediculosis, Taking and recording temperature, pulse and respiration, Serving meals and feeding a helpless patient
- ii. **Drugs and lotions:** Simple weights and measures, technical terms and abbreviation in common use. Administration of drugs orally. Cure of simple and dangerous drugs.
- iii. **Inhalations:** Preparation of moist inhalations.
- iv. **Enemas;** Those to be returned eg. Soap, olive oil and glycerine enemas, Those to be retained eg. Continuous rectal infusion.
- v. **Hot applications:** Filling hot water bottles, Fomentations, Medical including Turpentine stupes, surgical.
- vi. **Cold applications;** Filling ice bags, Cold compresses,
- vii. Tepid sponging.
- viii. Testing of urine for albumin and sugar Reaction and specific gravity.

### 5. BANDAGING

- i. Types of bandages and their uses, Application of roller and triangular bandages. Use of simple splints,
- ii. **Roller bandaging:** Simple and reverse spiral and figure of eight, spica of elbow, knee and heel, bandage of the hand, fingers and thumb, ascending shoulder spica, bandage of the ear, eye and carbuncle.
- iii. **Triangular bandaging:** Slings.

**6. FIRST AID**

General principles of first aid, Shock, Haemorrhage including epistaxis, Haemoptysis and Haematemesis, Fractures, sprains and dislocations, Wounds, abrasions and bruises, Bites and stings, Burns and scalds, Loss of consciousness; fainting, fits, and convulsions, asphyxia from drowning, choking and carbon monoxide gas Electrocution.

**Poisons:** General principles of treatment, Foreign bodies, Ear, Nose, throat and stomach.

**Artificial respiration:** Holger Nielson, Mouth to mouth

**LIST OF PRACTICALS FOR CLASS-XI (PART – I)****NURSING CARE OF THE PATIENT**

Bed making, admission bed, Lifting and turning patients, Care of the hair, hair washing, fine-combing, treatment for pediculosis, Bathing in bed and the bathroom, Taking and recording temperature, pulse and respiration, Drugs and lotions: simple weights and measures technical terms and abbreviations in common use, Administration of drugs orally. Care of simple and dangerous drugs, Hot applications, Filling hot water bottles, Cold applications; (Filling ice bags, Cold compresses).

**BANDAGING**

Types of bandages and their uses. Application of roller and triangular bandages Use of simple splints, Roller bandaging: simple and reverse spiral and figure of eight, spica of elbow, knee and heel, bandage of the hand, fingers and thumb, ascending shoulder spica, bandage of the ear, eye and carbuncle, Triangular bandaging: Slings.



<b>Marks : 85</b>	<b>CLASS-XII (PART-II)</b>	<b>Time : 3:00 hours</b>
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### ANATOMY AND PHYSIOLOGY

1. **Digestive system:** Alimentary tract and associated organs: position, structure and functions, Simple description of the process of digestion and absorption.
2. **Metabolism:** Simple description of the metabolism of proteins, fats and carbohydrate, Body heat and regulation of body temperature.
3. **Excretory system:** Kidneys and urinary bladder: structure and function, Simple description of the formation of urine. Composition of urine. Micturition, Skin: structure and function. Hair and nails.
4. **Endocrine system:** Brief outline of the endocrine glands. Structure and function of the pancreas, thyroid, parathyroid, suprarenal and pituitary glands
5. **Nervous system:** Central nervous system: cerebrum, cerebellum, medulla and spinal cord, Peripheral nerves and reflex action, Autonomic nervous system, Organs of special sense
6. **Reproductive system:** Structure and function of the male and female reproductive organs.

### DIETETICS

Essential nutrients: Protein, carbohydrates, fats, vitamins, mineral salts and water, Calorie values and requirements, Balanced diet.

#### Practical:

Simple food tests for proteins, Carbohydrates and fs, Enzyme action eg. action of saliva on starch, Sickroom cookery: tea, barley water, albumin water egg frip, scrambled egg, baked custard, egg jelly, orange jelly, vegetable soup.

### HEALTH OF MOTHER AND CHILD

1. Preparation for marriage and parenthood, The importance of a happy home environment on the physical and mental development of the child, Parental responsibilities in promoting character development.
2. Importance of good maternity care, Signs and symptoms of pregnancy; antenatal care, Brief outline of fetal development and the birth of the baby, Post-natal care.
3. Care of the baby; Breast and artificial feeding; weaning, Bathing the baby, Immunisation.
4. Maternal and child welfare services.
5. Family Planning; The need for family planning at the national level and the family level.

#### Recommended books:

1. Anatomy and Physiology for Nurses-by W. Gardon Sears.
2. Aids to Practical Nursing Marjorie Houghton.
3. An Introduction to Hygiene and Public Health by Dr. Niazi,
4. Maternal and Child Welfare Manual—Susan Tracy and Archibald Norman, published by British Red Cross Society
5. Sir John's Ambulance First Aid Manual.

### INSTRUCTIONS FOR PRACTICAL TRAINING

1. **For Regular Students:** One period per week through-out the two years course, for practical instructions in the class room in the college, In addition to this, during the second year, each student should visit a recognized hospital weekly for at least one hour's practical bed-side nursing so that a minimum total of 30 hours Ward experience is gained. A certificate to this effect should be signed by the nursing Superintendent of the hospital and forwarded to the Principal of the college concerned.
2. **For Private Students:** No Private candidate is allowed to take the examination unless she has produced a certificate from the Nursing Superintendent of a teaching hospital to the effect that she has put in the minimum of 30 hours of practical work in the hospital.

**NURSING (Division of Practical) PART - II (CLASS XII)**  
**NURSING CARE OF THE PATIENT**

1. Changing sheets from side to side with the patient in bed, operation, bed, Fracture bed and use of bed Cradles.
2. Care of pressure areas, causes, prevention and treatment of bedsores.
3. Care of the mouth and teeth, including those of a helpless patient,
4. Inhalation : preparation of moist inhalations,
5. **Enemas** : Those to be returned eg. soap, olive oil and glycerin enemas, Those to be retained eg. continuous rectal infusion.
6. Tepid sponging.
7. Testing of Urine for albumin and sugar Reaction and specific gravity, **FIRST AID**
8. General principles of first aid.
9. Shock.
10. Hamorrhage including epistaxis, Haemoptysis
11. Fractures, sprains and dislocations.
12. Wounds, abrasions and bruises.
13. Bites and stings.
14. Burns and scalds.
15. Loss of consciousness; fainting, fits and convulsions, asphyxi from drowning, choking and carbon monoxide gas Electrocution,
16. Poisons: general principles of treatment, Foreign bodies, Ear, .Nose, Throat and Stomach.
17. Artificial respiration: Holger Nielson, Mouth to mouth.



### **ISLAMIC STUDIES GROUP**

This group will comprise the following three subjects;

1. ARABIC	PART I	Marks 100
	PART II	100
2. ISLAMIC STUDIES	PART I	100
	PART II	100
3. ISLAMIC HISTORY AND CULTURE	PART I	100
	PART II	100

#### ***Syllabus.***

##### **(1) ARABIC**

<b>Marks : 100</b>	<b>PART I (CLASS-XI)</b>	<b>Time : 3 hours</b>
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The syllabus and time will be the same as that of Arabic (Elective) Paper A (Part-I) in Humanities Group.

<b>Marks : 100</b>	<b>PART II (CLASS-XII)</b>	<b>Time : 3 hours</b>
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The syllabus and time will be the same as that of Arabic (Elective) Paper B (Part-II) in Humanities Group.

##### **(2) ISLAMIC STUDIES**

<b>Marks : 100</b>	<b>PART I (CLASS-XI)</b>	<b>Time : 3 hours</b>
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**Al-Fiqh**—Chapters on Taharat, Salat, Saum and Zakat from Multapal Abhur or Al-Quduri.  
**Usul al-Fiqh**—The four Usul, viz. (Kitab, Sunnah, Ijma and Qias.)

<b>Marks : 100</b>	<b>PART II (CLASS-XII)</b>	<b>Time : 3 hours</b>
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**Al-Quran**: Surat al-Baqra with translation and explanation. 70Marks  
**Al-Hadith**: Mishkatal-Masabih from Kitab-al-Inam to the end of Kitab-al-Ilam. 30Marks

##### **(3) ISLAMIC HISTORY AND CULTURE**

<b>Marks : 100</b>	<b>PART I (CLASS-XI)</b>	<b>Time : 3 hours</b>
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The political and cultural history of Islam upto the Umayyad period.

1. **Background of Islam.**

**Pre-Islamic civilization of the Near East:** Assyrian and Babylonian civilization, the Hebrew-monotheism Byzantines; Christianity; imperial administration. The Sassanians – Zoroastrianism, ideas of monarchy. Political, social and cultural life of the Arabs before Islam.

**Life of the Prophet:** His early life; mission and early difficulties; Hijrat; wars and ultimate triumph; beliefs and institutions of Islam; character and achievements of the Prophet as a social reformer and builder of a new millat.

2. **The early Caliphs.**

**Abu Bakr:** His election as Caliph; Osama's expedition; suppression of rebellions and apostasy; beginning of the clash with the Persian and the Roman Empires; Abu-Bakr's character and achievements.

**Omar:** Spread of Islam and expansion of Arab rule in Iraq, Persia, Syria and Egypt; emergence of Islam as a great power; evolution of civil government and military organization; treatment of non-Muslims; his character and achievements.

**Osman:** Continuation of the expansion of Islam; his character and achievements.

**Ali:** Succession of Ali; civil wars; origin of the 'Shias' and the 'Kharjis'; Ali's administration; his assassination; his character and achievements.

Progress of Islam in the period of the early Caliphs; its political, social, economic and cultural aspects.

3. **The Umayyads**

**Amir Muawiyah:** Abdication of Imam Hasan; Establishment of the Umayyad dynasty; Amir Muawiyah's campaigns and conquests; measures to consolidate dynastic rule of administration; beginning of the Arab navy ; Amir Muawiyah's character and achievements.

**Carrier and character of Imam Hussain;** Events leading to the tragedy of Karbala; its religious, moral and political significance.

**Abdul Malik:** Restoration and consolidation of Umayyad rule; campaigns against the Byzantines, Berbers and Kharjis; his policy and administrative reforms.

**Walid bin Abdul Malik:** Spread of Islam and expansion of the Arab rule in Asia, Africa and Europe, his works of public utility; promotion of art and architecture; growth of naval-power grandeur of his reign.

**Sulaiman bin Abdul Malik:** His ill-treatment of the Muslim generals; military campaigns and conquests; seize of Constantinople.

**Omar bin Abdul Aziz:** His character, zeal for reforms and achievements.

**Later Umayyad rulers;** The Armenian and Caucasian wars; campaigns in France, causes of the decline and fall of the Umayyads.

**Nature of the Umayyad rule:** Growth of the Arab Empire in this period; administration-provincial and central; military organization; social, cultural, and economic condition; the capital and the royal court; architecture and paintings.

<b>Marks : 100</b>	<b>PART II (CLASS-XII) (Option I)</b>	<b>Time : 3 hours</b>
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The political and cultural History of Islam from the beginning of the Abbasids to the fall of Baghdad

**1. The Abbasids:**

Foundation and consolidation of the Abbasid dynasty ; Abbasid propaganda the appearance of Abu Muslim and the establishment of the Abbasid dynasty; Al-Saffah; Al-Mansur, the real founder of the dynasty; consolidation of the Abbasid rule; foundation of Baghdad; rise of the Barmaki family and growth of the Persian influence. Mahdi and suppression of the Mutazalities; glory of reign of Haroon; fall of the Barmaki family.

Mamun; his patronage of Mutazalities; intellectual and literary development under Mamun.

Mutasim and the beginning of the Turkish ascendancy; Samara; Al-Mutawakkil; rise of the local Persian dynasties; the Buwayhids; the Saljuqs; Tughril, Alp Arslan and Malik Shah; the Ayyubis in Egypt and Syria.

The Crusades; causes and effects; Salah-ud-Din Ayyubi.

Mongol invasion of the Muslim world and the sack of Baghdad 1258 A.D. Causes and effects of the fall of Baghdad.

Nature of the Abbasid caliphate; ascendancy of the Persian influence; wazarat and administration.

**Foreign relations of the Abbasids.**

**Social and economic conditions;** position of the slaves and treatment of the non-Muslims.

**Scientific and literary progress;** Medicine, geography, astronomy, history, philosophy, literature and poetry law and jurisprudence, political thought.

**Education;** Institutions of higher learning, literary societies, libraries.

**Fine Art;** Architecture, painting, calligraphy and music.

**2. Fatimid Caliphate in Egypt:**

Ismaili Sect, origin of the Fatimids; establishment of the Fatimid rule in Egypt; Al-Muizz and expansion of the Fatimid rule in Sicily, Italy and Arabia; Al-Aziz; patronage of art, architecture and education; Al-Azhar; Decline and fall of the Fatimids, the rise of the Mamluks.

<b>Marks : 100</b>	<b>PART II (CLASS-XII) (Option II)</b>	<b>Time : 3 hours</b>
<b>The Cultural System of Islam</b>		

Among others, the following specific aspects will be studied in the light of the Kitab and the Sunnah and the writings of eminent Muslims thinkers :

**The Individual :—**Study of the Akhlaq-i-Islam with special stress on the following points: Taqwa, Dhikr, Sabr, Shukr, Afw, Adl, Ihsan, Tadabbur, Tahammul, Khidmat-i-Khalq, Talab-i-Ilm.

**The Family :—**The nature and purpose of home life, The role of the mother, father and children, The rights and duties of husband and wife.

**The School and the Mosque :-** The nature and purpose of education in Muslim Society, The role of the Maktab in Society, The role of Mosque in society.

**Muslim Society :—** The rights and duties of : Relatives, Neighbours, Citizens, The state.

**The World of Islam:** The concept of (The Umma, Ukhuwwat, Tabligh, Jihad).



**AGRICULTURE***(Outlines of tests)***PART I = Marks 85****PART II = Marks 85****PRACTICAL = Marks 30****Syllabus**

<b>Marks : 85</b>	<b>PART I (CLASS-XI)</b>	<b>Time : 3.00 hours</b>
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1. Importance of Agriculture for Pakistan. Division of province into zones according to rainfall and climate. Suitability of different crops for different zones. Elementary knowledge about soil formation, physical constituents and properties of main types of soils in the province.
2. Water holding capacity and movement of water in different types of soils and its effect on crops production—Alkaline and acid soils— their causes and control.
3. Importance of irrigation for area with low rainfall and for crops grown during the dry season of the year. Critical times in the life of crop when irrigation is necessary including those implement commonly used in mechanized farming, Advantages and drawbacks of irrigation from: (Canals, Tube-wells and ordinary wells and Ponds and other means), Remedial measures for water-logging.
4. Soil conservation and allied practices. Soil fertility and how to maintain it. Conservation of farm-yard manure and making of compost from vegetative matter, Green manures and its importance. Part played by nitrogen fixing bacteria associated with leguminous plants. Advantages of growing leguminous crops for green manuring or as alternate crops, Importance of Inorganic and Organic Manures. In crop growth role of major and minor elements.

**LIST OF PRACTICALS FOR CLASS-XI (PART I)**

A group of students will maintain a simple plot of land where they will grow one kharif crop, one Rabi crop and some seasonal vegetables. They will keep a record of all field operations done throughout the year with dates and also a record of performance of crops grown by them. They will learn the use of local and improved implements for their field operations so far as possible, Identification of different soils, Experiments of Illustrate physical Properties of sand and clay with special reference to their comparative weights, permeability to water and their relative water holding capacity, Identification of different organic and inorganic manures, Field trips in the locality.

**Note:** A record of all practical work done throughout the year will be maintained and produced at the time of Practical examination.

<b>Marks : 85</b>	<b>PART II (CLASS-XII)</b>	<b>Time : 3.00 hours</b>
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1. Parts of a plant and their functions in detail—root, stem, leaf, flower, fruit and seed.
2. Germination of seeds—condition essential for germination; qualities of good seed.
3. Plant nutrition—essential elements required for plant growth. How these are taken by plants?
4. Soil, season and rainfall requirements of important Kharif and Rabi crops of the province.
5. Soil, time of sowing, seed rate, water requirements importance of gardens and vegetable crops of the province.
6. Out turn, cost of production and profits obtained from important field crops and vegetable crops.
7. Principles underlying rotation of crops.
8. Recognition of weeds growing in crop fields; steps to be taken for eradicating weeds.
9. Recognition of major local insect pests and diseases of crops-Identification of insect pests at different stages of their life cycle. Step to be taken for controlling different insect pests and plant diseases.
10. Recognition of important breeds of milch, cattle, draft animals, sheep and goats and poultry. Elementary knowledge of general management. Care and feeding of cattle, sheep goats and poultry.
11. Chemical fertilizers—methods of their application and doses for important crops.
12. Importance of preparatory tillages—methods and implements used for tillage,
13. Different methods and implements used for seed bed preparation, sowing of crops and inter-tillage.

#### **LIST OF PRACTICALS FOR CLASS-XII (PART II)**

Testing germination and purity of seeds, Collection and recognition of important weeds of the locality, Collection and recognition of important insect pests and plant diseases of the locality. Controlling of insect pests and plant diseases by spraying, dusting, etc, with suitable chemical, Observation of good and bad points of cattle and determination of important breeds, Field trips in the locality.

**Note.** A record of all practical work done throughout the year will be maintained and produced at the time of the Practical examination.



## LIBRARY SCIENCE

### AIMS AND OBJECTIVES OF EDUCATION IN LIBRARY SCIENCE

1. To develop interest in reading materials and their use in libraries and to promote reading habit among the students.
2. To create among students a better understanding of the usefulness of libraries in their studies and their dynamic role in a fast changing society.
3. To develop among the students the skill to make effective use of library resources and services including library equipments so that irrespective of the career that they may later-on choose for themselves, they can derive maximum benefits out of the library.
4. To acquaint students with the literature of Islam and Pakistan.
5. To promote interest among students for life-long education and help them to develop into good citizens.

### Syllabus Library Science

Marks 85	Class XI (Part – I)	Time : 3.00 hours
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#### **Paper-1— Introduction of Books and Libraries**

This paper will consist of the following five sections:

Nature and types of libraries and their use, Nature and types of library materials, History of books and libraries, Use of library materials, Meaning and concept of information.

#### **Scope:**

Definition, concept and brief description of objectives and services of library. Role of the library in society (pages 20). Definition and concept of books and other library materials, Types of library materials, care of library materials (Pages 20). Brief history of writing and writing materials (The Alphabet, papers making and printing). Brief history of libraries in general with special reference to Pakistan. Brief introduction to libraries and the library materials possessed by the city libraries and libraries in the vicinity. (Pages 20). Purpose of books and other library materials. Library materials for use. Methods and ways of making them useable. (Pages 20). The meaning, concept and role of information in generation of knowledge and its usefulness (Pages 20).

#### **Practicals**

The practicals for each section will include term papers concerning to the specific topics of each section. This may also include reports of library tours.

#### **Syllabus**

### EXPECTED OUT-COME

#### **PAPER I—Introduction of Books and Libraries.**

##### **SECTION I.—Nature and type of Libraries and their use:**

1. An understanding of the meaning and concept of a Library.
2. An awareness about library objectives and services.
3. An understanding of a library's contribution in the life of an individual and in the society at large.
4. An awareness of the usefulness of a library in education and in developing reading habit.
5. An understanding of the impact of machines in the improvement of services offered by a library.

##### **SECTION 2.—Nature and types of Library materials:**

An understanding of the various types of library materials and their physical forms and characteristics.

An understanding of the ways by which these materials can be protected from damage and loss. Also an understanding among students of the care with, which they are required to use the materials to save them from damage disfigurement.



**SECTION 3.—History of books and Libraries :**

1. An understanding of the development of writing and writing materials with special reference to the Muslim World.
2. An understanding of history of libraries in general with special reference to Pakistan.
3. An awareness of the libraries and the library materials possessed by the city and the libraries in their vicinity.

**SECTION 4.—Use of Library Materials:**

1. An understanding of the purpose of the library materials in communication of knowledge.
2. An appreciation of the benefit of reading and the role, books have played in influencing the society.
3. An understanding of the ways by which a student can require his desired information from library materials.

**SECTION 5.—Meaning and concept of information. It will acquaint the students with:**

Concept of information, Meaning of information, Usefulness of information.

**EVALUATION****Paper 1.—Introduction of books and Libraries.****SECTION 1.—Nature and type of Libraries and their use.**

Assessment of student's knowledge about the meaning concept objectives and services of library and its role in the society, Objective tests.

**SECTION 2.—Nature and types of Library materials:**

1. Assessment of the nature and types of library materials their physical forms and characteristic and student's understanding of effective use of these materials.
2. Assessment of student's understanding of the ways and means for protection of these materials from damage and loss.
3. Objective tests.

**SECTION 3.— History of books and Libraries:**

1. Assessment of student's knowledge of the history of writing and writing materials.
2. Assessment of student's knowledge of the history of libraries in general with special reference to Pakistan.
3. Assessment of student's knowledge about the nature and usefulness of local libraries and those located in the vicinity, where visits to libraries are arranged. They may be asked to write assignments on the topic.

**SECTION 4.—Use of Library Materials:**

Assessment of student's knowledge of the purpose form and use of books and other library materials.

Assessment of student's knowledge of the methods by which library materials are made useable.

Objective tests.

**SECTION 5.—Meaning and concept of information :**

Assessment of student's about understanding and comprehension of concept, meaning and usefulness of information, Objectives Tests.

**Recommended Books:**

عنوان کتاب :- اساس لائبریری سائنس (انٹر پارٹ-1) مصنف :- ملک محمد ابراہیم ناشر / پبلشر :- مجید بک ڈپو (22- اردو بازار، لاہور)

Marks 85	Class XII (Part – II)	Time : 3.00 hours
Practical: 30		

**Paper II.—Organization of Library Materials for use**

This paper will consist of the following four section:

Classification and assignment of Subject Headings, Cataloguing of books, Use of reference books, Circulation of Library materials.

**Scope**

**SECTION I.—Definition of classification, its importance and use in the Library.**

Use of DDC (latest abridged edition restricted to Broad Numbers) and the description of Sear's Subject Heading and its use (Pages 25).

**SECTION 2.**—Cataloguing—its meaning, concepts, principles and its use in the library, — Brief account of the development of present code of AACR. Preparation of simple catalogue cards (main entry) according to AACR and cataloguing of Pakistani names (by Dr. Anis Khurshid). Emphasis may be given on books of subject interest of the class, (Pages 25).

**SECTION 3.**—Types of reference books and their definitions—practical demonstration of the reference books Bibliography, Encyclopedia, Dictionaries, Biographical sources and Almanacs). Emphasis may be given to Pakistani reference books. (Pages 25).

**SECTION 4.**—Lending of Library materials and various records necessary for circulation—charging system used for lending of materials maintenance of other records including Accession Register in the Library (Pages 25).

**PRACTICALS  
(PAPER II)**

**SECTION 1.—Classification and Assignment of Subject Headings**

Study and practice of 1st, 2nd 3rd summary of DDC. Assignment of DDC numbers (Broad Numbers) of books on various subjects. Arrangement of books by classification numbers. Interpretation of classification numbers by the help of DDC. Allocation of Subject Headings to books with the help of Sear's list. Arrangement of Subject Headings.

**SECTION 2.—Cataloguing.**

Preparation of simple catalogue cards according to AACR 2.

**SECTION 3.—Reference Sources.**

Study of main features of various types of reference material. Bibliography, Encyclopedia, Dictionaries, Biographical sources and Almanacs). Practice in the location of specific information with the help of relevant reference book.

**Note:** Passing in theory as well as practicals in both papers is compulsory.

**EVALUATION**

**PAPER II. — Organisation of Library materials for use.**

**SECTION 1. – Classification and Assignments of Subject Headings**

Understanding of the concept of arrangement of Books on Shelves by subject. Understanding of the signs and symbols used for the guidance of user for locating their required material. Knowledge of the DDC—its main classes sub-division from divisions. Concept of the Subject Headings and their use. Objective tests.

**SECTION 2.—Cataloguing of Books.**

Understanding of the purpose and functions of a catalogue. Understanding of different types and forms of catalogue. Understanding of the components of main entry card. Understanding of alphabetization. Understanding of the different forms of names with especial reference to Pakistan. Objective tests.

**SECTION 3.—Use of Reference Books.**

Understanding of the nature of different types of reference books and their important features. Understanding the purpose of different reference books. Understanding of using various reference books for finding required information. Practical exercises and objective tests.

**SECTION 4.—Circulation of Library Materials.**

Assessment of Library materials and various records necessary for circulation. Assessment and familiarization of charging system used for lending materials and maintenance of other records including Accession Register

### **Practicals**

Assessment of the understanding of the students in using DDC abridged edition for classification of books and the use of Sear's Subject Headings for assignment of Subject Headings. Understanding of the AACR 2 entry cards preferably for Pakistani books. Understanding of the various reference books finding required information for the class interest of the students. These assessments will be based on the practicals which a student will be required to perform during his studies.

### **EXPECTED OUT-COME**

#### **Paper II.—Organization of Library materials for use.**

#### **SECTION I.—Classification and assignment of Subject Headings.**

Understanding of DDC classification schemes (abridged edition) by which books are classified and Sear's Subject Headings and the ways by which books are classified and arranged on shelves. Students will be able to understand classification symbols and author mark to locate their desired materials on the shelves. Students will thus be able to use the library effectively.

#### **SECTION 2.—Cataloguing of books.**

Understanding of the concept and functions of a catalogue. Understanding of the need of the bibliographic details of book on a catalogue and their use in locating books. Will develop ability among students to search their needed material through catalogue. Will create appreciation among students for the standardization of names in a catalogue. Will help a student in preparing a list of books on his subject of nearest.

#### **SECTION 3.—Use of Reference Books**

Student will be familiar of various reference sources, find his desired information from them and will be able to use them.

#### **SECTION 4.—Circulation Library Materials.**

Understanding of library materials and various records necessary for circulation. Understanding and familiarization of charging system used for Lending materials and maintenance of other records including Accession Register.

### **Practicals**

Students will be able to classify books broadly and prepare simple catalogue cards with assignment of Subject Headings.

### **Recommended Books:**

- عنوان کتب:- 1- اساس لائبریری سائنس (انٹر پارٹ-II)
- 2- پریکٹیکل نوٹ: اساس لائبریری سائنس
- مصنف:- ملک محمد ابراہیم
- ناشر/پبلشر:- مجید بک ڈپو (22- اردو بازار، لاہور)



## COMPUTER SCIENCE AND ENTREPRENEURSHIP

Marks :75

PART-I (CLASS-XI)

Time: 2:30 Hours

Theory: 75 + Practical: 25 Total: 100

### Topics

#### Unit 1: Introduction to Software Development

- 1.1 Software Development
- 1.2 Introduction to Software Development Life Cycle (SDLC)
- 1.3 Software Development Methodologies
- 1.4 Project Planning and Management
- 1.5 Graphical Representation of Software Systems
- 1.6 Introduction to Design Patterns
- 1.7 Software Debugging and Testing
- 1.8 Software Development Tools

#### Unit 2: Python Programming

- 2.1 Introduction to Python Programming
- 2.2 Basic Python Syntax and Structure
- 2.3 Operators and Expressions
- 2.4 Control Structures
- 2.5 Python Modules and Built-in Data Structures
- 2.6 Built-in Data Structures
- 2.7 Modular Programming in Python
- 2.8 Object-Oriented Programming in Python
- 2.9 Advanced Python Concepts
- 2.10 Testing and Debugging in Python

#### Unit 3: Algorithms and Problem Solving

- 3.1 Understanding Computational Problems
- 3.2 Algorithms for Problem Solving
- 3.3 Problem Solvability and Complexity
- 3.4 Algorithm Analysis
- 3.5 Algorithm Design Techniques
- 3.6 Commonly Used Algorithms

#### Unit 4: Computational Structures

- 4.1 Primitive Computational Structures

#### Unit 5: Data Analytics

- 5.1 Basic Statistical Concepts
- 5.2 Data Collection and Preparation
- 5.3 Building Statistical Models
- 5.4 Introduction to Data Visualization
- 5.5 Tools for Data Visualization

#### Unit 6: Emerging Technologies

- 6.1 Definition and Overview of Emerging Technologies
- 6.2 Cloud Computing
- 6.3 Applications and Implications of Cloud Computing
- 6.4 Introduction to Blockchain Technology
- 6.5 Applications and Implications of Blockchain
- 6.6 Future Trends and Innovations

#### Unit 7: Legal and Ethical Aspects of Computing System

- 7.1 Understanding Terms of Use
- 7.2 Privacy and Security Threats
- 7.3 The Digital Divide and Its Impacts
- 7.4 Computing's Impact on Individuals and Society
- 7.5 Digital Citizenship and Ethical Considerations

#### Unit 8: Online Research and Digital Literacy

- 8.1 Online Research and Digital Literacy
- 8.2 Utilizing Digital Resources
- 8.3 Research Ethics

8.4 Understanding Intellectual Property

**Unit 9: Entrepreneurship in Digital Age**

9.1 Design Thinking and Business Solutions

9.2 Creating a Business Plan

9.3 Collecting Market Insights

9.4 Developing Effective Marketing and Sales Strategies

9.5 Financial Concepts for Business

9.6 Communication and Storytelling Skills

9.7 Collaboration and Iteration

9.8 Innovation and Creativity

**COMPUTER SCIENCE AND ENTREPRENEURSHIP Part – I**

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**PUNJAB EDUCATION, CURRICULUM, TRAINING AND ASSESMENT AUTHORITY**

**Marks :75****(CLASS-XII) PART-II****Time: 2:30 Hours****Theory: 75 + Practical : 25 Total:100****Topics****Weightage  
% age  
40****Database Basics**

Introduction to Database Concepts, Database concepts, Terminology and Usage.  
Database Design and Table Creation, Formatting a Table, Relationships, Locating and Replacing information, Creating Simple Queries, Creating Calculated Fields.  
Introducing Forms, Formatting and Creating Forms, Formatting and Creating Reports

**Programming using C****60****OR****Programming using VISUAL BASIC****Option I: Outline for C**

Characteristics of High Level Programming Languages, Basic Structure of Program.  
Creating, Editing and Saving a Source Program, Compiling, Linking and Executing A Program, Variables: character, integer, long integer, floating point, double precision, Input/Output, printf, scanf, format Specifier, Field Width Specifier. Operators: Arithmetic, Relational, Logical Operators, Comments, Loops: for loop, while loop, do-while, Decision: if Statement, if-else Statement, else-if, switch Statement, Conditional Operator, Importance of Functions, Simple Functions, Function Passing Arguments and Returning Values, Open File, Read, Write, Append and Close File

**OR****Option II: Outline for Visual Basic**

I/O Statements, Control Statements, Working with Forms  
Variables and Arrays, Functions and Procedures, Basic ActiveX Controls, Drawing with Visual Basic, Advanced ActiveX Controls, Database Programming with Visual Basic, The Active Data Objects, Scripting Objects, Visual Basic and the Web

**LIST OF PRACTICALS FOR CLASS-XII (PART – II )**

1. Perform the following tasks and write down the stepwise procedure.  
Create a new blank database with file name Employees.  
Create a new table in Design view and add fields to the table as follows:  
Make the Social Security No field primary key and save the table as Employees.  
Open the table in Datasheet view and add five records in the table.
2. Perform the following tasks and write down the stepwise procedure.  
Create the table and add the records.  
Open Employees table and change Field Size property of Social Security No to 11.  
Change Decimal places property of Salary field to 0 (Zero).  
Choose Short Date Form Format property box of Birthdate field.  
Add a caption to each field as shown below and save changes:  
Set Department field to require.
3. Perform the following tasks and write down the stepwise procedure.  
Create the table and add the records.  
Apply validation rule on social security that it must not be zero. It should display 'No valid No' if the user enters wrong data.  
Hide last name. First name. Social security no and Department.  
Delete record having DOB13-Jan-83.  
Rename Employees table to 'Workers Data'.  
Freeze the salary column.  
Find record having name Raza & Replace it with Talha.  
Sort Department column in descending order.
4. Perform the following tasks and write down the stepwise procedure.  
Create a table named 'Instructor' (Id, Name, City, and Phone).  
Add Input mask property to Phone field so it takes numbers in (+092) 41 733474 formats.  
Add five records in the table.
5. Perform the following tasks and write down the stepwise procedure.  
Create a table called Workshop Registration  
Insert ten records in the table.

- Create a query that shows First Name, Last Name and Workshop for workshop participants.
6. Perform the following tasks and write down the stepwise procedure.  
Create a table Employee with the following structure (EmpNo as primary key).  
Add given records in table.
  7. Perform the following tasks and write down the stepwise procedure.  
Create a table called Client  
Enter the following records in the table:  
Create query in design view to display the entire salesmen who are located in FSD.  
Create query in design view to find out the salesman who stays in a city whose second letter is 'H'.
  8. Perform the following tasks and write down the stepwise procedure.  
Create a table Employee  
Insert five records in table  
Create a query to display calculated field of total salary using expression builder:  
Total Salary = Salary + Bonus  
Create a report using auto report.
  9. Perform the following tasks and write down the stepwise procedure.  
Create the tables in Access  
Employee (EmpId, EmpName, Job Sal DeptNo)  
Department (DeptNo, Dname, Loc)  
Develop relationship between both the tables.  
Insert the following records in Department table  
Insert the following records in Employee table  
Write a query to display the minimum salary earned by clerk.  
Write a query to calculate the average salary of all employees.  
Write a query to list the employee names and salary increased by 15%.
  10. Perform the following tasks and write down the stepwise procedure.  
Create a table called student  
Make sure that AdmDate is less than or equal to current date.  
Create a columnar form to input data to insert five records.  
Create a report using the Report wizard.
  11. Write a program that inputs Name, Age and Address from the user and displays it on the Screen.
  12. Write a program that inputs Base and Height from the user and Calculates area of a triangle by using the formula  $\text{Area} = \frac{1}{2} \times \text{BASE} \times \text{height}$ .
  13. Write a program that inputs temperature from the user in Celsius and Converts it into Fahrenheit using the formula  $F = \frac{9}{5}C + 32$ .
  14. Write a program that inputs 4 number and calculates the sum, average and product of all the numbers.
  15. Write a program that inputs radius from the user and calculates area and circumference of circle using formula  $\text{area} = \pi R^2$  and  $\text{Circumference} = 2\pi R$ .
  16. Write a program that inputs a three digits number from the user and displays it in reverse order. For example, if the user enter 123, it displays 321.
  17. Write a program that inputs miles from the user and converts miles into kilometers. One mile is equal to 1.609 kilometer.
  18. Write a program that finds area of triangle when three sides A, B and C of the triangle are given. It inputs value of a A, B and C. Formula of the area of Triangle is  $\text{AREA} = \sqrt{s(s-a)(s-b)(s-c)}$  WHERE  $s = \frac{(a+b+c)}{2}$ .
  19. Write a program that inputs temperature in Fahrenheit and converts it into Celsius.
  20. Write a program that inputs a number and finds whether it is even or odd using If-Else structure.
  21. Write a program that inputs a number from user and determines whether it is positive, negative or zero.
  22. Write a program that inputs test score of a student and displays his grade on the following criteria.
  23. Write a program that inputs three numbers and displays the smallest number by using nested if condition.
  24. Write a program that inputs a character and displays whether it is vowel or consonant using switch statement.
  25. Write a program that displays counting from 1 to 10 using while loop.
  26. Write a program that displays first 5 numbers and their sum using while loop.
  27. Write a program that displays first five numbers with their squares using while loop.
  28. Write a program that inputs two number and exchanges their value. The program should display the value of variables of before and after exchanges.
  29. Write a program that inputs a number from the user and display a table of that number using while loop.
  30. Write a program that inputs a number from the user and displays the factorial of that number using while loop.
  31. Write a program that displays Sum of the following series using while loop.  $1 + \frac{1}{2} + \frac{1}{4} + \frac{1}{6} + \dots + \frac{1}{100}$ .
  32. Write a program that displays sum of the following series using while loop.  $1 + \frac{1}{3} + \frac{1}{5} + \frac{1}{7} + \dots + \frac{1}{99}$ .

33. Write a program that inputs starting and ending point from the user and displays all odd numbers in the given range using do-while loop.
34. Write a program that inputs two numbers from user and displays the result of first number raise to the power of second number using do while loop.
35. Write a program that produces the following output.
36. Write a program to display alphabets from A to Z using for loop.
37. Write a program that inputs a number from the user and displays the factorial of that number using do while loop.
38. Write a program that displays product of all odd numbers from 1 to 10 using for loop.
39. Write a program that inputs a number from the user and displays the factorial of that number using for loop.
40. Write a program that inputs table number and length of table and then displays the table using for loop.
41. Write a program that inputs a positive integer number from the keyboard and displays it's in reverse number. For example, the reverse of 345 is 543.
42. Write a program to calculate and display the sum of following series using for loop  $x + x^2 + x^3 \dots x^n$ .
43. Write a program that displays the following shape using while loop.
44. Write a program to calculate and display the sum of the following series using for loop:  $1/2 + 2/3 + 3/4 + \dots + 99/100$ .
45. Write a program that inputs five values and displays their squares and cubes using loop.
46. Write a program that displays the following shape using nested loops. The outer loop should be for loop and inner loop should be while loop.
47. Write a program that displays the following block using nested for loop.
48. Write a program that displays the following shape using nested for loops.
49. Write a program that displays the following shape using nested for loops.
50. Write a program that displays the following shape using nested for loops.
51. Write a program that inputs an integer and displays whether it is a prime number or not.
52. Write a program that inputs two numbers in main function and passes these numbers to a function. The function displays the maximum number.
53. Write a program that inputs two numbers in main function and passes the number to a function. The function displays the factorial of that number.
54. Write a program that inputs a number in main function and passes the number to a function. The function displays the factorial of that number.
55. Write a program that inputs two numbers in main function and passes them to a function. The function displays first number raised to the power of second number.
56. Write a program that inputs two integers and then passes them to four functions add (), subtract (), multiply () and divide () one by one.
57. Write a program that finds sum of the squares of integers from 1 to n. Where n is a positive value entered by the user (i.e.  $\text{sum} = 1^2 + 2^2 + 3^2 + \dots + n^2$ ).
58. Write a program to calculate and display the sum of the following series using for loop:  $1 + 2x + 3x^2 + 4x^3 + 5x^4$ .
59. Write a program that displays the following output using nested for loop.
60. Write a program that displays the following shape using nested for loop.
61. Viva voce

### **Computer Science Part – I**

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**Publisher:** S.S. Publisher Lahore

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**Publisher:** Kitab markaz Faisalabad





**CIVICS**

<b>Marks: 100</b>	<b>PART-I (Class- XI)</b>	<b>Time: 3.00 Hours</b>
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**CHAPTER-I CIVICS - WHAT IS IT?****Concepts**

Introduction  
Relationship with other social sciences

**Contents**

Definition  
Nature, Significance, Utility, Relationship of civics with Political Science, History, Economics, Sociology & Ethics

**CHAPTER-II THE BASIC CONCERN****Concepts**

Civics and human needs  
Individual  
Family  
Community  
Society  
Nation and Nationality  
Muslim Ummah

**Contents**

The harmonic relationship between the members of society e.g. childhood. Socialization, gender, religion.  
Individual as a member of state  
Family a basic social institution  
Nature & Significance of community  
Society  
Nation and Nationality & Muslim Ummah

**CHAPTER-III STATE****Concepts**

Introduction  
Distinctive nature of state.  
Islamic background.  
Welfare State.

**Contents**

Definition  
Elements, Origin, Distinction of state from:  
Government, Society, Nation, Conceptual basis of state in Islam, Welfare State and equity issues with reference to gender, religion, area & social classes.

**CHAPTER-IV SOVEREIGNTY****Concepts**

Understanding Sovereignty.  
Islamic Background

**Contents**

Definition  
Salient features  
Forms Manifestation of Sovereignty  
Theories of Sovereignty  
Basic principles of Sovereignty in Islam.

**CHAPTER-V GOVERNMENT****Concepts**

Introduction  
Classification  
Organs  
Good Governance

**Contents**

Meaning  
Democracy and Dictatorship  
Parliamentary  
Presidential  
Federal & Unitary  
Legislature  
Executive  
Judiciary  
Definition  
The role of Good Governance in Islamic Democratic Government  
Obstacles and remedies Accountability

**CHAPTER-VI LAW AND RELATED MATTERS****Concepts**

Understanding Law  
Islamic Law  
Liberty and Equity

**Contents**

Meaning  
Sources  
Kinds  
Meaning  
Sources  
Objectives  
Meaning of liberty & equity  
Relationship between Law, Liberty and Equity

**CHAPTER- VII CITIZEN AND CITIZENSHIP**

Concepts	Contents
Introduction	Definition
Human Rights and Responsibilities	Qualities of good citizenship How citizenship acquired and lost? Definition Rights and responsibilities of a citizen in Islamic perspective UN Declaration of Human Rights

**CHAPTER-VIII CONSTITUTION**

Concepts	Contents
Introduction	Definition of constitution Kinds of constitutions Characteristics of a good constitution

**CHAPTER-IX POLITICAL DYNAMICS**

Concepts	Contents
Public Opinion	Meaning
Elections and Electorate	Formulation
Political Parties	Agencies
Devolution of Power Plan	Conditions for sound public opinion Meaning Significance of Elections in a democratic state Islamic Concept Direct and indirect Elections Referendum Plebiscite Introduction Objectives Role

<b>Marks: 100</b>	<b>PART-II (Class- XII)</b>	<b>Time: 3.00 Hours</b>
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**CHAPTER-X PAKISTAN MOVEMENT**

Concepts	Contents
Ideology of Pakistan	Meaning of Ideology
Important Events of Pakistan Movement	Significance of Ideology of Pakistan Ali Ghar Movement Back ground and formation of All India Muslim League-1906 Lucknow Pact 1916 Khilafat Movement 1919 Act of 1935 Pakistan Resolution 1940 3 <sup>rd</sup> June plan

**CHAPTER-XI CONSTITUTIONAL DEVELOPMENT 1947-1973**

Concepts	Contents
Introduction to constitutional development from 1947-1962	A brief historical outlook on constitutional development from 1947-56
The constitution of the Islamic Republic of Pakistan 1973	Salient features of constitution of 1956 and 1962 Separation of East Pakistan in 1971 roots and causes Salient features and Islamic Provisions of 1973 constitution Parliament President, Prime Minister Provincial Autonomy Supreme Court and High Courts Islamic Provision

**CHAPTER-XII SOCIAL SERVICES IN PAKISTAN****Concepts**

Social Services with specific reference to Health & Education.

**Contents**

Structure and Facilities  
Problems

**CHAPTER-XIII SOCIAL ORDER IN PAKISTAN****Concepts**

Introduction

Implementation Concerns

**Contents**

Meaning

Significance

Requisites of Proper social order fulfilling the principle of liberty, justice, equity and authority in Islamic perspective.  
Prevailing situation of social order in Pakistan and role of Islamic Values for maintaining social order and justice in welfare state. Role of Police in Pakistan

**CHAPTER-XIV NATIONAL INTEGRATION AND COHESION****Concepts**

Introduction

Problems and remedies

**Contents**

Meaning

Importance

National Integration and cohesion in an Islamic State

Problems in the way to national integration and cohesion in Pakistan remedial measures keeping in view the ideological basis of Pakistan.

**CHAPTER-XV PAKISTAN AND THE WORLD****Concepts**

Pakistan's Foreign Policy

Pakistan and U.N

**Contents**

Determinant of Pakistan's foreign policy

The main features of Pakistan's foreign policy

Pakistan's foreign relations with its neighbours

Role of Pakistan in O.I.C and E.C.O

U.N and its organs

U.N role in Solving international Problem i.e. Kashmir. Afghanistan. Palestine.

**Recommended Book: Civics (Part-I)**

**Authors:** 1. Prof. Aftab Ahmad Dar 2. Prof. Hallema Naz Afridi  
**Publisher:** Qari Publisher, Lahore.

**Recommended Book: Civics (Part-II)**

**Authors:** 1. Prof. Rehman-ul-Allah Ch. 2. Prof. Muhammad Farooq Malik  
**Publisher:** Maktaba Saeedya, Lahore



**COMMERCIAL PRACTICE**

(There will be two papers of 100 marks each)

(Outlines of tests)

<b>PART-I (CLASS XI)</b>	<b>100 Marks</b>
Accountancy OR Business Correspondence.	
<b>PART-II (CLASS XII)</b>	<b>100 Marks</b>
Typewriting and Shorthand. (English or Urdu)	

**Syllabus.**

Elective subject which may be opted as a single subject by any student who is not taking the full Commerce Group of subjects. The subject may be taken in two parts as indicated below:

<b>Marks : 100</b>	<b>PART I (CLASS-XI)</b>	<b>Time : 3:00 Hours</b>
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**ACCOUNTANCY (Option i)**

- 1. Introduction:** Book-keeping and business transaction –definition, objects and advantages of book-keeping – nature of business transactions.
- 2. Principles of double entry:** Accounts and their classification–rules for debit and credit (Dr. & Cr), Books of account – Journal and Ledger.
- 3. Journals:** Simple cash book, double column cash book, triple column cash Book, petty cash book kept on the imprest system–purchases, sales and return books – journal proper or general journal.
- 4. Ledger:** Its nature and importance-posting, folioing, cast and carry forward-balancing.
- 5. Trial Balance:** Definition, purpose and preparation.
- 6. Adjustments:** Accrued and outstanding income and expenses, closing stock depreciation and reserves.
- 7. Financial Statements:** Trading, Profit and Loss Account Balance sheet.
- 8. Miscellaneous:** Capital and Revenue-expenditure, income, payments, receipts, profit or loss-allocation, Error and their correction-book-keeping and trial balance error-localization of errors-suspense account-correction of errors.

**Recommended Books:**

Principles of Accountancy by M.A. Ghani,  
(M/S. Salman Publishing Company, Lahore).

<b>Marks : 100</b>	<b>PART I (CLASS-XI)</b>	<b>Time : 3:00 Hours</b>
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**BUSINESS CORRESPONDENCE (Option ii)**

- 1. Commercial correspondence.** Essentials of a good business, letter-different parts and arrangement of a business letter.
- 2. Kinds of business letters:** Application for a post and letter of appointment, Enquiry and its reply, Orders and indents, Reference, Advice, Complaints and claims, Circulars, Collection and dunning, Replies to advertisements regarding agencies.
- 3. Official and demi-official correspondence:** Memorandum, communication with subordinates.
- 4. Postal information.** Preparation of letters for the post-enclosures-writing of addresses.
- 5. Sorting, filling, docketing, indexing and endorsing business letters.**
- 6. Noting, drafting and compilation of letters from brief notes.**

**Recommended Books:**

- 1- مخزن تجارت از محمد حسین
- 2- اصول تجارت از بخش بختیار علی

<b>Marks : 100</b>	<b>PART II (Option I)</b>	<b>Time : 3 Hours</b>
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**(English Shorthand and Typewriting)**

- Shorthand:** The standard to be attained will be such as to satisfy tests of the following nature:  
Speed Test: A passage or a commercial letter about 300 words dictated at a speed of 60 words per minute with a maximum permissible error of 2%  
**Note:** Pitman or Gregg systems will be accepted.
- Typewriting.** The standard to be attained should be such as to enable the student to take the following tests.  
Typing from manuscript with corrections, insertions and deletions.  
Accuracy Test: Typing from a printed sheet containing about 350 words at a minimum speed of 35 words per minute on international standards.  
Tabulation: Typing out a tabulated statement. Lines are to be drawn in the type-writer.  
**Note:** In the accuracy test one mark will be deducted for every two mistakes.

**Recommended Books:**

New Method Typewriting Instructor (by Muhammad Tufail Nasim).  
Modern Course in Touch Typewriting (by Mr. Muhammad Mohsin).  
Manual of typewriting (by A.M. Hashmi and H.A. Syed).

<b>Marks : 100</b>	<b>PART II (Option ii)</b>	<b>Time : 3 Hours</b>
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**(Urdu Shorthand and Typewriting)**

- Shorthand:** The standard to be attained will be such as to satisfy tests of the following nature:  
Speed Test: A passage or a commercial letter of about 420 words dictated at a speed of 70 words per minute with a maximum permissible error of 3%  
**Note:** Pitman or Gregg systems will be accepted.
- Typewriting:** The standard to be attained should be such as to enable the student to take the following tests.  
Speed Tests Typing from printed sheet containing 250 words at a minimum speed of 25 words per minute.  
Tabulation: Typing out an easy tabulated statement. Lines are to be drawn on the type-writer. The statement will comprise no more than five lines.  
Typing an official or a business letter (In duplicate)

**Note:**

Shorthand Time: 1 ½ hour  
Typewriting Time : 1 ½ hour  
(Speed Test : 10 minutes)

Both Shorthand and Typewriting will carry 50 marks each. (Speed test will carry 20 marks, while the other two Type-writing questions will carry 15 marks each).

**Recommended Books:**

- 1-Urdu Shorthand Instructor (Pitman system) by Muhammad Tufail Nasim.      2- Urdu Typewriting Instructor by Mr. Zafar Iqbal Zafar.





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