# FEDERAL BOARD OF INTERMEDIATE AND SECONDARY EDUCATION H-8/4, ISLAMABAD

# NO.3-21/FBISE/RES/CC/178

16 September 2020

# NOTIFICATION

In pursuance of Ministry of Federal Education and Professional Training Notification No.F.4(5)/2015-NCC/RE dated 15 September 2020 the reduced syllabus for 9<sup>th</sup> & 10<sup>th</sup> classes is enclosed herewith and also being uploaded on the FBISE's website <u>www.fbise.edu.pk</u> for SSC Annual Examination 2021. However, format of model question papers and style of asking questions will remain the same.

(ZULFIQAR ALI RIZVI) Director Research Ph: 051-9269504

All heads of institutions affiliated with FBISE at SSC level

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# **Reduced Syllabus** SSC-I and SSC-II Examination 2021 under FBISE



# **National Curriculum Council**

Ministry of Federal Education and Professional Training

# TABLE OF CONTENTS

CLASS	SUBJECT	PAGE NO.
	Urdu	1
	English	2-3
	Mathematics (Science Group)	4-5
	General Mathematics	6-7
	Islamiyat	8-9
9	Pakistan Studies	10
	Physics	11-12
	Chemistry	13-14
	Biology	15-16
	Computer Science	17
	General Science	18
	Urdu	19-20
	English	21-22
	Mathematics (Science Group)	23
	General Mathematics	24-25
	Islamiyat	26-27
10	Pakistan Studies	28
	Physics	29-31
	Chemistry	32-34
	Biology	35-37
	Computer Science	38
	General Science	39

# اردو منتخب سلیبس جماعت نہم کے لیے نوٹ (مصنفین اور شعرا کے تعارف میں سے کوئی سوال نہیں بنایا جائے گا۔ )

• • • •		
گھرکا کام	جماعتكاكام	عنوانات
مشقی سوال نمبرا (جز، ه و ز)، شقی سوالنمبر 3,4, 2	مشقی سوال نمبر ا (جز، الفب ج د)، مشقی سوالنمبر	<b>بجرت نبوی</b> سالندازید. بح <b>رت نبوی</b> سالندازید.
,8,	7,9,10	
مشقى سوال نمبر ا(جز، د)، مشقى سوالنمبر 3,5, 2	مشقى سوال نمبرا (جز، الفب ج )، مشقى سوالنمبر 4	کابلی
مشقى سوال نمبرا (جز، ہ و)، مشقى سوالنمبر ,8, 5,7 2	مشقى سوال نمبرا (جز، الفب ج د) مشقى سوالنمبر 3،4	آ رام دسکون
مشقى سوال نمبر ا (جز، د ه )، مشقى سوالنمبر 6,7, 4	مشقی سوال نمبرا (جز، الفب ج )،	امتحان
,10	جملے کے اجزائے ترکیبی(صفحہ نبر 75,76)	
مشقی سوالتمبر ۱۱۰ ,8, 5, 4, 3	مشقى سوال نمبر ا (تمام اجزا)، مشقى سوالنمبر 9،	قددِاياز
	(روزمرہاورمحاورے کے لحاظ سے غلط فقرات کی درستی )صفحہ	
	نمبر95,96	
مشقی سوال نمبر ا(جز، د ه )، مشقی سوالنمبر 5,7,8	مشقى سوال نمبرا (جز، الف ب ج )، مشقى سوالنمبر 3,4,2	حد (نظم)
	(قافياور رديف )(صفحة مبر108,109)	
مشقى سوال نمبر ا (جز، د ه )، مشقى سوالنمبر 3	مشقى سوال نمبر ا (الف ب ج )، مشقى سوالنمبر ،2,5	نعت(نظم)
مشقى سوالنمبر ,9, 6,7 3	مشقى سوال نمبر ا (تمام اجزا)	پيوستەرە ىتجرىسےامىيد بمہارركھ
	مشقى سوالنمبر ،12, 11, 10, 5, 2	
مشقی سوال نمبرا (جز، د ه )	مشقی سوال نمبرا (جز، الفب ج )،	غزل،میرتقی میر
	مشقى سوالنمبر ,6, 4,5 2	
	غزل، مطلع، مقطع (صفحه نمبر 128,129)	
مشقی سوال نمبر ا (جز، د ه )، مشقی سوالنمبر 8،3	مشقى سوال نمبرا (جز، الفب ج )، مشقى سوالنمبر , 3،2	غزل اسدالله خان غالب
	كنابي(صفحةبر138)	
	خطوطنو کی(صفحہ نمبر 59 تا63)	قواعدوانشا،
	مكالمەنوىيى(صفحەنمبر74 تا76)	بمطابق كتاب' اردوقواعدوانشا
	رودادنویی( سالگره تقشیم انعامات، جشن آ زادی )	نهم دېم، پنجاب شيکسٹ بک بورڈ''

# **ENGLISH SSC-I**

Unit #	Title	Contents /Exercises to be covered
1	The Saviour of Mankind	<ul> <li>Reading Comprehension (Exercise-B)</li> <li>Grammar (Adjective, Conditional Type-I) Exercise A, B, C &amp;D. Homework: Vocabulary &amp; Glossary (Exercise –A &amp; B)</li> </ul>
2	Patriotism	<ul> <li>Reading Comprehension (Exercise-A)</li> <li>Grammar Modal Verbs (Exercise –A &amp; B)</li> <li>Punctuation Exercise -C Homework: Vocabulary &amp; Glossary (Exercise –A), Writing Skills (Exercise-E)</li> </ul>
4	HazratAsma (RA)	<ul> <li>Reading Comprehension (Exercise-C)</li> <li>Grammar (Abstract Noun, Exercise-B&amp; preposition of time, Exercise-E &amp; F)</li> <li>Punctuation (Exercise –G) Homework: Glossary</li> </ul>
5	Daffodils	<ul> <li>Reading Comprehension (Exercise-A)</li> <li>Theme /Central idea of the Poem</li> <li>Figures of Speech (simile, metaphor, personification &amp; imagery) Exercise-A, B, C</li> <li>Grammar (Collective Noun, exercise-A &amp; Conjunctions, Exercise-D)</li> <li>Homework: Paraphrasing of poem</li> </ul>
6	The Quaid's Vision and Pakistan	<ul> <li>Vocabulary &amp; Glossary (Exercise A, B, C, D)</li> <li>Reading Comprehension (Exercise-A)</li> <li>Grammar (Adverb, Infinitive, Gerund &amp; Conditional III) Exercises A, B, C, D&amp; E</li> </ul>
7	Sultan Ahmed Mosque	<ul> <li>Vocabulary (Exercise A, B, C &amp; D)</li> <li>Reading Comprehension (Exercise-A)</li> <li>Grammar: Position of Adverbs, Degrees of Comparison (Exercise A, B &amp; C)</li> <li>Use of "Since &amp; For" (Exercise D) page-80</li> </ul>
12	Three Days to See	<ul> <li>Vocabulary (Exercise A, B &amp;C)</li> <li>Reading Comprehension (Exercise-A)</li> <li>Grammar (Conditional Type-II, Kind of sentences) Exercise A, B, C</li> <li>Identification Simple, Compound &amp; Complex sentences (Exercise-D &amp; E)</li> <li>Homework: Writing Skills Exercise-A</li> </ul>

# **GRAMMAR & COMPOSITION**

- i. All parts of speech (types & subtypes)
- ii. Types of phrases, clauses & sentences (Identification only)
- iii. Conditional Sentences
- iv. Verbals (Gerund, Participles & Infinitive)
- v. Active Voice & Passive Voice (Exercises page# 169-170 from English Grammar and Composition 9-10, PTB, Lahore, 1<sup>st</sup> Edition March, 2020)
- vi. Tenses, Translation Exercises, Present Tenses (page 74 to 87), Past Tenses (pages-95 to 108) Future Tenses (Pages117-131), & Correction Exercises pages # 164-168(from English Grammar and Composition, PTB, Lahore,1<sup>st</sup> Edition March, 2020)
- vii. Informal Letters (from English Grammar and Composition 9-10, PTB, Lahore,1<sup>st</sup> Edition March, 2020)
  - a. Write a letter to your brother about the importance of science subjects
  - b. Write a letter to your father asking him about the health of your mother.
  - c. Write a letter to your friend condoling the death of his mother.
  - d. Write a letter to your sister congratulating her on her success in the exam.
- viii. Punctuation exercises from English Text Book (class 9<sup>th</sup>), PTB, Lahore (Unit # 2, page-19 Exercise-(c) & Unit # 4 Page # 43 Exercise-(g).
- Paragraph writing (a. A Visit to a Museum, b. Fashion, c. An Industrial Exhibition, d. How to keep our town clean?)(English Grammar and Composition 9-10, PTB, Lahore,1<sup>st</sup> Edition March, 2020)
- Dialogue Writing (a. between teacher and student, b. between two students regarding salat,
   c. between a tailor and a customer) (English Grammar and Composition 9-10, PTB,
   Lahore,1<sup>st</sup> Edition March, 2020)

# NOTE:

- 1. Unit No. 3, 8,9, 10 &11 are entirely excluded.
- 2. All Review Exercises (I, II & III) in the English Text Book are entirely excluded.
- 3. The overall pattern and weightage of annual paper will remain the same, however, both objective and subjective paper will be from the reduced /selected contents.
- 4. All grammar based content is supposed to be taken from the prescribed /recommended grammar book (English Grammar and Composition, PTB, Lahore,1<sup>st</sup> Edition March, 2020)

# MATHEMATICS SSC-I (Science Group)

#### CHAPTER#1

EX# 1.1; Q3	EX#1.2; Q6 (i)	EX# 1.3: Q6, Q7
EX# 1.4: Q6	EX# 1.5; Q6	EX# 1.6; Q1

#### CHAPTER#2

EX#2.1; Q6 EX#2.4; Q1 (i, iv), Q2, Q3 (i) EX# 2.6; Q4 (iii, iv, v), Q6 (ii, iii, iv, vi), Q7 EX# 2.6; Q4 (iii, iv, v), Q6 (ii, iii, iv, vi), Q7 EX# 2.6; Q4 (iii, iv, v), Q6 (ii, iii, iv, vi), Q7

#### CHAPTER#3

EX#3.2; Q4, Q5, Q6; Laws of logarithms Ex# 3.3; Q4 (i, ii) EX# 3.4; Q1 (iii, iv, viii)

#### CHAPTER#4

EX# 4.1; Q4 (b), Q5(i, iii, v), Q6(ii) EX# 4.2; Q1 (i), Q4, Q6, Q8 EX# 4.3; Q1(ii), Q2(ii), Q3(iii), Q4(iii, v) EX# 4.4; Q1 (iv, vi), Q3 (iii), Q5 (i,ii)

#### CHAPTER #5

EX# 5.1; Q1 (ii, v, vi), Q3 (ii, iv), Q4 (iv), Q5 (ii, v, vi) Ex# 5.2; Q1 (iii, v), Q2 (i, vi); Q3 (iv, v), Q4 (iii, v) Q5 (ii, iv); Q6 (i, iv) EX# 5.3; Q1 (i, iv, v), Q4, Q5 EX# 5.4; Q2, Q8

#### CHAPTER#6

EX#6.1; Q2 (ii, iii), Q3 (i, ii), Q5 (i, ii), Q7, Q8 EX# 6.2; Q1, Q5, Q9, Q11, Q13 EX# 6.3; Q1 (i, viii), Q2 (ii, v), Q4 (ii), Q5

#### CHAPTER#7

EX#7.1; Q1 (i, v, viii, x), Q2 (v,vii) EX# 7.2; Q2 (v, vii, viii) Ex# 7.3; Q1 (ii, v), Q2 (ii, v, viii)

#### CHAPTER#8

EX# 8.1; Q3, Q4, Q5

EX# 8.3; Q1, Q4, Q5

#### CHAPTER#9

EX#9.1; Q1 (a,c,e); Q2 EX#9.3; Q1 (b, d, f), Q2, Q3, Q6 EX# 9.2; Q1 Q3; Q6; Q9; Q10

#### CHAPTER#10

Review EX# 10; Q2, Q3, Q4, Q5

#### CHAPTER#11

Review EX #11; Q3, Q4, Q5, Q6; Theorem 11.1.2

#### CHAPTER#12

Theorems; 12.1; 12.1.4

#### CHAPTER#13

Theorem #13.1.1

# CHAPTER#14

Review EX#14; Q2; Q3; Q4; Q5

# CHAPTER#15

Theorem 15.1.1; Q1 (i, iv); Q3; Q8; Review#15 Q1 (v, vi)

# CHAPTER#16

Review EX #16; Q2

#### CHAPTER#17

EX# 17.1; Q1(ii, iv, vii), Q2(iii)

EX# 17.2; Q1 (ii), Q2 (ii); Q3 (i), Q4 (i)

#### NOTE:

- All Class work will be given for revision as H.W.
- The MCQ's Portion of the annual paper will be taken from MCQ's exercise at the end of the chapters: so MCQ's will be done in class by class teacher.

# **GENERAL MATHEMATICS SSC-I**

CLASS WORK	HOME WORK
UNIT-1 Percentage and Ratios	
EXERCISE 1.1, Q# 1 (iii, x, xii), Q2 (iv, vii), Q3	EXERCISE 1.1, Q# 1 (iv, v, vi), Q2 (xi,
(vi, x, xii), Q4 (vi, vii, viii, xii)	xii), Q3 (I, vii, ix, xi), Q4 (i to v)
EXERCISE 1.2, Q# 1, 9	EXERCISE 1.2, Q# 2, 3, 7
EXERCISE 1.3, Q# 1, 2 (viii, ix)	EXERCISE 1.3, Q# 2 (i to vii)
Exercise 1.4 Q1, 6	Exercise 1.4 Q7, 9
Exercise 1.5 Q1, 3, 11	Exercise 1.5 Q2, 8, 12
UNIT-2 Zakat, Ushr, Inheritance	
EXERCISE 2.1, Q# 1 to 12	REVIEW Ex.2, Q# 3, 4, 5, 6
UNIT-3 Business Mathematics	
EXERCISE 3.1, Q# 1, 7	EXERCISE 3.1, Q# 3, 8
EXERCISE 3.2, Q# 1, 2, 5	EXERCISE 3.2, Q# 6, 8
EXERCISE 3.3, Q# 1, 6	EXERCISE 3.3, Q# 4
UNIT-4 Financial Mathematics	
EXERCISE 4.1, Q# 4, 5	EXERCISE 4.1, Q# 6
EXERCISE 4.2, Q# 1, 6, 10	EXERCISE 4.2, Q# 3, 14
EXERCISE 4.3, Q# 1, 3	EXERCISE 4.3, Q# 6, 9
EXERCISE 4.4, Q# 1, 3	EXERCISE 4.4, Q# 4, 5
EXERCISE 4.5, Q# 1, 3	EXERCISE 4.5, Q# 2
UNIT-5: Consumer Mathematics	
EXERCISE 5.1, Q# 1, 6, 7	EXERCISE 5.1, Q# 2, 8
EXERCISE 5.2, Q# 1 (ii), 2 (ii)	EXERCISE 5.2, Q# 1 (vi), 2 (i)
EXERCIISE 5.3, Q# 1, 4	EXERCISE 5.3, Q# 6
REVIEW Ex. 5, Q# 1, 4	REVIEW Ex. 5, Q# 3
UNIT-6: Exponents and logarithms	
EXERCISE 6.1, Q# 1 (ii), 2 (III), Q3 (ii, vi, vii),	EXERCISE 6.1, Q# 1 (v, vi), 2 (iv), Q3
Q4 (iii, vii), Q5 (v, vii, xi)	(iii, v, viii), Q4 (I to iv), Q5 (xii, xiii)
EXERCISE 6.2, Q# 1 (v, vi), 8, 9, 11, 14, 16, 19,	EXERCISE 6.2, Q# 1 (i to iv), 10, 13, 15,
25, 28 (iii, iv), 29 (vi)	17, 28 (v), 29 (vii, viii)
EXERCISE 6.3, Q# 8, 5, 10, 13	EXERCISE 6.3, Q# 3, 4, 14
EXERCISE 6.5, Q# 1 (iii), 2 (ii, iv, v), 3(ii), 5 (i,	EXERCISE 6.5 (i, ii), Q# 2 (i), 3 (iii)
ii, v)	Q 3, 4, 14
EXERCISE 6.6, Q# 2(i), (iv), 4(i), (vi)	EXERCISE 6.6, Q# 2 (ii), 4 (ii)
REVIEW Ex. 6, Q# 1, 3, 4	
UNIT-7: Arithmetic and Geometric Sequences	
Exercise 7.1, Q# 1 (vii, ix), 3 (v, vi)	Exercise: 7.1, Q # 1 (iv, v, viii), 2 (ii, iii),
	3 (iii, iv)
Exercise 7.2, Q# 1(i, ii, iv, v)	Exercise: 7.2 Q# 1 (iii), 2(ii, iii), 4

Exercise 7.3, Q # 1, 6, 8, 9	(Classwork is given as homework)
Exercise 7.4, Q # 1, 4, 8, 10	(Classwork is given as homework)
Exercise 7.5, Q # 1, 2, 6, 12	(Classwork is given as homework)
REVIEW Ex.7, Q# 4, 5, 6, 8	
UNIT-8: Sets and Functions	
EXERCISE 8.1, Q# 5	EXERCISE 8.1, Q# 6, 7
EXERCISE 8.2, Q# 4, 5	EXERCISE 8.2, Q# 2, 7
REVIEW Ex.8, Q# 1, 4, 5, 7	(Classwork is given as homework)
UNIT-9 : Linear Graphs	
EXERCISE 9.1, Q# 1, 3	(Classwork is given as homework)
EXERCISE 9.2, Q# 2, 5, 7, 8, 11	
EXERCISE 9.3, Q# 1, 3	
REVIEW Ex.8, Q# 6, 3, 4	
UNIT-10: Basic Statistics	
EXERCISE 10.1, Q# 2	EXERCISE 10.1, Q# 3
EXERCISE 10.2, Q# 1 (ii)	EXERCISE 10.2, Q# 1 (i, iii)
EXERCISE 10.3, $Q#1$ (iv)	EXERCISE 10.3, Q# 1 (i, ii)
EXERCISE 10.4, Q# 1 (ii)	EXERCISE 10.4, Q# 1 (iv, v)
REVIEW Ex.1, Q# 1 to 6	
Examples given on page 264, 365, 366, 273, 274,	
284, will be solved by the teacher in class	

# NOTE:

MCQ's portions of annual paper will be taken from objective exercises at the end of the chapter and objective questions will be done in class by the teacher.

اسلاميات (لازمى) جماعت تنم

الجزءُالاوّل

مِن حَدِي القرآن الكريم

آيات(1 تا 48 ) (منځ نبر 7 تا 17 )

سواة الانفال

الدرس الاول(1) مشقى سوال نمبر 1 كلاس درك ترجمهآيات1 تا10

ہوم درک سوال نمبر 3،2

الدرس الأول (ب) كلاس درك ترجمه آيات 11 تا19

سوال نمبر 2،1

الدرس الأول (ج)

کلاس درک ترجمه آيات 20 تا 28 سوال نمبر 2،1

الدرس الثاني (١)

كلاس درك ترجمهآيات29 تا37 سوال نمبر 3،2،1

> الدرس الثاني (ب) كلاس ورك

ترجمهآيات38 تا44 سوال نمبر 2،1

الدرس الثاني (ج)

كلاس ورك ترجمه آيات45-48 سوال نمبر 2،1

الكلمات والتر اكيب (يا دكرنا )

ہوم درک الکلمات دالترا کیب (یا دکرنا) سوال نمبر 4،3

ہوم درک: الکلمات دالتر اکیب (یا دکرنا) سوال نمبر 3

ہوم درک:الککمات دالتر اکیب (یا دکرنا) سوال نمبر 4

ہوم درک:المکلمات دالتر اکیب (یا دکرنا ) سوال نمبر 3

ہوم ورک: النکلمات والتر اکیب (یا دکرنا) سوال نمبر 3

	رمان		م <sup>ي</sup> ن حدى الح		
	نېر1 تا5		زجمه حدیث نب تشریح ملی زندگی	_1 _2	
<b>طالعہ)</b> سوال نمبر1		ر <b>ءالثالث</b> رف، <b>حفاظت</b> اور فضائل) سوال نبر 2	قرآن مجيد(تعا	-1	
		<b>کرسول هنرت محمر، خاتم</b> سوال نبر 3،2		-2	
سوال نمبر 1	بوم ورک		علم <b>کی فرمنیت اورف</b> کلال درک	-3	
سوال نمبر4،1	بوم درک	ا <b>بمیت اور مصارف)</b> سوال نبر 3		_4	

# PAKISTAN STUDIES SSC-I

## **CHAPTER 1 IDEOLOGICAL BASIS OF PAKISTAN**

TOPICS: Basis of the Ideology of Pakistan, Two Nation Theory: Origins, Evolution and explication, The ideology of Pakistan and Quaid-i-Azam CLASS WORK: Long questions: 5-6-8 HOMEWORK: Short questions: 1-2-3-4-5-7-9-13

# **CHAPTER 2 MAKING OF PAKISTAN**

Topics: Pakistan Resolution 1940, Background of Pakistan resolution, Quaid-e-Azam presidential address, text of the resolution, reaction to the resolution, Jinnah-Gandhi talks 1944, Cabinet mission plan 1946, talks with different political leaders, proposal of cabinet mission, reaction of political parties to cabinet mission. Interim government 1946-47,3<sup>rd</sup> June 1947 plan, Quaid-e-Azam, Role in making of Pakistan, services rendered by Quaid-e-Azam.

CLASS WORK: Long question 5-6-8-10

HOMEWORK: Short questions 3-4-5-6-9-11-12-13-15

# **CHAPTER 3 LAND AND ENVIRONMENT**

Topics: Location of Pakistan, regions of Pakistan with reference to temperature, climatic regions of Pakistan, plain region, major environmental hazards and their remedies, environmental pollution and its types, threats to water, soil, vegetation and wildlife.

CLASS WORK: Long questions:5-8-11-12-14-15-16

HOMEWORK: Short questions1-2-3-5-7-11-12

# CHAPTER 4 HISTORY OF PAKISTAN (Part 1)

Topics: Early problems of Pakistan, Quaid-i-Azam, role as first governor general of Pakistan, Pakistan objective resolution 1949, Muslim family laws ordinance 1961, Indo-Pak war 1965, events of war, naval war, ceasefire, effects of war, unity and solidarity among Pakistani people. Economic development: the second five years plan (1960-65), the third five years plan (1965-70). Separation of East Pakistan and emergence of Bangladesh, causes of separation of East Pakistan. CLASS WORK: Long question: 5-6-8-10-11

HOMEWORK: Short question:3-4-5-6-7-9-13-14-15

## NOTE:

> All MCQs of all chapters given in exercise are included in syllabus

# **PHYSICS SSC-I**

#### NOTE:

> All mini exercises, quick quiz and side information are excluded.

#### **Unit 1 Physical Quantities and Measurements**

- 1.2physical quantities1.3International system of units
- 1.4prefixes1.5Scientific Notation
- 1.6 Measuring Instruments (Vernier callipers, Screw gauge, Stop Watch)
- 1.7 Significant figures....

Example 1.4 is H.W

Exercise: Short Question: 1.2, 1.3 (H.W) And 1.5, 1.8, 1.11 (C.W) Problems: 1.1, 1.5, 1.8, 1.9 (H.W) and 1.10, 1.4 (H.W) MCQ's (1, 2, 3, 6) is (C.W)

#### **Unit 2 Kinematics**

All theory topics 2.1- 2.7 and examples 2.1-2.7, 2.10 are included. Exercise: All MCQ's are included. Questions 2.3, 2.9 is (H.W) 2.5, 2.6, 2.10, 2.11 is (C.W) Problems: 1-4, 6, 8

#### **Unit 3 Dynamics**

3.1: Force, Inertia and Momentum
3.2: Newton's Laws of Motion (1<sup>st</sup> 2<sup>nd</sup> 3<sup>rd</sup>, mass and weight, Force and Momentum, Law of Conservation of momentum)
3.3: Friction, Rolling Friction, Advantages / disadvantages of Friction, methods to reduce friction
3.4: Centripetal and centrifugal force
Examples 3.1-3.3, 3.6, 3.7, 3.8 (H.W)
Exercise
MCQ's 1-3, 5,7,8,9 (C.W)
Short Question 3-6, 9,10,13,15 (C.W)
Problems: 1-5, 8-10 (H.W)

#### **Unit 4 Turning Effects of Forces**

All Theory Topics 4.1- 4.8 are included. Examples (4.1-4.3) is (H.W) Exercise All MCQ's are included. Questions' 4.3-4, 7, 4.10, 4.11, 4.13 (C.W) Problems: 4.1-4.7 (H.W)

#### **Unit 5 Gravitation**

Topic 5.1: (the force of gravitation) 5.2: (mass of Earth), 5.3: (variation of g with Altitude) Example: 5.1 and 5.2 is (H.W) Exercise: MCQ's (1-4) Short Questions: 5.2-5.4, 5-11 and 5.12 Problems: 5.1-5.5 (c.w)

#### **Unit 6 WORK AND ENERGY**

Theory Topics (6.1-6.4), 6.8- efficiency, 6.9- power Example: (6.1-6.4) is H.W Exercise: MCQ'S (1-5) Short questions 6.3 and 6.4 Problems: (1-6)

#### **Unit 7 Properties of Matter**

Theory Topics:
7.2 Density,
7.3, Pressure,
7.5, Pressure in Liquid (Pascal's Law);
Application of Pascals, Law (Hydrolic Press Only)
7.6 Archimede's Principle,
7.7 Principle of Floatation (Ships and Submarine)
7.8 Elasticity, 7.9 Hook's Law (Young's Modulus)
Examples. 7.2, 7.3, 7.7 (H.W)
Exercise: MCQ's (2, 3, 5, 6, 7)
Short Questions: 7.11, 7.15-7.22
Problems: (7.4-77), 7.11

#### **Unit 8 Thermal Properties**

8.3, Specific heat capacity, importance of large specific Heat capacity of water, heat capacity
8.8: Thermal expansion (linear and volume expansion) consequences and applications of thermal expansion)
Examples: 5,6
Exercise:
MCQ's 4,5,6,7
Problems: 8.3-8.5

# **CHEMISTRY SSC-I**

#### Chapter 1 Branches of Chemistry

Basic definitions, Matter, substance, Mixture(types), Elements, compound, Atomic number, Mass number, Relative mass unit, Empirical formula and Molecular formula, Types of molecular formula, Molecular mass calculation, concept of mole, Avogadro's number, chemical calculation, mole-mass calculation (1.5), Mole-particles calculation Example (1.6,1.7)

Exercise: MCQ: (1-10) Short questions: (I-VIII) Long Questions: (3-11), 14, 15

#### Chapter 2 Structure of Atom

Rutherford atomic model (experiment, Defects), Bohr's atomic theory, electronic configuration Exercise MCQ: (I, V, VI, VII, VIII) Short questions: (I-V) Long Questions: 5, 6,7,8,11,12

#### Chapter 3 Periodic Table and Periodicity of properties

Periods and groups of element, s and p blocks in periodic table, Periodicity of properties, Shielding effect, atomic size, Ionization energy and trends, Electron affinity, electro negativity
Exercise:
MCQ: (I, II, II, IV, V, V I, VII, VIII, IX)
Short question: (I, II, III, IV, V)
Long Questions: 3, 4,5,10

Chapter 4 Structure of molecule
Chemical Bond, Types of bond, ionic bond, covalent bond, intermolecular forces
Exercise:
MCQ: (I, II, II, IV, V, VI, VII, VIII, IX)
Short question: (II, III, IV)
Long Questions: 3, 5, 6, 7, 9, 10, 11, 12, 13

#### Chapter 5 Physical state of Matter

Boyle's Law, Charles Law, Liquid state, evaporation vapor pressure and effect of external vapor pressure, boiling point, sublimation, types of solids **Exercise: MCQ:** (I, IV, VI, VII, VIII, IX, X) **Short question:** (II, III, IV, VI) **Long Questions:** 5, 6, and 7,8,14

#### Chapter 6 Solution

Saturated, Unsaturated, Super Saturated Solution, Concentration Units (Percentage, Molarity, Solubility, Effect of Temperature on Solubility, Comparison of Solution, Suspension and Colloids. **Exercise:** MCQ: (I, II, III, VI, VII, X) Short question: (I, II, III, VI, VII, X) Long Questions: 4, 8, 10, 12, 13

# Chapter 7 Electrochemistry

Oxidation, Reduction, oxidation reduction in term of loss or gain of electrons, oxidation state and rules for assigning oxidation state and oxidation number, oxidizing and reducing agent, Electrochemical cell, nature of electrochemical process, concept of electrolyte, electrolytic cell, use of electrolytic cell, galvanic cell (Daniel cell), Reaction in Daniel cell, Zinc electroplating, chromium electroplating, corrosion and its prevention, rusting of iron, corrosion of Aluminum, cathode protection.

Exercise: MCQ: (I, II, V, VI, IX) Short question: (I, II, IV, VI) Long Questions: 6, 13 (a,b,c), 14, 15,12(a,b,c)

#### Chapter 8 Chemical Reactivity

Metal, electropositive character, comparison of reactivity of Alkali and alkaline Earth metals, inertness of Noble metals, importance of silver, Gold, Platinum, Non-metals, Electro negativity character, comparison of reactivity of halogen.

Exercise: MCQs (I-X) Short Question/Answer (I-IV) Long Questions: (Q 3, 4, 5, 8)

# **BIOLOGY SSC-I**

<b>Ch.</b> #	Chapter Name	Topics Included	<b>Review Questions</b>
1	Introduction to	Introduction to Biology (2-3)	MCQs (1-10)
	Biology	Branches of Biology	(Home Work)
		The Levels Of Organization (7-13)	Short Questions (1)
			Understanding the
			Concept (1,5,6,7)
2	Solving a	Biological Method (20-23)	MCQs (1-9)
	Biological	Theory, Law and Principle (26-27)	(Home Work)
	Problem	Data Organization And Data Analysis (27-	Short Questions (1-2)
		28)	Understanding the
			Concept (3)
3	Biodiversity	Biodiversity (31)	MCQs (1-2,5-13)
		Importance of Biodiversity (32)	(Home Work)
		Classification- Aims and Principles (33-35)	Short Questions (2,4)
		Aims of classification	Understanding the
		Basis of classification	Concept (3,5,7)
		Taxonomic hierarchy	
		Two kingdom classification system (36-38)	
		Three kingdom classification system	
		Five kingdom classification system	
		The five kingdoms	
		Binomial Nomenclature (39-40)	
		Deforestation and Overhunting (43-44)	
		Endangered Species In Pakistan (45-46)	
4	Cells and Tissues	Cellular Structures and Function (57-65)	MCQs (1.3-15)
		Difference Between Eukaryotic and	(Home Work)
		Prokaryotic Cells (66)	Short Questions (2)
		Passage of Molecules into and Out of Cells	Understanding the
		Diffusion (69)	Concept (7,11)
		Osmosis (70) (Water Balance Problems,	
		Osmosis and Guard Cells, Application of	
		Knowledge About Semi Permeable	
		Membranes Excluded)	
		Active Transport (73)	
		Animal Tissues (74)	
		Epithelial Tissues (Types Excluded) (75)	
		Connective Tissues (75)	
		Muscle Tissues (76-77)	
		Nervous Tissue (77)	
		Plant Tissues (78-82)	
		Simple Tissues	
		Meristematic Tissues (Types Excluded)	
		Permanent Tissues (Names of Types Only)	
		Compound Tissues (Names of Types Only)	
5	Cell Cycle	Cell Cycle (87-88)	MCQs (1-15)
		Mitosis and Its Phases (89-91)	(Home Work)
		Meiosis and Its Phases (95-100)	Short Questions (1-2)
		Comparison Between Mitosis and Meiosis	Understanding the
		(101)	Concept (2,6)
6	Enzymes	Enzyme Introduction (107-108)	MCQs (1-6)
		Characteristics of Enzymes (108-109)	(Home Work)

7	Bioenergetics	Factors Affecting Rate of Enzyme Action (109-111) Mechanism Of Enzyme Action (111-112) Oxidation and Reduction Reactions (118) ATP- The Cell's Energy Currency (119-120)	Short Questions (1) Understanding the Concept (2,7) MCQs (1-2,4-5,6-9) (Home Work)
		Photosynthesis (120) Mechanism of Photosynthesis (121-122) Respiration (130) Aerobic and Anaerobic Respiration (130- 131) (Importance of Fermentation excluded) Mechanism of Respiration (132)	Short Questions (1) Understanding the Concept (2,7-8)
8	Nutrition	Components of Human Food (143) Minerals (Table 8.2 excluded) (144) Role of Calcium and Iron (145) Effects of Water and Dietary Fiber (150) Digestion In Humans (157-165) (Disorders Excluded)	MCQs (1,2,4-11,13-15) (Home Work) Short Questions (3-5) Understanding the Concept (3,6,11)
9	Transport	Transpiration (173) (Opening and Closing of Stomata Excluded, Factors Affecting the Rate of Transpiration Excluded) Significance of Transpiration (176) Transport in Human (184) Blood (185-187) (Table 9.2 Excluded) Human Heart (192-193) Pulmonary and systemic Circulation (193) Heartbeat (194-195) Heart Rate and Pulse Rate (195-196) Blood Vessels (197-198) (Table 9.1 Included)	MCQs (4-17) (Home Work) Short Questions (5,8) Understanding the Concept (4)

# **COMPUTER SCIENCE SSC-I**

#### List of Topics for Theory

- Unit 01 Fundamentals of Computer Science (complete chapter)
- Unit 02 Fundamentals of Operating System (reduced)
  - > 2.1 Introduction (Included)
  - 2.2 Operating System (Included)
- Unit 03 Skipped: whole chapter in theory, topic will be covered in practicals
- Unit 04 Data Communication (complete chapter)
- Unit 05 Computer Network (complete chapter)
- Unit 06 Computer Security and Ethics (complete chapter)

#### List of Practical(9<sup>th)</sup>

#### **Microsoft Windows**

- Creating New Folder
- How to Search for a File or Folder
- To Cut/Copy and Paste a File Folder from one location to another
- How to Use Recycle Bin
- To Display the My Recent Document Folder on Start Menu and Open Recently used document
- How to Open and Make Selections from a Menu
- How to Access Control Panel and Set the Time & Date
- How to Arrange and Remove Icons
- How to Add or Remove Programs and Windows Components
- How to adjust resolution, changing desktop background, color scheme and screen saver.

#### Microsoft word

- Creating a new Document, Saving a Document, Opening a Document, Printing a Document.
- Inserting and editing Text, Selecting Text, Copying and moving Text, Deleting Text, changing Font type, Size and Changing Font Styles and Effects.
- Inserting Symbols and Equations.
- Paragraph Formatting.
- Page Formatting, inserting Section Break, Header and Footer, Inserting Page Number and Changing Page Margins.
- Inserting and Positioning Pictures.
- Inserting WordArt.
- Inserting and Formatting Table
- Using Hyperlink

#### Microsoft Excel

- Copying and Moving cell contents, Use of Fill-Handle to fill cells
- Cell Formatting, Working with cell addressing, Relative Cell Addressing, Absolute Cell Addressing
- Working with Functions
- Working with Formulas
- Creating Charts
- Manipulating and Formatting data
- Conditional Formatting of data
- Sorting of Data

#### Inpage

- Copying, Moving and Deleting Text
- Changing Language
- Formatting Document

# **GENERAL SCIENCE SSC-I**

## Chapter 1 Introduction and role of Science

- Brief contribution of Muslim scientists
- Contribution of Pakistani scientists
   1 Dr. Abdus Salarn 2 Dr. Abdul Ocdean
  - 1-Dr Abdus Salam 2-Dr Abdul Qadeer Khan
- Branches of Science
- Role of science and Technology
- $\blacktriangleright$  Exercise questions (1,2,3,4,5,6)

## Chapter 2 Our Life and Chemistry

- > Three basic elements (Respiration, Photosynthesis)
- Properties of water as solvent
- Composition of Air, Role and Uses of air gases
- Importance and function of elements in daily life (Iodine, Chlorine, Iron)
- Exercise question no (1,2,3,4,6,7,9,10,12)

#### Chapter 5 Microorganism and Diseases

- Diseases and their causes
- Bacterial diseases
- Viral diseases
- Cancer, Malaria
- Spreading of Germs
- Protection of germs and diseases
- Smoking, Abad Habit
- $\blacktriangleright$  Exercise question no (1,2,3,4,5,6,7)

## Chapter 7 Energy

- Energy, Types of energy
- Inter conversion of energy
- Renewable energy resources
- Exercise questions (1,2,3,4,5,6,8,9,10,11)

## **Chapter 9 Basic Electronics**

- Semiconductor
- Semi conductor diode
- Radio waves
- Radio
- Computer
- Micro processor
- Exercise questions (1,2,3,4,5,6,7,8,12,13,14,15)

اردو منتخب سلیبس جماعت دہم کے لیے

نوٹ (مصنفین اور شعراکے تعارف میں سے کوئی سوال نہیں بنایا جائے گا۔ )

گھر کا کا م	جماعت کا کام	عنوانات
<sup>مشق</sup> ل سوالنمبر 11 ,7, 5, 2, 2	مشقى سوال نمبرا (جز، الف ب ج د)مشقى سوال نمبر6،	حمد (نظم)
	غزل، نظم نظم اورغزل میں فرق (صفحہ نمبر 5,6)	
مشقی سوال نمبرا (جز، د ه) مشقی سوالنمبر 7, 3	مشقى سوال نمبرا (جز، الفب ج )، مشقى سوالنمبر 5،6	نعت(نظم)
<sup>مشق</sup> ل سوالتمبر ,5, 4	مشقى سوال نمبر ا (تمام اجزا)، مشقى سوالنمبر 2	نظريه پاکستان
مشقی سوال نمبرا (جز، د ه )، مشقی سوالنمبر 3,4, 2	مشقى سوال نمبر ا(جز، الفب ج )،، مشقى سوالنمبر 5،7	مجھے میرے دوستوں سے بحچاؤ
	جملهاسمىيداور جملەنغلىيەكى تركىب نحوى،افسانە(صفحەنمبر 57,58)	
مشقی سوال نمبر ا (جز، د ه )مشقی سوالنمبر ، 4, 2	مشقى سوال نمبرا (جز، الفب ج )، مشقى سوالنمبر 5,7, , 3	ملمع
مشقى سوال نمبرا (جز، د )، مشقى سوالنمبر 3,4,5	مشقى سوال نمبرا (جز، الف ب ج )، مشقى سوالنمبر 7,2	چغل خور
	(جمه معترضه ) صفحه نمبر 77	
مشقی سوال نمبر ا (جز، د ه و) مشقی سوالنمبر 2	مشقى سوال نمبرا (الف ب ج )مشقى سوالنمبر ،,7,8, 6	نام دیومالی
	مبتدااورخبر میں تقطیع کرنا (صفحہ نمبر 86)	
مشقى سوال نمبرا (جز، د ه )مشقى سوالنمبر , ,6, 5	مشقی سوال نمبرا (جزالف،ب،ج)	على بخش
	مشقی سوالنمبر ، ,10, 9, 4, 3	
مشقى سوالنمبر 6,2	مشقی سوال نمبر ا (تمام اجزا)،	میدان کربلامیں گرمی کی شدت
	مشقى سوالنمبر , 7,9 , 4	
	استعاره،اركان استعاره،مجاز مرسل (صفحة مبر 120,121)	
<sup>مشق</sup> ق سوالنمبر 6·3	مشقى سوال نمبر ا (تمام اجزا)،،مشقى سوالنمبر ,5،7	فاطمه بنت عبدالله
مشقى سوالنمبر 2،3	مشقی سوال نمبر ا (تمام اجزا)،	حسرت موہانی کی غزل
	مطلع ادر مقطع (صفحه نبر 150)	
مشقی سوال نمبر ا (جز، د ه )مشقی سوالنمبر 5,4،3	مشقى سوال نمبرا (جزالف،ب،ج)مشقى سوالنمبر 2	جگرمرادآبادی کی غزل
	قافيداوررديف (صفحه نمبر 154,155)	

# قواعد دانشا، بمطابق کتاب''ارد دقواعد دانشا نهم دیم، پنجاب ٹیکسٹ بک بورڈ'' مضمون نگاری( زمزم،علامہ اقبال،قائد اعظم، یوم آزادی، محنت کی برکتیں، ماں باپ سے ساتھ سلوک، شہری اور دیہاتی زندگی، دقت کی پابندی) کہانیاں (جس کا کام اسی کوساج، سچ کی برکت، جھوٹ کی سزا،قوم کی خاطرا یثار، اتفاق کی برکت)

<b>ENGLISH SSC-II</b>
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Unit #	Title	Contents /Exercises to be covered
1	Hazrat Muhammad (PBUH)	Glossary & Vocabulary (Ex-A&B)
	an Embodiment of Justice	• Reading Comprehension (A &C)
		• Grammar: Concrete& Abstract Noun (Exercise A,
		B & C)
		Homework: Writing Skills Exercise(A&B)
3	Try Again (Poem)	• Theme of the poem
		Stanza Comprehension
		Reading Comprehension Exercise-A
		• Figures of Speech (Simile & Alliteration)
		Grammar: Personal Pronoun & Degrees of
		Adjectives (Exercise A, B, C & D)
		Homework: Writing Skills (Exercise-A)
4	First Aid	• Glossary Exercise –A, B & C
		Reading Comprehension Exercise-A &B
		• Grammar (Adverb, Adverb Phrase, Infinitive &
		gerund) Exercise –A, B, C& D
		Homework: Writing Skills "How to take care of
		cuts and scraps?"
5	The Rain (Poem)	• Theme
		Stanza Comprehension
		• Figures of Speech (Metaphor & Personification)
		• Vocabulary Exercise A, B, C& D
		Reading Comprehension Exercise-A&B
		• Grammar (Transitive & Intransitive Verbs)
		Exercise-A
9	Selecting the Right Career	• Glossary, Vocabulary (Exercise A, B & C)
		• Reading Comprehension (Exercise-A)
		• Grammar (Noun Clause)
		Homework: Writing Skills (Exercise-C)
10	The World without Books	Reading Comprehension Exercise-A
		• Grammar (Relative Pronoun & Adjective Clause)
		Exercise (A & B)
		Homework: Glossary & Vocabulary
13	Faithfulness	Reading Comprehension (Page -154)
		Grammar (Conditional Sentences), Compound &
		Complex Sentences
		Homework: Glossary & Vocabulary

# **GRAMMAR & COMPOSITION**

- i. All parts of speech (types & subtypes)
- ii. Types of phrases, clauses & sentences (Identification only)
- iii. Conditional Sentences
- iv. Verbals (Gerund, Participles & Infinitive)

- v. Narration (Exercises from pages 173 -177, English Grammar and Composition, PTB, Lahore,1<sup>st</sup> Edition March, 2020)
- vi. Prepositional /Phrasal Sr#1-60 (Pages 159 –161, English Grammar and Composition, PTB, Lahore,1<sup>st</sup> Edition March, 2020)
- vii. Comprehension Paragraphs Verbs (Exercises 1-15 pages 38-45(from English Grammar and Composition, PTB, Lahore,1<sup>st</sup> Edition March, 2020)
- viii. Application /Letter
  - a. Write an application to the MD of a firm for the post of Manager.
  - b. Write an application to the principal of your school regarding access to e-library
  - c. Write a letter the editor of a newspaper regarding poor sanitation.
  - d. Write a letter the editor of a newspaper regarding increasing rate of street crimes.
- ix. Essay writing
  - a. My Aim in Life
  - b. Overpopulation
  - c. Patriotism
  - d. Beauties of Village Life
  - e. My Ideal Personality
  - f. Green and Clean Pakistan

## NOTE:

- 1. Unit No. 2,6,7,8, 11 & 12 are entirely excluded.
- 2. All Review Exercises (I, II & III) in the English Text Book are entirely excluded.
- 3. The overall pattern and weightage of annual paper will remain the same, however, both objective and subjective paper will be from the reduced /selected contents.
- 4. All grammar based content is supposed to be taken from the prescribed /recommended grammar book "(English Grammar and Composition, PTB, Lahore,1<sup>st</sup> Edition March, 2020.

MATHEMATICS SSC-II Science Group

Ex: 1.1 Q1 (i, iii), Q2 (i, iv, v), Q3 (i, vi, viii) Ex: 1.3 Q2, Q7, Q9, Q10, Q14

#### CHAPTER #2

CHAPTER #1

Ex: 2.1 Q1 (ii) Q2 (iv) Q3, Q5 Ex: 2.3 Q1 (i, ii), Q2 (I), Q3 (i), Q4 (ii), Q5 (ii) Ex: 2.6 Q1 (iii), Q2 (ii), Q3 (ii), Q5 (ii) Ex: 2.8 Q2, Q5, Q7, Q10

#### CHAPTER #3

Ex: 3.1, Q4, Q6, Q11 (iii, v) Ex: 3.3 Q1 (iii), Q 2 (iv), Q 3 (iv), Q4 (iii, iv) Ex: 3.5 Q2, Q6 Ex: 3.7 Q6, Q7, Q9

#### **CHAPTER #4**

Ex: 4.1 Q2, Q7 Ex: 4.3 Q1, Q6, Q8

#### CHAPTER #5

Ex: 5.1 Q4 (iii), Q5 Ex: 5.3 Q3, Q4 (iii, i, v) Ex: 5.5 Q1, Q5 (iii, iv)

#### **CHAPTER #6**

Ex: 6.1, Q5 Ex: 6.3 Q4, Q5 a (ii), 5b, Q6

#### CHAPTER #7

Ex: 7.1 Q4 (ii, iv, vii), Q5 (iii, iv, viii) Ex: 7.4 Q7, Q10, Q11, Q16, Q20, Q24

CHAPTER #8: Theorem 1, 2

CHAPTER #10: Theorem 3

CHAPTER #12: Theorem 1

#### CHAPTER #13

Ex 13.1 Q1, Q4, Ex 13.2 Q2. Q3. Q4, Ex 13.3 Q6, Q7, Q8, Q9

#### NOTE:

- All Class work will be given for revision as H.W.
- The MCQ's Portion of the annual paper will be taken from MCQ's exercise at the end of the chapters: so MCQ's will be done in class by class teacher.

Ex: 1.2 Q1 (iv, vii) Ex: 1.4 Q3, Q6, Q11

Ex: 2.2 Q1, Q2 (iv, v, vii) Q3 Ex: 2.5 Q1 (e), Q2 (d), Q3 (a) Ex: 2.7 Q1, Q3, Q5, Q9, Q13

Ex: 3.2 Q1 (iii), Q3, Q8, Q13 Ex: 3.4 Q1 (i), Q2 (ii, v, vi, viii) Ex: 3.6 Q1 (ii, iii, vii), Q2 (whole)

Ex: 4.2 Q2, Q4, Q8 Ex: 4.4 Q1, Q3

Ex: 5.2 Q3 Ex: 5.4 Q1, Q3 (ii, iii)

Ex: 6.2 Q3 (i), Q5, Q9, Q11

Ex: 7.2 Q1 (ii), Q2 (i), Q3 (ii), Q12, Q13 Ex 7.5 Q1, Q3, Q4, Q8, Q9, Q10

#### **CHAPTER #9**: Theorem 4

**CHAPTER #11**: Theorem 4

# **GENERAL MATHEMATICS SSC-II**

CLASS WORK	HOME WORK
UNIT-1 ALGEBRAIC FORMULAS AND	
APPLICATIONS	
EXERCISE 1.1, Q# 1, 5, 9, 13, 14, 15, 19, 24.	EXERCISE 1.1, Q# 2, 8, 10, 28.
EXERCISE 1.2, Q# 2, 3, 6, 7, 10, 12.	EXERCISE 1.2, Q# 1, 11, 18, 21.
EXERCISE 1.3, Q# 3 (i), (v), 4, 6, 9 (ii).	EXERCISE 1.3, Q# 3 (ii), (iii), 5, 9 (i).
	REVIEW Ex.1, Q# 1.
UNIT-2 FACTORIZATION	
EXERCISE 2.1, Q# 1, 2, 9, 15.	EXERCISE 2.1, Q# 5, 11, 16.
EXERCISE 2.2, Q# 1, 2, 8.	EXERCISE 2.2, Q# 3, 9.
EXERCISE 2.3, Q# 1, 6, 11.	EXERCISE 2.3, Q# 2, 14.
EXERCISE 2.4, Q# 1, 2, 9, 20.	EXERCISE 2.4, Q# 6, 19.
EXERCISE 2.5, Q# 6, 10, 19, 20.	EXERCISE 2.5, Q# 7, 18.
	REVIEW Ex.1, Q# 1
	-
UNIT-3 ALGEBRAIC MANIPULATION	
EXERCISE 3.1, Q# 3, 7, 10.	EXERCISE 3.1, Q# 8, 13, 15.
EXERCISE 3.2, Q# 1, 3.	EXERCISE 3.2, Q# 6, 7.
EXERCISE 3.3, Q# 1, 6, 8.	EXERCISE 3.3, Q# 2, 14.
EXERCISE 3.4, Q# 1, 7, 9, 11, 13.	EXERCISE 3.4, Q# 10, 12.
EXERCISE 3.5, Q# 2, 6, 8.	EXERCISE 3.5, Q# 5, 7, 12.
EXERCISE 3.6, Q# 1, 2, 6, 12.	EXERCISE 3.6, Q# 3, 9.
	REVIEW Ex.1, Q# 1
UNIT-4 LINEAR EQUATIONS AND	
INEQUALITIES	
EXERCISE 4.1, Q# 2, 7, 10, 12, 19.	EXERCISE 4.1, Q# 3, 4, 8, 13, 20.
EXERCISE 4.2, Q# 1, 2, 7, 10, 12, 19.	EXERCISE 4.2, Q# 5, 9, 16.
LALKCISL 4.2, QII 1, 2, 7, 10, 13.	REVIEW Ex.1, Q#1
UNIT-5: QUADRATIC EQUATIONS	
EXERCISE 5.1, Q# 1, 3, 9, 11, 14, 18, 22.	EXERCISE 5.1, Q# 2, 12, 15, 19, 23.
EXERCISE 5.2, Q# 1, 2, 7, 12.	EXERCISE 5.2, Q# 3, 9.
EXERCISE 5.3, Q# 1, 7.	EXERCISE 5.3, Q# 2, 8.
	REVIEW Ex.1, Q#1.
	-
UNIT-6: MATRICES AND	
DETERMINANTS	
EXERCISE 6.1, Q# 4.	EXERCISE 6.3, Q# 1 (vi), 6, 8.
EXERCISE 6.2, Q# 1, 2, 3, 6.	EXERCISE 6.4, Q# 3, 7, 13.
EXERCISE 6.3, Q# 1 (iv), (v), 2, 4, 11.	EXERCISE 6.5, Q# 2 (ii), 3 (vi).
EXERCISE 6.4, Q# 1, 9, 12, 15.	EXERCISE 6.6, Q# 2 (ii), 4 (ii).
EXERCISE 6.5, Q# 1(ii), (iii), 2(i), 3(i), (ii), 4	REVIEW Ex.1, Q# 1
EXERCISE 6.6, Q# 2(i), (iv), 4(i), (vi).	

UNIT-7: FUNDAMENTALS OF GEOMETRY Exercise 7.1, Q#2, 4, 7 (ii), (v) Exercise 7.2, Q# 1 Exercise 7.3, Q # 1,2,3,4 Exercise 7.4, Q # 1,5 Exercise 7.5, Q # 1 Exercise 7.6, Q # 1	Exercise: 7.1, Q # 3, 7 (i), (vi). Exercise: 7.3 Q # 5. REVIEW Ex.1, #1.
<b>UNIT-8: PRACTICAL GEOMETRY</b> EXERCISE 8.1, Q# 1, 2, 3, 7, 11, 23, 24, 26.	EXERCISE 8.1, Q# 8, 9, 13, 20, 25. REVIEW Ex.1, Q #1
UNIT-9: AREAS AND VOLUMES EXERCISE 9.1, Q# 1(i), 4, 7. EXERCISE 9.2, Q# 1, 2, 3, 7(i), 10 (i), 12, 16. EXERCISE 9.3, Q# 1, 2, 4, 5, 6. UNIT-10: INTRODUCTION OF COORDINATE GEOMETRY EXERCISE 10.1, Q# 1(i), (ii), (viii), (ix), (x), 2(i), (ii), 4, 6, 7, 10, 11.	EXERCISE 9.1, Q# 1(ii), (iii), 5, 8. EXERCISE 9.2, Q# 7 (ii), 10 (ii), (iii),14, 18. EXERCISE 9.3, Q# 3. REVIEW Ex.1, Q# 1 EXERCISE 10.1, Q# 2 (iii), 12. REVIEW Ex.1, Q# 1.

اسلامیاتلازمی جماعت دہم الجزءالادل:

من حدى القرآن

(صفحة نبر 27 تا35)

مورة الاحزاب (آيات 1 تا 34)

الدرس الرابع ،الف

ہوم درک:الکلمات دالتر اکیب (یادکرنا) سوال نمبر 3

كلاس ورك ترجمه آيات (1 تا8) سوال نمبر 2،1

الدرس الرابع (ب) كلاس ورك: ترجمه آيات 9 تا 20 سوال نمبر 2،1

ہوم درک:الحکمات والتر اکیب (یادکرنا) سوال نمبر 3

موان جنز 2،1

ہوم درک:الکلمات والتر اکیب(یا دکرنا) سوال نمبر 1

ہوم درک:الکلمات دالتر اکیب (یا دکرنا)

سوال نمبر 3

**الدرس الرالع (ج)** كلاس درك ترجمدآيات 21 تا 27

**الدرس الخامس(۱)** کلاس درک ترجمه آیات 28 تا34 سوال نمبر 2،1

صفي نمبر (46،45)

سورة المتحند (آيات 6،1)

الدرس السالح (1)

5

كلاس درك ترجمه آيات 1 تا 6 سوال نبر 1، 2، 1 موال نبر 4، 3 موال نبر 4، 3

الجزءالثاني (مِن حدى الحديث)

ترجمه احادیث 20تا 20 تشریخ عملی زندگی سے تعلق 11 تا 15

كلاس ورك

سوال نمبر 4،3

\_3

الجزءالثالث(موضوعاتي مطالعه)

	طجادت	_1
,	كلاس ورك	
ہوم درک سوال نمبر 6،2	سوال نمبر 1	
	مبردشكر	_2

	ہوم درک	
5	سوال نمبر	

ہوم درک

سوال نمبر 5

ہوم درک

سوال نمبر3

عائلى زندگى
کلاس درک
سوال نمبر 4،1

- اجرت وجهاد \_4 كلاس درك سوال نمبر 1
- حقوق العباد \_5 كلاس درك <del>م</del>وم ورک سوال نمبر 4،3 سوال نمبر 2

# PAKISTAN STUDIES SSC-II

# **CHAPTER 6 HISTORY OF PAKISTAN II**

TOPICS: Key aspects of the constitution of 1973, major aspects of the Islamization process during 1977-88, Pakistan as a nuclear power, the system of devolution of power initiated by Prevez Musharaf with particular emphasis on local self-government, local government plan 2000.

CLASS WORK: Long questions: 2-3-4-7

HOMEWORK: Short questions: 1-4-5-6-7-10

# **CHAPTER 7 FOREIGN RELATIONS OF PAKISTAN**

Topics: objectives of Pakistan's foreign policy, Pak-India relation, Pak-China relation, Pak-Afghan relation, genesis and development of Kashmir issue, Pakistan development of Kashmir issue, Pakistan relation with central Asian countries, Pakistan contribution towards peace-keeping in world

CLASS WORK: Long question 1-2-3-5-7-8-12 HOMEWORK: Short questions 1-3-4-5-6-8

# **CHAPTER 8 ECONOMIC DEVELOPMENT**

Topics: Agriculture, main problems associated with agriculture, industries of Pakistan, different sources of energy, important sector of economy, Agriculture potential of Pakistan along with problems and measures for maximization of yield

CLASS WORK: Long questions:1-2-3-8-9

HOMEWORK: Short questions1-3-4-6-9

# **CHAPTER 9 POPULATION, SOCIETY AND CULTURE OF PAKISTAN**

TOPICS: Major Features of Pakistani Society and Culture, Educational Structure of Pakistan, Major Social Problems of Pakistan, Role of minorities in Pakistan, commonality in regional cultures leading to national integration and cohesion

CLASS WORK: Long question:1-2-5-6-7

HOMEWORK: Short question:2-4-5-7-8

## NOTE:

> All MCQs of all chapters given in exercise are included in syllabus

# **PHYSICS SSC-II**

# NOTE:

> All conceptual questions and side information are excluded.

## UNIT 10 SIMPLE HARMONIC MOTION

- 10.1 Mass Attached with spring, Motion of simple Pendulum
- 10.3 Wave Motion
- 10.4 Types of mechanical waves

(waves as carrier of energy, Relation between velocity, frequency and wavelength)

Examples 10.1,10.2 (H.W)

Exercise: Review Question:10.1 ,10.6,10.10 (C.W)

Problems: 10.1 -10.5 (H.W)

MCQ's (1-6)

# UNIT 11 SOUND

- 11.1 Sound Waves
- 11.2 Characteristic of sound (Loudness, pitch, quality, intensity, intensity level)
- 11.3 Reflection of sound
- 11.4 Speed of sound
- 11.7 Audible frequency range
- 11.8 Ultra sound

Example 11.1,11.2 (H.W) Exercise: MCQ's (1-7) are included. Questions 11.1-11.3,11.8,11.12,11.13

Problems: 11.1-11.5 (H.W)

# UNIT 12 GEOMETRICAL OPTICS

All theory topics from 12.1 -12.10 Examples 12.1-12.6 (H.W) Exercise MCQ's1-6 Review Question 12.9,12.15,12.16 and 12.18 Problems: 12.1-12.4, 12.9 -12.12 (H.W)

# UNIT 13 ELECTROSTATICS

- 13.1 Production of electric charges
- 13.2 Electrostatic induction
- 13.4 Coulomb's Law
- 13.5 Electric Field and electric intensity
- 13.6 Electrostatic Potential

13.7 Capacitors and capacitance (combination in series and parallel)

EXAMPLES,13.1-13.4 (H.W)

Exercise

MCQ's 1-11

Review Questions' 13.1 - 13.3 Problems: 13.1- 13.10 (H.W)

# UNIT 14 CURRENT ELECTRICITY

All theory topics from 14.1-14.11

Example: 14.1 -14.8 (H.W) Exercise: MCQ's (1-9) Review Questions:14.2-14.5 Numerical problems 14.1-14.7

## UNIT 15 ELECTROMAGNETISM

- 15.1 Magnetics effects of steady current (Direction of Magnetic field, magnetic field of solenoid)
- 15.5 electromagnetic induction
- 15.6 Direction of induce emf, Lenzs law
- 15.8 Mutual induction

15.9 Transformer

Exercise:

MCQs 1,2,3,7,8,9

Review questions: 15.1, 15.3, 15.7-15.9 Problems: 15.1-15.3 (H.W)

# UNIT 16 BASIC ELECTRONICS

- 16.1 Thermionic emission
- 16.2 Investigating the properties of electron
- 16.4 Analog and Digital electronics
- 16.5 Basic operation of digital electronics

16.6 -16.10 Logic gates

Exercise:

MCQs 1-7

Review Questions: 16.1, 16.7, 16.8

## UNIT 18 ATOMIC AND NUCLEAR PHYSICS

18.1-18.9 (all theory topics) Examples: 18.1-18.4 (H.W) Exercise MCQs 1-9 Review Questions: 18.3, 18.5, 18.6, 18.8, 18.12-18.15 Numerical problems: 18.1-18.5

# **PHYSICS – SSC** LIST OF PRACTICALS

## **SECTION-A**

- 1. To measure the volume of a solid cylinder by measuring length and diameter of a solid cylinder with Vernier calipers.
- 2. To measure the thickness of a metal strip or a wire by using a screw gauge.
- 3. To find the acceleration of a ball rolling down an angle iron by drawing a graph between 2S and T2.
- 4. Investigate the relationship between force of limiting friction and normal reaction to find the coefficient of sliding friction between a wooden block and horizontal surface.
- 5. To study the relationship between load and extension (Helical spring) by drawing a graph.
- 6. To find the density of a body heavier than water by Archimedes principle.

## **SECTION-B**

- 1. To study the effect of the length of simple pendulum on its time period and hence find "g" bycalculation.
- 2. To verify the laws of refraction by using a glass slab.
- 3. To find the refractive index of water by using concave mirror.
- 4. To trace the path of a ray of light through glass prism and measure the angle of deviation.
- 5. Verify Ohm's law (using wire as conductor).
- 6. To verify the truth table of OR, AND, NOT, NOR and NAND gates.

# **CHEMISTRY SSC-II**

### **Chapter 9: Chemical Equilibrium**

Reversible reaction and dynamic equilibrium, Law of mass action and its derivation, equilibrium constant and its unit, Importance of equilibrium constant

Exercise: MCQs (I-X) Short Question/Answer (I-V) Long Questions: (Q 3, 4, 6, 8)

#### Chapter 10: Acid, Bases, and salt

Concept of Acid and bases, Arhenius, Lowry and Bronsted-Lowery, Lewis concept of acid and bases, pH scale, Salts, Uses of salts **Exercise:** MCQs (I-X) Short Question/Answer (II, III, IV, V) Long Questions: (Q 3, 4, 6, 10,11,15)

#### **Chapter 11: Organic chemistry**

Organic compound, Chemical diversity and magnitude of organic compound, general characteristic of organic compound, condensed and structural formula, saturated and unsaturated hydrocarbon, Naming alkane, sources, and uses of organic compound, alkane and alkyl radical, classification of organic compound, functional group, functional group containing C, N, H, Functional group containing double and triple bond

**Exercise:** MCQs (I-X) Short Question/Answer (I-V) Long Questions: (Q 4, 6, 8, 9, 10, 11 (ab,c),15, 18,19)

## Chapter 12: Hydrocarbon

Hydrocarbon and its types, Alkane, preparation of alkanes, Properties of alkanes, Alkene, preparation of alkene, Properties of alkenes, Alkynes, preparation of alkynes, Properties of alkynes,

Exercise: MCQs (I-X) Short Question/Answer (I-V) Long Questions: (Q 3, 4, 5, 8, 10, 13,17)

#### **Chapter 13: Biochemistry**

Carbohydrates and its types, sources and uses of carbohydrates, nucleic acid, DNA, RNA, Vitamin and Types of Vitamin **Exercise: MCQs** (II, III, IV, VI, IX, X) **Short Questions:** (I, II, IV, VI) **Long Questions:** Q3, 7, 9, 11, 15, 16

#### **Chapter 14: Environmental Chemistry**

Layers of atmosphere, Air pollutants, Effect and sources of air pollutant, Global warming, acid rain and its effects, Ozone depletion and its effect

Exercise: MCQs: (I-X) Short Question-Answer: (I-V) Long Questions: (4, 6, 7, 8, 11, 12)

#### Chapter 15: Environmental Chemistry II Water

Topics: Soft and Hard water, Types of soft and hard water, Methods of removing hardness of water borne Diseases Exercise: MCQs (III, IV, V, VI, VII, VIII) Q2: Short Question-Answer (I, IV, V, VI) **Long Questions**: 3, 5 (a,b,c,d), 10, 11, 12, 14, 21, 25

## **Chapter 16: Chemical Industries**

Topics: Basic metallurgical operation Solvay process (flow sheet), Urea, Importance of fractional distillation of petroleum Exercise: MCQs (I, III, VII, VIII, IX, X) Q2: Short Question-Answer (II, III, IV, V) Long Questions:7, 8,9,10,13,15,16

# **CHEMISTRY – SSC LIST OF PRACTICALS**

### **Physical States of Matter**

Determine the Melting Point of Naphthalene. Major Determine the Boiling Point of Ethyl Alcohol. Major Separate naphthalene from the given mixture of sand and naphthalene by sublimation. Major

#### **Solutions**

Prepare 100 cm3 of 0.1M NaOH solution. Major Prepare 250 cm3 of 0.1M HCl solution. Major Prepare 100 cm3 of 0.1M NaOH solution from the given 1M solution. Major Prepare 100 cm3 of 0.01M HCl solution from the given 0.1M solution. Major Prepare 100 cm3 of 0.01M oxalic acid solution from the given 0.1M solution. Major Prepare pure Copper Sulphate crystals from the given impure sample. Minor Demonstrate that temperature affects solubility. Minor 7. Electrochemistry

#### **Electrochemistry**

Demonstrate the conductivity of different given solutions. Minor

#### **Chemical Reactivity**

Demonstrate that an element and a compound can react to form a different element and a different compound. Minor

Demonstrate that some chemical reactions absorb energy. Minor

#### Acids, Bases and Salts

Identify sodium, calcium, strontium, barium, copper, potassium radicals by flame test. Minor

Standardize the given NaOH solution volumetrically. Major Standardize the given HCl solution volumetrically. Major Determine the exact molarity of the Na2CO3 solution volumetrically. Major Classify substances as acidic, basic or neutral Minor

#### **Organic Chemistry**

Identify aldehydes using Fehling's test and Tollen's test. Major Identify carboxylic acids using sodium carbonate test. Major Identify Phenol using Ferric Chloridete test. Major

#### **Hydrocarbon**

Identify saturated and unsaturated organic compounds by KMnO4 test. Minor

#### Water

Demonstrate the softening of water by removal of calcium ions from hard water. Major

# **BIOLOGY SSC-II**

<b>Ch.</b> #	Chapter Name	Topics Included	<b>Review Questions</b>
10	Gaseous Exchange	Gaseous Exchange in Plants (page 2-3) Gaseous Exchange in Humans (4-6) The Lungs (6) Mechanism of Breathing (7)	MCQs (1-7, 9-10) (Home Work) Short Questions (1-3) Understanding the concept (2)
11	Homeostasis	Osmotic Adjustment in plants (20-21) Urinary System of Human Structure of Kidney, Functioning of Kidney, Osmoregulatory Function of the Kidney (22-26) Dialysis (27-28)	MCQs (1-7, 9-10) (Home Work) Short Questions (2) Understanding the concept (1, 4)
12	Coordination and Control	Types of Coordination (Coordination Action Excluded) (33) Human Nervous System (34-41) Receptors in Humans, Eye (42-43) Ear (45-46) Endocrine System (47-51)	MCQs (1-10) (Home Work) Short Questions (2,4, 8) Understanding the concept (2,4,10,11)
13	Support and Movement	Human Skeleton (57) Bone and Cartilage (58-60) Components of Human Skeleton (60) Types of Joints (62-63) Muscles and Movement (63-64)	MCQs (1, 3-10) (Home Work) Short Questions (1,4) Understanding the Concept (1-2)
14	Reproduction	Reproduction (70) Methods of Asexual Reproduction (70-75) Binary Fission, Fragmentation, Budding, Spore Formation, Parthenogenesis, Vegetative Propagation (natural and Artificial Vegetative Propagation Excluded) Sexual reproduction in plants (78) Sexual Reproduction in Flowering Plants (78-81) Pollination and Its Types Sexual Reproduction in Animals (84) Formation of Gametes (84-85) Reproduction in Rabbit (87-88)	MCQs (1-10) (Home Work) Short Questions (3-4) Understanding the Concept (6-7)
15	Inheritance	Introduction in Raboit (87-88) Introduction to Genetics (94) Chromosome and Genes (94-98) Mendel's Laws of Inheritance (90-101)	MCQs (1-7) (Home Work) Short Questions (1-3) Understanding the Concept (2)
16	Man and His Environment	Components of Ecosystem (114) Biogeochemical Cycles (119-121) Interactions in Ecosystems (122-125)	MCQs (1-2,4-5,7-8) (Home Work) Short Questions (1) Understanding the Concept (2-3)

17	Biotechnology	Introduction to Biotechnology (138) Fermentation (139-140) Genetic Engineering (144-147)	MCQs (2-4) (Home Work) Short Questions (4-5) Understanding the Concept (3)
18	Pharmacology	Medicinal Drugs (150-151) Antibiotics and Vaccines (155-156)	MCQs (1-3,7-8) (Home Work) Short Questions (3) Understanding the Concept (3,5)

# BIOLOGY – SSC List of Practical

# 1. Introduction to Biology

1. Study of different types of bacteria with the help of prepared slides and of *Amoeba*, *Paramecium, Volvox* from prepared slides/ fresh culture/charts

# 4. Cells and Tissues

3. Examination under the microscope an animal cell (e.g. from frog's blood) and a plant cell (e.g. from onion epidermis), using an appropriate temporary staining technique, such as iodine or methylene blue

# 5. Cell Cycle

7. Observation of various stages of mitosis and meiosis by slides, model and charts

# 7. Bioenergetics

10. Demonstration of the process of photosynthesis using an aquatic plant, like Hydrilla

# 8. Nutrition

- 15. Food tests: Benedict's test for reducing sugar, iodine test for starch, spot test and emulsion test for fat, and Biuret test for protein in solution
- 16. Microscopic examination of a transverse section of the small intestine to show the villi

# 9. Transport

- 19. Investigation of the rate of water loss at the two surfaces of a leaf by a simple experiment using cobalt chloride paper
- 20. Investigation of transpiration in potted plant under a bell jar
- 22. Identification of red and white blood cells under the light microscope on prepared slides and in diagrams and photomicrographs
- 23. Investigation of the effect of physical activity on pulse rate

# 10. Gaseous Exchange

- 24. Activity to compare the breathing rate at rest and after exercise
- 26. Demonstration of the presence of tar in cigarette smoke and also by charts showing pictures of lungs of smokers and nonsmokers

# 11. Homeostasis

27. Examination of the structure of kidney (sheep kidney/model)

# 12. Coordination in Man

28. Study of human eye, ear and brain

# 14. Reproduction

- 30. Observation of binary fission of ameba using slides, photomicrographs or charts
- 31. Observation of budding in yeast from prepared slides
- 32. Examination of a bulb (onion), corn (*Edocasia*), rhizome (ginger) or stem tuber (potato) and its cultivation to get new plants

# **COMPUTER SCIENCE SSC-II**

#### List of Topics for Theory

- Unit 01 Programming Techniques (complete chapter)
- Unit 02 Programming in C (reduced chapter)
  - > 2.2 Programming environment (Included)
    - > 2.3 Programming Basics (Included)
    - > 2.4 Constants and Variables (Included)
- Unit 03 Input and Output Handling (complete chapter)
- Unit 04 Conditional Control Structure (complete chapter)
- Unit 05 Loop Control Structure (complete chapter)
- Unit 06 Computer Logic and Gates (complete chapter)
- Unit 07 Skipped whole chapter in theory

#### **List of Practicals**

#### PROGRAMMING LANGUAGE C

- Program to find the Addition, Subtraction, Multiplication and Division of two numbers by using of printf() and scanf() Functions
- C Program to Calculate Area and Circumference of Circle
- C Program to Calculate Area of Right angle Triangle
- C Program to Calculate Area of Rectangle
- C Program to calculate sum of 5 subjects and find percentage
- C Program to compare two integers and three integers
- Use of if()- else
- C Program to find whether the number is even or odd
- C Program to find if a given number is positive or negative
- C Program to Swap Two Numbers using temporary variable (temp)
- C Program to convert temperature from degree Centigrade to Fahrenheit
- C Program to print first 10 Natural numbers using for() loop
- C Program to print first 10 Natural numbers using while() loop
- C Program to print first 10 Natural numbers using do-while() loop
- C Program to check whether the number is Prime or not
- C Program to find table of a number
- C Program to print numbers in reverse order from 1 to 10
- C Program to print even and Odd numbers from 1 to 20
- C Program to find Roots of a Quadratic Equation
- C Program to find the Grade of a student on percentage marks
- C Program to find Grade of a student using switch statement
- C Program to find the Sum of odd series from 1 to 100
- C Program to print the following number pattern Nested loop
- C Program to create a simple calculator using Switch statement
- C Program to find Factorial of a number
- C Program to find GCD of two numbers

# **GENERAL SCIENCE SSC-II**

## Chapter 3 Bio Chemistry and Bio Technology

- > Metabolism
- Digestion of food (Carbohydrates, Proteins and fats)
- ➢ Enzymes
- Human Blood
- Chromosomes, DNA and Genes
- Antibiotic and Genes
- $\blacktriangleright \quad \text{Exercise question no } (1,2,3,5,6,7)$

## Chapter 4 Man and Health

- Major components of Food(vitamin)
- Balanced diet
- ➢ First Aid
- $\blacktriangleright$  Exercise question No (1,2,3,5,6,8)

## Chapter 6 Environment and Natural Resources

- > Atmosphere
- Different layers of atmosphere
- > Ozone, Green House Effect, Human activity and disturbance of climate
- Pollution (Air, water and Land Pollution)
- Effect of rising population on environment
- Exercise questions (1,2,3,4,5,8,9,14,15,16)

### **Chapter 8 Current Electricity**

- Electric Current
- ➢ Voltage
- Resistance
- Ohm's Law
- ➢ Electric circuit
- Direct current (DC) and Alternating current (AC)
- Exercise questions (1,2,3,4,5,6,7,8,9,10,11)

#### Chapter10 Science and Technology

- Science and technology in the past
- Advancement in science and technology
- ► LASER
- > Satellites
- X-Ray, Ultrasound, Electro cardiography (ECG), Magnetic Resonance Imaging (MRI)
- Exercise Questions (1,2,3,4,5,11,12,13,14,15,16)

#### Chapter 11 Pakistan's Space and Nuclear Program

- Space Exploration
- Satellites
- Space Shuttle
- Pakistan space program
- Pakistan Nuclear Program (Nuclear Technology, nuclear power Generation)
- ► Exercise question no (1,2,3,4,7,8,9,10)