



**APSACS SSC Syllabus Pack
Class X
Cold & Warm Region
2020-21**

ARMY PUBLIC SCHOOLS & COLLEGES SYSTEM SECRETARIAT

Academic Calendar 2020-2021

APSACS Syllabus Pack (5 Blocks- 25 Weeks Study Time)		
<ul style="list-style-type: none"> • 80% Course to be studied from Block 1-4: (22 Jun -07 Nov2020) • 20% course to be studied inBlock5: (19 Nov - 24 Dec2020) • Winter Break (10 days) From 25th of December 2020 to 3rd January2021 • Revision, syllabus completion & Test Series: (04Jan -20Feb) 		
# of Study weeks	Week Dates	Class X
Block 1 (05 weeks) 22 June – 25 July		
1.	22 June- 27 June	Syllabus Pack
2.	29 June – 04 July	
3.	06 July – 11 July	
4.	13 July – 18 July	
5.	20 July - 25 July	
Block 2 (05 weeks) 27 July – 29 Aug		
6.	27 July – 01 Aug	Syllabus Pack
7.	03Aug – 08 Aug	
8.	10 Aug – 15 Aug	
9.	17 Aug – 22 Aug	
10.	24 Aug – 29 Aug	
Block 3 (05 weeks) 31 Aug – 03 Oct		
11.	31 Aug - 05 Sept	Syllabus Pack
12.	07 Sept – 12 Sept	
13.	14 Sept – 19 Sept	
14.	21 Sept – 26 Sept	
15.	28 Sept – 03 Oct	

Block 4 (05 weeks) 05 Oct – 07 Nov		
16.	05 Oct – 10 Oct	Syllabus Pack
17.	12 Oct – 17 Oct	
18.	19 Oct - 24 Oct	
19.	26 Oct - 31 Oct	
20.	02 Nov - 07 Nov	
21 & 22	09 Nov – 26 Nov	School Assessments for FBISE Admission (02 weeks & 4 days)
Block 5 (04 weeks + 2 days) 27 Nov – 24 Dec		
23.	27 Nov - 28 Nov	Syllabus Pack
24.	30 Nov – 05 Dec	
25.	07 Dec -12 Dec	
26.	14 Dec -19 Dec	
27.	21 Dec - 24 Dec	
Winter Break (10 days) From 25th of December 2020 to 3rd of January 2021		
Block 6 (03 weeks) 04 Jan – 23 Jan		
28.	04 Jan – 09 Jan	Syllabus Pack
29.	11 Jan – 16 Jan	
30.	18 Jan – 23 Jan	
Revision + Test Series (02 weeks) 25 Jan – 06 Feb		
31.	25 Jan – 30 Jan	Syllabus Pack
32.	01 Feb – 06 Feb	
Pre Boards Exams (3 weeks) 08 Feb – 25 Feb		
33.	08 Feb – 13 Feb	Syllabus Pack
34.	15 Feb – 20 Feb	
35.	22 Feb – 25 Feb	



APSACS SSC Syllabus Pack

Class X

Block 5 (Week 23-27)

**APSACS Syllabus Pack SSC X
Cold & Warm Region
2020-2021**

English

Resources	Timeline for Session 2020 - 2021														
<p>Prescribed Textbook</p> <ul style="list-style-type: none"> • English 10 (Punjab Textbook Board) • English Grammar and Composition, PTB, Lahore, 1st Edition March, 2020) <p>Authors: Prof. B.A Chisty Prof. Fazl-ur-Rehman Butt Abdul Qadeer Hashmi</p> <p>Resources:</p> <ul style="list-style-type: none"> • English Simple Grammar and Composition 10th Class (Federal Board) Author: Prof Zia-ur-Rahman Khan • High School English Grammar & Composition by Wren & Martin. Multicolour Edition 2016 Revised by Prasada Rao <p>Prescribed Notebook: Single-lined notebook (large) / Register</p>	<table border="1"> <thead> <tr> <th>Weeks / Days</th> <th>Class X</th> </tr> </thead> <tbody> <tr> <td>Time available</td> <td>34 wks</td> </tr> <tr> <td>Study Time</td> <td>27+ wks</td> </tr> <tr> <td>School Assessments</td> <td>02 weeks & 04 days</td> </tr> <tr> <td>Winter Break</td> <td>10 days</td> </tr> <tr> <td>Revision & Test Series</td> <td>02 wks</td> </tr> <tr> <td colspan="2">Federal Board Examination</td> </tr> </tbody> </table>	Weeks / Days	Class X	Time available	34 wks	Study Time	27+ wks	School Assessments	02 weeks & 04 days	Winter Break	10 days	Revision & Test Series	02 wks	Federal Board Examination	
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Winter Break	10 days														
Revision & Test Series	02 wks														
Federal Board Examination															

Revised Reduced syllabus for class X

Ministry of Federal Education & Professional Training has announced & uploaded reduced syllabus / content again on FBISE official Website for SSC Annual Examination 2021 on 14 October 2020. Schools must ensure that the revised syllabus content is well-taught & students are prepared to appear for Board Exams.

Unit #	Title	Contents /Exercises to be covered
1	Hazrat Muhammad (PBUH) an Embodiment of Justice	Glossary & Vocabulary (Ex-A & B) Reading Comprehension (A &C) Grammar: Concrete& Abstract Noun (Exercise A, B & C) Homework: Writing Skills Exercise(A&B)
2	Chinese New Year	Grammar – Collective Nouns Exercises – A
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 scrapes”
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
6	Television Vs News paper	Grammar – First Conditionals Exercises – C
7	Little by Little One Walks Far	Grammar - Indefinite Pronouns Exercises – A, B
8	Peace (Poem)	Grammar – Pronouns Exercises – A, B, C

Subject: English– X**Session (2020-2021)**

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
11	Great Expectations	Grammar - Narration Exercises – D
12	Population Growth and World Foods Supplies	Grammar - Subordinating Conjunctions – Adverb Clauses Exercises – A, B, C, D
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. **Verbs** (Gerund, Participles & Infinitive)
- v. **Narration** (Exercises from pages 173 -177, English Grammar and Composition, PTB, Lahore,1st Edition March, 2020)
- vi. **Prepositional / Phrasal Verbs** Sr#1-60 (Pages 159 –161, English Grammar and Composition, PTB, Lahore,1st Edition March, 2020)
- vii. **Comprehension Paragraphs** Verbs (Exercises 1-15 pages 38-45(from English Grammar and Composition, PTB, Lahore,1st 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. Only Reading Comprehension Ex of Unit No. 2,6,7,8, 11 & 12 are 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,1st Edition March, 2020.

Block 5: English Week 23

# of wks	Week Dates	Course Content Unit /Chapter/Topics
Week 23	26, 27 Nov	AFL (Discussion on Assessments)

Syllabus Pack Block 5 (week 23)

Week No.	Topics / Objectives	Study Guidelines	Resources
Week 23	AFL (Discussion on Recurring errors in School Assessments)		

2021-2020ء

ہنسیکیس سلپس پیک ایس ایس سی II

کوڈ اینڈ وارم ریجن

2021-2020

اردو

<p>ٹیکسٹ بک</p> <p>اردو (لازمی) برائے جماعت دہم</p> <p>ناشر: علمی کتاب خانہ کبیر سٹریٹ اردو بازار لاہور</p> <p>اردو قواعد و انشاء 9-10</p> <p>پنجاب ٹیکسٹ بک</p> <p>اردو نوٹ بک / رجسٹر</p>	جماعت دہم	ہفتے / دن
	35	کل دستیاب دورانیہ
	27	تدریسی دورانیہ
	03	اسسمنٹ کے ہفتے
	10 دن	تعطیلات موسم سرما
	2 ہفتے	دہرائی + ٹیسٹ سیریز
	03	پری بورڈ امتحانات
	فیڈرل بورڈ امتحان	

منتخب نصاب اُردو لازمی

شامل نصاب عنوانات برائے جماعت دہم

1. حمد (نظم) (مشق مکمل)
2. نعت (نظم)
3. نظریہ پاکستان
4. مجھے میرے دوستوں سے بچاؤ
5. ملمع
6. چغتل خور
7. نام دیومالی
8. علی بخش
9. میدان کربلا میں گرمی کی شدت
10. فاطمہ بنت عبد اللہ
11. حسرت موہانی (غزل)
12. جگر مراد آبادی (غزل)
13. قواعد و انشاء (مضمون نگاری، کہانی نویسی)

برطابق کتاب اُردو قواعد و انشاء نہم و دہم پنجاب ٹیکسٹ بک بورڈ لاہور۔
نوٹ: (مصنفین اور شعرا کے تعارف میں سے کوئی سوال نہیں بنایا جائے گا)

2020ء-2021ء

مضمون: اردو ہم
بلاک 5 اردو تیسواں ہفتہ

نصابی مواد موضوع: سبق / نظم / غزل کا نام	ہفتے / دن	ہفتے
AFL دون	۲۷ نومبر، ۲۸ نومبر	تیسواں ہفتہ

سلیبس پیک بلاک 5 (تیسواں ہفتہ)

ذرائع	طریقہ تدریس	موضوعات / مقاصد	ہفتہ نمبر
		<u>AFL (ASSESSMENT FOR LEARNING) Days</u> ملاحظہ کریں۔ AFL document میں موجود Syllabus Implementation Guide for Teachers	تیسواں ہفتہ

**APSACS Syllabus Pack SSC X
Cold & Warm Region
2020-2021**

Mathematics

Resources	Available Time															
<p>Prescribed Textbook Mathematics 10 (Science Group) by Ilmi Kitab Khana</p> <p>Authors: Muhammad Habib Ch Asghar Ali Prof. Abdul Rauf Khan Muhammad Moeen</p> <p>Resources: Mathematics 10 (Science Group) by Ilmi Kitab Khana</p> <p>Prescribed Notebook: Maths Single Line Notebook (Large)/Register</p>	<table border="1"> <thead> <tr> <th style="text-align: center;">Weeks / Days</th> <th style="text-align: center;">Class X</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Time available</td> <td style="text-align: center;">35 wks</td> </tr> <tr> <td style="text-align: center;">Study Time</td> <td style="text-align: center;">27 wks</td> </tr> <tr> <td style="text-align: center;">School Assessments</td> <td style="text-align: center;">03 weeks</td> </tr> <tr> <td style="text-align: center;">Winter Break</td> <td style="text-align: center;">10 days</td> </tr> <tr> <td style="text-align: center;">Revision & Test Series</td> <td style="text-align: center;">02 wks</td> </tr> <tr> <td colspan="2" style="text-align: center;">Federal Board Examination</td> </tr> </tbody> </table>		Weeks / Days	Class X	Time available	35 wks	Study Time	27 wks	School Assessments	03 weeks	Winter Break	10 days	Revision & Test Series	02 wks	Federal Board Examination	
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REVIEWED SYLLABUS MATHEMATICS SSC - II

Unit 1	Quadratic Equations
Ex. 1.1	Q1(iv, vi); Q2(i, iv, v); Q3(i, ii, iv, vi, vii, viii, ix);
Ex. 1.2	Q1(iii, iv, vii, viii, ix)
Ex. 1.3	Q2; Q4; Q5; Q7; Q9; Q10; Q13; Q14
Ex. 1.4	Q3; Q7; Q8; Q10; Q11
Miscellaneous Ex 1	Q1; Q2; Q3
Unit 2	Theory of Quadratic Equations
Ex. 2.1	Q1(i, iii); Q2(iii, iv); Q3; Q4(ii, iii); Q5; Q6; Q8(ii)
Ex. 2.2	Q1; Q2(ii, iv, vii, viii); Q3; Q5
Ex. 2.3	Q1(i, ii, iv); Q2(i); Q3(i); Q4(ii); Q5(ii, iii); Q6(i)
Ex. 2.4	Q1(ii, iii); Q2(iii, iv)
Ex. 2.5	Q1(c, g, h); Q2(a, c, d, e); Q3(a)
Ex. 2.6	Q1(ii, iii); Q2(ii); Q3(i); Q4(i, iii); Q5(i)
Ex. 2.7	Q1; Q3; Q4; Q5; Q6; Q9
Ex. 2.8	Q2; Q4; Q5; Q6; Q7
Miscellaneous Ex 2	Q1; Q3
Unit 3	Variations
Ex. 3.1	Q1(iii, iv); Q2(i, ii); Q3; Q4; Q6; Q9; Q11(iii, iv)
Ex. 3.2	Q1(i, iii); Q3; Q6; Q7; Q8; Q9
Ex. 3.3	Q1(iii, iv, vi); Q2(ii, iv, v); Q3(iii, iv); Q4(ii, iii)
Ex. 3.4	Q1(i, iv, v, vii); Q2(iii, v, vi, viii, ix)
Ex. 3.5	Q2; Q3; Q5; Q6
Ex. 3.6	Q1(ii, iii, iv, vi); Q2(i, ii)
Ex. 3.7	Q1; Q2; Q6; Q7; Q8
Miscellaneous Ex 3	Q1; Q3
Unit 4	Partial Fractions
Ex. 4.1	Q2; Q3; Q4; Q7; Q8
Ex. 4.2	Q1; Q2; Q4; Q7
Ex. 4.3	Q1; Q4; Q6; Q8

Ex. 4.4	Q1; Q2; Q3
Miscellaneous Ex 4	Q1
Unit 5	Sets and Functions
Ex. 5.1	Q2(i, iv); Q3(i, iii, v); Q4(i, ii, iii, iv); Q5(i)
Ex. 5.2	Q1(ii, iii); Q2; Q3; Q4(i)
Ex. 5.3	Q1(i, v, vi); Q3; Q4(i, iii, iv, v)
Ex. 5.4	Q2; Q3(ii, iii); Q4; Q5(ii, iii)
Ex. 5.5	Q1; Q2; Q4; Q5; Q6(vii, viii)
Miscellaneous Ex 5	Q1; Q2; Q3
Unit 6	Basic Statistics
Ex. 6.1	Q1; Q2; Q4; Q5
Ex. 6.2	Q3; Q6; Q7; Q9; Q10; Q12; Q13
Ex. 6.3	Q4; Q5; Q6; Q7
Miscellaneous Ex 6	Q1
Unit 7	Introduction to Trigonometry
Ex. 7.1	Q1(ii, iii, vi, viii); Q2(i, ii); Q3(ii, v); Q4(ii, iv, v, vii); Q5(ii, v, vii)
Ex. 7.2	Q1(ii); Q2(ii); Q3(ii); Q5; Q10; Q13
Ex. 7.3	Q1(ii, iv); Q2(ii, iv); Q3(ii, iii); Q7; Q8; Q9; Q10; Q12(ii, iii, v, vii, ix, xi)
Ex. 7.4	Q8; Q9; Q11; Q12; Q13; Q16; Q17; Q18; Q20; Q21; Q23; Q24
Ex. 7.5	Q5; Q6; Q7; Q8; Q9; Q10; Q12
Miscellaneous Ex 7	Q1; Q3
Unit 8	Projection of a side of a Triangle
Ex. 8.1	Q1
Ex. 8.2	Q2; Q3
Theorems	Theorem 1; Theorem 2
Miscellaneous Ex 8	Q4; Q6; Q8; Q10
Unit 9	Chords of a Circle
Ex. 9.1	Q3; Q4
Ex. 9.2	Q2; Q3
Theorems	Theorem 1; Theorem 2; Theorem 4
Miscellaneous Ex 9	Q1; Q2

Unit 10	Tangent to a Circle
Ex. 10.1	Q1
Ex. 10.2	Q1; Q2
Theorems	Theorem 3; Theorem 4(A); Theorem 4(B)
Miscellaneous Ex 10	Q1
Unit 11	Chords and Arcs
Ex. 11.1	Q1; Q2;
Theorems	Theorem 1; Theorem 3; Theorem 4
Miscellaneous Ex 11	Q1
Unit 12	Angle in a Segment of Circle
Theorems	Theorem 1; Theorem 3
Miscellaneous Ex 12	Q1
Unit 13	Practical Geometry- Circle
Ex. 13.1	Q3(ii); Q5; Q6
Ex. 13.2	Q1; Q2; Q3; Q6; Q7
Ex. 13.3	Q1; Q2; Q3; Q5; Q6; Q9
Miscellaneous Ex 13	Q1; Q2; Q3

NOTE:

- All Class work will be given for revision asH.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 mathematicsteacher.

Block 5: Mathematics Week 23

Wks	Time line	Course Content Unit /Chapter/Topics
Week 23	Nov 27 – Nov 28	AFL (Discussion on Assessments)

Syllabus Pack Block 5 (week 23)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 23	AFL (Discussion on Assessments)		

Session (2020-2021)
APSACS Syllabus Pack SSC X
Cold & Warm Region
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Physics

Resources	Available Time															
<p>Prescribed Textbook Physics 10, Malik Sirajuddin & Sons, Lahore</p> <p>Authors: Dr. Azmat Iqbal Dr. Ghulam Murtaza</p> <p>Prescribed Notebook: Single Lined Notebook (Large)/Register Practical Notebook</p>	<table border="1"> <thead> <tr> <th style="text-align: center;">Weeks / Days</th> <th style="text-align: center;">Class X</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Time available</td> <td style="text-align: center;">34 wks</td> </tr> <tr> <td style="text-align: center;">Study Time</td> <td style="text-align: center;">27+ wks</td> </tr> <tr> <td style="text-align: center;">School Assessments</td> <td style="text-align: center;">02 weeks & 04 days</td> </tr> <tr> <td style="text-align: center;">Winter Break</td> <td style="text-align: center;">10 days</td> </tr> <tr> <td style="text-align: center;">Revision & Test Series</td> <td style="text-align: center;">02 wks</td> </tr> <tr> <td colspan="2" style="text-align: center;">Federal Board Examination</td> </tr> </tbody> </table>		Weeks / Days	Class X	Time available	34 wks	Study Time	27+ wks	School Assessments	02 weeks & 04 days	Winter Break	10 days	Revision & Test Series	02 wks	Federal Board Examination	
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PHYSICS SSC-II
Reduced Syllabus

NOTE:

- All conceptual questions and side information are excluded.
- Only topic based related MCQs, Short and Long Questions and numerical are included.

UNIT 10 SIMPLE HARMONIC MOTION AND WAVES

- 10.1 Simple Harmonic Motion (Mass Attached with spring, Motion of simple Pendulum only)
- 10.3 Wave Motion
- 10.4 Types of mechanical waves

UNIT 11 SOUND

- 11.1 Sound Waves
 - 11.2 Characteristic of sound (Loudness, pitch, quality, intensity, intensity level)
 - 11.3 Reflection of sound (Echo)
 - 11.4 Speed of sound (Measuring speed of sound by Echo Method is excluded)
 - 11.7 Audible frequency range
 - 11.8 Ultrasound
- (Tables: 11.1, 11.2 are included)

UNIT 12 GEOMETRICAL OPTICS

All theory topics from 12.1 -12.10

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

Subject: Physics– X

Session (2020-2021)

UNIT14 CURRENT ELECTRICITY

All theory topics from 14.1-14.11

UNIT15 ELECTROMAGNETISM

- 15.1 Magnetism effects of steady current
- 15.5 electromagnetic induction
- 15.6 Direction of induced emf, Lenz's law
- 15.8 Mutual induction
- 15.9 Transformer

UNIT16 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 All Logic gates

UNIT18 ATOMIC AND NUCLEAR PHYSICS

18.1-18.9 (all theory topics)

PHYSICS – SSC

LIST OF PRACTICALS

SECTION-B

1. To study the effect of the length of simple pendulum on its time period and hence find "g" by calculation.
2. To verify the laws of refraction by using a glass slab.
3. To find the refractive index of water by using a concave mirror.
4. To trace the path of a ray of light through a glass prism and measure the angle of deviation.
5. To verify the truth table of OR, AND, NOT, NOR and NAND gates.

Subject: Physics– X

Session (2020-2021)

Block 5: Physics Week 23

Wks	Time line	Course Content Unit /Chapter/Topics
Week 23	Nov 27 – Nov 28	AFL (Discussion on Assessments)

Syllabus Pack Block 5 (week 23)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 23	AFL (Discussion on Assessments)		

**APSACS Syllabus Pack SSC X
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2020-2021**

Chemistry

Resources	Available Time												
<p>Prescribed Textbook</p> <ul style="list-style-type: none"> • Textbook of Chemistry Grade 10 National Book Foundation As Federal Textbook Board- Islamabad • Practical Notebook Chemistry Class 10 <p>Prescribed Notebook: Single-lined notebook (large)/Register</p>	<table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th style="text-align: center;">Weeks / Days</th> <th style="text-align: center;">Class X</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Time available</td> <td style="text-align: center;">34wks</td> </tr> <tr> <td style="text-align: center;">Study Time</td> <td style="text-align: center;">26wks</td> </tr> <tr> <td style="text-align: center;">School Assessments</td> <td style="text-align: center;">03 wks</td> </tr> <tr> <td style="text-align: center;">Syllabus completion + Revision + Test Series</td> <td style="text-align: center;">02 wks</td> </tr> <tr> <td style="text-align: center;">Pre Board Exams</td> <td style="text-align: center;">03 wks</td> </tr> </tbody> </table>	Weeks / Days	Class X	Time available	34wks	Study Time	26wks	School Assessments	03 wks	Syllabus completion + Revision + Test Series	02 wks	Pre Board Exams	03 wks
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Pre Board Exams	03 wks												

**Reduced Syllabus
Chemistry SSC–II**

NOTE: Side Boxes like (Society, Technology and Science, Do you know, Science, Tit Bits are excluded from the syllabus, it is obvious that the topic which are excluded questions relevant in the exercises are omitted.

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.

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

Chapter 10: Acid, Bases, and salt

Concept of Acid and bases, Arrhenius, Lowry and Bronsted-Lowery, Lewis concept of acid and bases, pH scale, Salts, Uses of salts.

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

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 (complete topic).

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

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.

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

Chapter 13: Biochemistry

Carbohydrates and its types, sources and uses of carbohydrates, nucleic acid, DNA, RNA, Vitamin and Types of Vitamin.

Subject: Chemistry– X

Session (2020-2021)

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

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.

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

Chapter 15 Environmental Chemistry II Water

Topics: Soft and Hard water, Types of soft and hard water, Methods of removing hardness Of water, Water borne diseases.

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

Chapter 16 Chemical Industries

Topics: Basic metallurgical operation, Solvay process, Urea, Fractional distillation of petroleum.

Note: Topic related self-assessments, review exercise and think tank questions are included. Side boxes and Society, science and technology are not included.

NOTE:

- **It is obvious that questions of topics not mentioned above are not included in exam.**
- **Paper will be curriculum based not book based.**

REVIEWED LIST OF PRACTICALS

CHEMISTRY-SSC

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**

Electrochemistry

Demonstrate the conductivity of different given solutions. **Minor**

Chemical Reactivity

Subject: Chemistry– X

Session (2020-2021)

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 soluteion 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 Chloride 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**

Block 5: Chemistry Week 23

Wks	Time line	Course Content Unit /Chapter/Topics
Week 23	Nov 27-Nov 28	• AFL

Syllabus Pack Block 5 (week 23)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 23	AFL <u>Objectives</u> Students will be able to <ul style="list-style-type: none"> identify their mistakes in papers and do corrections in their Notebooks as per requirement 	<u>Explanation and Discussion:</u> <ul style="list-style-type: none"> AFL to be carried out. Questions of the Paper and students' answers to be discussed and corrections to be done by students in their Notebooks as per teacher's instructions. 	<ul style="list-style-type: none"> Textbook of Chemistry Grade 10 National Book Foundation as Federal Textbook Board- Islamabad

**APSACS Syllabus Pack SSC X
Cold & Warm Region
2020-2021**

Biology

Resources	Available Time																
<p>Prescribed Textbook</p> <p>Biology 10 PLD Publishers, Lahore</p> <p>Practical Notebook Biology Class 10</p> <p>Prescribed Notebook: Single-lined notebook (large)/Register</p>	<table border="1"> <thead> <tr> <th data-bbox="1220 536 1536 571">Weeks / Days</th> <th data-bbox="1536 536 1720 571">Class X</th> </tr> </thead> <tbody> <tr> <td data-bbox="1220 571 1536 608">Time available</td> <td data-bbox="1536 571 1720 608">34 wks</td> </tr> <tr> <td data-bbox="1220 608 1536 644">Study Time</td> <td data-bbox="1536 608 1720 644">27wks</td> </tr> <tr> <td data-bbox="1220 644 1536 719">School Assessments</td> <td data-bbox="1536 644 1720 719">03 wks</td> </tr> <tr> <td data-bbox="1220 719 1536 756">Winter Break</td> <td data-bbox="1536 719 1720 756">10 days</td> </tr> <tr> <td data-bbox="1220 756 1536 903">Syllabus completion + Revision + Test Series</td> <td data-bbox="1536 756 1720 903">02 wks</td> </tr> <tr> <td data-bbox="1220 903 1536 940">Pre board Exams</td> <td data-bbox="1536 903 1720 940">03 wks</td> </tr> <tr> <td data-bbox="1220 940 1536 976"></td> <td data-bbox="1536 940 1720 976"></td> </tr> </tbody> </table>	Weeks / Days	Class X	Time available	34 wks	Study Time	27wks	School Assessments	03 wks	Winter Break	10 days	Syllabus completion + Revision + Test Series	02 wks	Pre board Exams	03 wks		
	Weeks / Days	Class X															
	Time available	34 wks															
	Study Time	27wks															
	School Assessments	03 wks															
	Winter Break	10 days															
	Syllabus completion + Revision + Test Series	02 wks															
	Pre board Exams	03 wks															

**REDUCED SYLLABUS
BIOLOGY SSC-II**

NOTE:

1. Only topic based relevant MCQs, Short and Long Questions are included.
2. All information in side boxes is excluded.

Ch. #	Chapter Name	Topics Included
10	Gaseous Exchange	Gaseous Exchange in Plants (page 2-3) Gaseous Exchange in Humans (4-6) The Lungs (6) Mechanism of Breathing (7)
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)
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)
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)

Subject: Biology– X**Session (2020-2021)**

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)
15	Inheritance	Introduction to Genetics (94) Chromosome and Genes (94-98) Mendel's Laws of Inheritance (90-101)
16	Man and His Environment	Components of Ecosystem (114) Biogeochemical Cycles (119-121) Interactions in Ecosystems (122-125)
17	Biotechnology	Introduction to Biotechnology (138) Fermentation (139-140) Genetic Engineering (144-147)
18	Pharmacology	Medicinal Drugs (150-151) Antibiotics and Vaccines (155-156)

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 amoeba 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 plan

Block 5: Biology Week 23

Wks	Time line	Course Content Unit /Chapter/Topics
Week 23	Nov 27-Nov 28	<ul style="list-style-type: none"> AFL

Syllabus Pack Block 5 (week 23)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 23	AFL <u>Objectives</u> Students will be able to <ul style="list-style-type: none"> identify their mistakes in papers and do corrections in their notebooks 	<u>Explanation and Discussion:</u> <ul style="list-style-type: none"> AFL to be carried out. Question of the Papers and students' answers to be discussed and corrections to be done by students in their Notebooks as per teacher's instructions. 	<ul style="list-style-type: none"> Biology 10 PLD Publishers, Lahore Board Marker

**APSACS Syllabus Pack SSC X
Cold & Warm Region
2020-2021**

Computer Science

Resources	Available Time															
<p>Prescribed Textbook A Text book of Computer Science Grade-10 National Book Foundation as Federal Textbook Board Islamabad</p> <p>Authors: Muhammad Sajjad Haider MS (Computer Science), , USA, BE(Mechanical Engineering), Korea Muhammad Khalid MS (Computer Science), B.Ed , University of Peshawar ,Pakistan</p> <p>Resources:</p> <ul style="list-style-type: none"> • Text book of Computer Science Grade-10 National Book Foundation as Federal Textbook Board Islamabad • Star Practical Notebook for Class X Prescribed <p>Notebook:</p> <ul style="list-style-type: none"> • Single-lined notebook (large) 	<table border="1"> <thead> <tr> <th style="text-align: center;">Weeks / Days</th> <th style="text-align: center;">Class X</th> </tr> </thead> <tbody> <tr> <td style="text-align: center;">Total available</td> <td style="text-align: center;">34 wks</td> </tr> <tr> <td style="text-align: center;">Study Time</td> <td style="text-align: center;">27 wks</td> </tr> <tr> <td style="text-align: center;">School Assessments</td> <td style="text-align: center;">03 wks</td> </tr> <tr> <td style="text-align: center;">Revision + Test Series</td> <td style="text-align: center;">02 wks</td> </tr> <tr> <td style="text-align: center;">Pre Board Exam</td> <td style="text-align: center;">03 wks</td> </tr> <tr> <td colspan="2" style="text-align: center;">Federal Board Examination</td> </tr> </tbody> </table>		Weeks / Days	Class X	Total available	34 wks	Study Time	27 wks	School Assessments	03 wks	Revision + Test Series	02 wks	Pre Board Exam	03 wks	Federal Board Examination	
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School Assessments	03 wks															
Revision + Test Series	02 wks															
Pre Board Exam	03 wks															
Federal Board Examination																

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

Block 5: Computer Science Week 23

Wks	Time line	Course Content Unit /Chapter/Topics
Week 23	Nov 27- Nov 28 (AFL)	(Discussion on Assessments)

Syllabus Pack Block 5 (week 23)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 23 (AFL)	– (Discussion on Assessments)		

2020ء-2021ء

ہیسیکس سلیمس پیک ایس ایس سی X

کولڈ + وارم ریجن

2020ء-2021ء

اسلامیات

دورانیہ		ذرائع
		<u>درسی کتاب:</u>
35	کل ہفتے	اسلامیات لازمی (۹-۱۰) پنجاب ٹیکسٹ بک بورڈ لاہور
27+	تدریسی ہفتے	(وفاقی وزارت تعلیم سے منظور شدہ)
03	سکول اسمنٹس	<u>ذرائع:</u>
02	دہرائی + ٹیسٹ سیریز	• قرآن مجید مع ترجمہ
پری بورڈ		• تفسیر قرآن
بورڈ امتحانات		• سورۃ الاحزاب کی تلاوت پر مشتمل سی ڈی / انٹرنیٹ
		رجسٹر: ۰۱

☆ ایف بی آئی ایس ای (FBISE) کے تحت ایس ایس سی امتحانات ۲۰۲۱ء کے لئے کم کیا گیا نصاب:

وفاقی وزارت تعلیم نے 14 اکتوبر ۲۰۲۰ء کو FBISE کی آفیشل ویب سائٹ پر، ایس ایس سی کے سالانہ بورڈ امتحانات کے لئے کم کیا گیا نصاب / سلیمس اپ لوڈ کیا ہے۔ لہذا اسکولز اس بات کو یقینی بنائیں کہ درج ذیل نصابی مواد طلباء کو اچھی طرح پڑھایا جائے تاکہ بورڈ کے امتحانات کے لئے طلباء کی تیاری مکمل ہو سکے۔

اسلامیات (لازمی) جماعت دہم

الجزء الاول: من هدى القرآن :

1- سورة الاحزاب آيات 1- 34

2- سورة الممتحنة آيات 1-6

(بما حاوره ترجمه، الكلمات والتراكيب بشمول التمارين كمل)

الجزء الثانى : من هدى الحديث :

1- ترجمه احاديث نمبر 11 – 20

2- تشریح و عملی زندگی سے تعلق احاديث نمبر 11-15

الجزء الثالث: موضوعاتى مطالعه :

1- طهارت اور جسمانى صفائى

2- عائلى زندگى كى اهميت

3- هجرت و جهاد

نوٹ: مذکورہ بالا تینوں موضوعات کے تمام مشقی سوالات شامل ہیں۔

بلاک-5 (اسلامیات) تیسواں ہفتہ

نصابی مواد باب / سبق / موضوعات	ٹائم لائن	ہفتہ نمبر / وقت
	اے ایف ایل (اسسٹنس پر تبادلہ خیال)	تیسواں ہفتہ
		27 نومبر – 28 نومبر

سلیبس پیکلاک-5 (تیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات / مقاصد	ہفتہ نمبر / تدریسی گھنٹے
<u>AFL (ASSESSMENT FOR LEARNING) Days</u>			تیسواں ہفتہ
• ملاحظہ کریں۔ AFL document میں موجود Syllabus Implementation Guide for Teachers			

2021-2020ء

ہنسیکیس سلیمس پیک ایس ایس سی II

کولڈ + وارم ریجن

2021-2020ء

اخلاقیات

دورانیہ		ذرائع
35	کل ہفتے	<p>درسی کتاب:</p> <p>اخلاقیات (9-10) پنجاب ٹیکسٹ بک بورڈ لاہور۔</p> <p>رجسٹر: ۱- بڑا (Large)/نوٹ بک</p>
27	تدریسی ہفتے	
03	اسیسٹنٹ کے ہفتے	
10 دن	تعطیلات موسم سرما	
02	دہرائی + ٹیسٹ سیریز	
03	پری بورڈ امتحانات	
فیڈرل بورڈ امتحانات		

☆ ایف بی آئی ایس ای (FBISE) کے تحت ایس ایس سی امتحانات ۲۰۲۱ء کے لئے کم کیا گیا نصاب:

کی آفیشل ویب سائٹ پر، ایس ایس سی کے سالانہ بورڈ امتحانات کے لئے کم کیا گیا نصاب / سلیمس اپ لوڈ کیا ہے۔ لہذا اسکولز اس بات کو FBISE وفاقی وزارتِ تعلیم نے ۱۴ اکتوبر ۲۰۲۰ء کو یقینی بنائیں کہ درج ذیل نصابی مواد طلباء کو اچھی طرح پڑھا یا جائے تاکہ بورڈ کے امتحانات کے لئے طلباء کی تیاری مکمل ہو سکے۔

REDUCED SYLLABUS
ETHICS (For non-muslims)
For Class-X (50 Marks)

1. INTRODUCTION TO RELIGIONS

- The role of religion in resolving crisis
- The concepts of sin and crime

2. WORLD RELIGIONS

- Mahavira
 - o His life
 - o Basic teachings

3. ETHICS AND VALUES

- Concepts of piety, mercy, compassion, clemency, honesty and righteousness in main religions of the world
- Concept of accountability and its influence on human character

5. PERSONALITIES

- Aristotle and his theory of ethics
- Kant and his theory of ethics
- Sri Arubindu

2020ء-2021ء

مضمون: اخلاقیات (دہم)
بلاک-5 (اخلاقیات) تیسواں ہفتہ

نصابی مواد باب / سبق / موضوعات	ہفتے / دن	ہفتہ
اے۔ ایف۔ ایل	نومبر 27- نومبر 28	تیسواں ہفتہ (2 دن)

سلیبس پیکلاک-5 (تیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات / مقاصد	ہفتہ نمبر
	اے۔ ایف۔ ایل		تیسواں ہفتہ (2 دن)

**APSACS Syllabus Pack SSC X
Cold & Warm Region
2020-2021**

Pakistan Studies

Resources	AvailableTime	
<p>Prescribed Textbooks: Pakistan Studies 10 by; Professor (Rtd.) Aftab Ahmad Dar</p> <p>Resources: Pakistan Studies for Class X (Punjab Textbook Board, Lahore)</p> <p>Notebooks Prescribed: Single lined Notebook (large):1</p>	Class X	
	Timeline	Weeks / Days
	Total available time	34 wks
	Study Time	28 + wks
	School Assessments	09 days
	Winter Break	10 Days
	Revision + Test Series	02 wks
	Federal Board Examination	

PAKISTAN STUDIES SSC-II
Reduced Syllabus by FBISE (Topics to be taught)

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***
- ***The course content of Pakistan Studies was completed in Study Pack 4 now revision of chapter 1 and Chapter 2 will continue in Study Pack 5.***

Block 5: Pakistan Studies Week 23

# of wks	Time line	Course Content Unit /Chapter / Topics
Week 23	Nov27,28 (02 days)	AFL : These two days will be utilized to review and analyse the commonly reoccurring mistakes in papers of School Assessments for FBISE Admission

Block 5: English Week 24

# of wks	Week Dates	Course Content Unit /Chapter/Topics
Week 24	27 Nov – 05 Oct	Unit 11: Grammar <ul style="list-style-type: none"> • Past Perfect Tense • Direct and Indirect Speech • Active and Passive Voice

Syllabus Pack Block 5 (week24)

Week No	Topics / Objectives	Study Guidelines	Resources
Week 24	Unit 11: Great Expectations <u>Grammar</u> 1. Past Perfect Tense 2. Direct and Indirect Speech 3. Active and Passive Voice Students will be able to: <ul style="list-style-type: none"> • Practice making sentences in Past Indefinite and Past Continuous & Past Perfect Continuous Tense • fill in the blanks with verbs in Past Perfect Tense • apply rules to change the narration • change passive voice into active voice 	<ul style="list-style-type: none"> • Recapitulate students' previous knowledge of Past Indefinite, Past Continuous and Past perfect Continuous Tense. Ask them to illustrate the rules and functions of these tenses. Encourage them to relate these tenses to everyday situations. • Refer textbook pg 135 for the sentence structure, use, interrogative & negative sentences, followed by Grammar Ex A, B pgs 134, 135 (textbook work) • Recall rules to change the narration of statements, requests, orders and questions. • Students to read the situations under each picture & write a pair of dialogues in direct speech between characters. • Students to share the conversation between the characters. • Ex C & D pgs 136, 137 to be done in notebooks. • Similarly revise rules to change passive voice into active voice & vice versa. • Written Work to be done in notebooks after • Ex E to be done in notebooks after board work. • Topic related Worksheet may be prepared for reinforcement of concepts. 	Eng-10 Textbook Pgs 134-138

ذرائع	طریقہ تدریس	موضوعات/مقاصد	ہفتہ نمبر
	<ul style="list-style-type: none"> • نثر پارے کی تشریح کا طریقہ سبق مرزا محمد سعید میں بتا دیا گیا ہے۔ • اسی طریقے کو مد نظر رکھ کر کسی ایک پیرا گراف کی تشریح کریں۔ 		
☆ اردو (لازمی) برائے جماعت دہم ☆ صفحہ نمبر ۵۸ ☆ بورڈ مارکر	☆ افسانہ فرضی کہانی کو کہتے ہیں۔ ☆ طلباء صفحہ نمبر ۵۸ پر دی گئی افسانہ کی تعریف کو پڑھیں اور یاد کریں۔	دہرائی افسانہ طلباء اس قابل ہوں گے کہ: ۱۔ افسانہ کا اعادہ کر سکیں۔	
☆ اردو (لازمی) برائے جماعت دہم ☆ صفحہ نمبر ۵۸ ☆ بورڈ مارکر	☆ طلباء گذشتہ جماعتوں میں مکالمہ نویسی کے اصول و ضوابط پڑھ چکے ہیں انہیں اصول و ضوابط کو مد نظر رکھ کر طلباء دیے گئے موضوع پر مکالمہ تحریر کریں ☆ دو دوستوں کے درمیان " دوستی " کے موضوع پر مکالمہ تحریر کریں	مکالمہ نگاری طلباء اس قابل ہوں گے کہ ۱۔ دیے گئے موضوع پر مکالمہ لکھ سکیں۔	

Block 5: Mathematics Week 24

Wks	Time line	Course Content Unit /Chapter/Topics
Week 24	Nov 30 – Dec 05	Unit 7 Introduction to Trigonometry 7.3 Trigonometric Ratios

Syllabus Pack Block 5 (week 24)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 24	Unit 7 Introduction to Trigonometry 7.3 Trigonometric Ratios 7.3 (i-a) General angles (Coterminal angles) 7.3 (i-b) Angle in Standard position 7.3(ii) The quadrants and Quadrantal Angles 7.3 (iii) Trigonometric ratios and their reciprocals with the help of a unit circle 7.3 (iv) The values of Trigonometric ratio for $45^\circ, 30^\circ, 60^\circ$ 7.3 (v) Signs of trigonometric ratios in different quadrants 7.3(vi) Values of remaining ratios if one trigonometric ratio is given 7.3(vii) Calculate the	<p>Note: Since this topic is critical and interrelated, the theory topics and their examples must be discussed but more emphasis will be paid to the topics which link with the included questions in the reduced syllabus from the FBISE.</p> <p><u>7.3 Trigonometric Ratios:</u> Pgs 153-163</p> <ul style="list-style-type: none"> Recall the previous knowledge of students about angle and its types i.e. acute, obtuse, right and complementary angles. <p><u>(i-a) General Angles (Coterminal Angles)</u></p> <ul style="list-style-type: none"> Introduce the concept of general/coterminal angles with relevant examples and discuss its general form with board illustrations. <p><u>(i-b) Angle in Standard Position</u></p> <ul style="list-style-type: none"> Discuss the standard position of an angle. Let the students solve relevant questions from Ex 7.3. <p><u>(ii) The Quadrants and Quadrantal Angles</u></p> <ul style="list-style-type: none"> Explain and illustrate the quadrants and quadrantal angles with the help of examples. Let the students solve relevant questions from Ex 7.3. <p><u>(iii) Trigonometric ratios and their reciprocals with the help of a unit circle</u></p> <ul style="list-style-type: none"> Students have been introduced to trigonometric ratios in Physics VIII briefly. Ask relevant questions to assess 	<ul style="list-style-type: none"> Mathematics 10 Textbook Laptop / Tab / Smart Phone Watch relevant videos on www.sabaq.pk

Week No	Topic/ Objectives	Study Guidelines	Resources
	<p>values ratios for 0°, 90°, 180°, 270°, 360°. Exercise 7.3 Q1(ii, iv); Q2(ii, iv); Q3(ii, iii); Q7; Q8; Q9; Q10; Q12(ii, iii, v, vii, ix, xi)</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • define and identify general (coterminal) angles • define and identify angles in standard position • recognize quadrants and quadrantal angles • define trigonometric ratios and their reciprocals with the help of a unit circle • find values of trigonometric ratios for 30°, 45°, 60° • recognize signs of trigonometric ratios in different quadrants • determine the values of remaining trigonometric ratios if one trigonometric ratio is given • calculate the values of trigonometric ratios for 0°, 90°, 180°, 270°, 360° 	<p>their previous learning.</p> <ul style="list-style-type: none"> • Introduce the trigonometric ratios and describe the steps of finding the values of trigonometric ratios • Describe the method how to find the values of trigonometric ratios if one trigonometric ratio is given. • Discuss example given on page 156. <p><u>(iv) The values of trigonometric ratio for 45°, 30° and 60° (Cases I&II)</u></p> <ul style="list-style-type: none"> • Describe the steps of finding the values of trigonometric ratio for 45°, 30° and 60° one by one. <p><u>(v) Signs of trigonometric ratios in different quadrants</u></p> <ul style="list-style-type: none"> • Discuss signs of trigonometric ratios in different quadrants. <p><u>(vi) Values of remaining trigonometric ratios if one trigonometric ratio is given</u></p> <ul style="list-style-type: none"> • Describe the steps of finding the values of remaining trigonometric ratios if one trigonometric ratio is given. • Discuss the examples given on page 159. <p><u>(vii) The values of trigonometric ratio for 0°, 90°, 180°, 270°, 360° (Cases I-V)</u></p> <ul style="list-style-type: none"> • Describe the steps of finding the values of trigonometric ratio for 0°, 90°, 180°, 270° and 360° one by one. • Discuss the example given on page 161. • Ask students to do Q1(ii, iv); Q2(ii, iv); Q3(ii, iii); Q7; Q8; Q9; Q10; Q12(ii, iii, v, vii, ix, xi) of exercise 7.3. • Give some questions to the students as H.W for practice. 	

Block 5: Physics Week 24

Wks	Time line	Course Content Unit /Chapter/Topics
Week 24	Nov 30 – Dec 05	CHAPTER 18 ATOMIC AND NUCLEAR PHYSICS 18.1 ATOM AND ATOMIC NUCLEUS 18.2 NATURAL RADIOACTIVITY 18.3 BACKGROUND RADIATIONS

Syllabus Pack Block 5 (week 24)

Week	Topic/ Objectives	Study Guidelines	Resources
Week 24	CHAPTER 18 ATOMIC AND NUCLEAR PHYSICS 18.1 ATOM AND ATOMIC NUCLEUS Example 18.1 <ul style="list-style-type: none"> Isotopes 18.2 NATURAL RADIOACTIVITY 18.3 BACKGROUND RADIATIONS Review Questions 18.1, 18.2 and 18.9 Students will be able to: <ul style="list-style-type: none"> describe and draw the structure of an atom differentiate between 	Possible Teaching Methods <ul style="list-style-type: none"> Concept Teaching Lecture Method Demonstration Method Explanation & Discussion (pg 180-183, 196 & 197) <ul style="list-style-type: none"> Recap atomic structure. Atom and atomic nucleus: Symbolic representation (Concept Teaching/ Graphic Organizer). <ul style="list-style-type: none"> ➤ Atomic structure ➤ Atomic number, neutron number and atomic mass ➤ Example 18.1 ➤ Isotopes Natural radioactivity: Introduce to the historic discovery of the radioactive phenomenon, experiment shown in Fig.18.3 (Concept Teaching/ Graphic Organizer). Background radiations: definition, sources (Concept Teaching/ Graphic Organizer) Discuss review questions 18.1, 18.2 and 18.9 with 	<ul style="list-style-type: none"> Textbook (X) pgs 183-186, 196 & 197 Practical Note Book 9th& 10th Marker Board Available A/V aids

Week	Topic/ Objectives	Study Guidelines	Resources
	<p>atomic number, neutron number and mass number</p> <ul style="list-style-type: none">• represent nuclides by using symbols• define and explain isotopes• explain the phenomenon of radioactivity• identify the type of radiation theoretically by analyzing its path in the magnetic field• describe the sources of radiations	the students.	

Block 5: Chemistry Week 24

Wks	Time line	Course Content Unit /Chapter/Topics
Week 24	Nov 30- Dec 05	Chapter 16 <u>Chemical Industries</u> <ul style="list-style-type: none"> • Basic Metallurgical Operations • Extraction of Metals • Review Questions

Syllabus Pack Block 5 (week 24)

Week	Topic/ Objectives	Study Guidelines	Resources
Week 24	Chapter 16: <u>Chemical Industries</u> <ul style="list-style-type: none"> • Introduction (Reading) • Table 16.1 ➤ 16.1: Basic Metallurgical Operations ➤ 16.1.1: <ul style="list-style-type: none"> • Concentration • Magnetic Separation • Cyclone Separation • Flotation Process ➤ 16.1.2: Extraction of Metals <ul style="list-style-type: none"> • Roasting • Smelting • Refining or Purification of metals ❖ Electro-refining ❖ Distillation 	<u>Explanation and Discussion:</u> <ul style="list-style-type: none"> • Explanation of definition of metallurgy and all related terms • Explanation of importance of metallurgy in science & daily life • Explanation of different metallurgical operations • Discussion on main step involved in metallurgy • Explanation of definition of concentration and its different methods • Explanation of importance and need of concentration in metallurgical process • Differentiation between smelting and roasting • Explanation of bessemerization process • Description of process of refining / purification of metals through electro refining & distillation • Group discussion to reinforce the concepts that have been learnt. <u>Reference Links:</u> https://en.wikipedia.org/wiki/Metallurgy	<ul style="list-style-type: none"> • Textbook of Chemistry Grade 10 National Book Foundation as Federal Textbook Board-Islamabad • Laptop / Tab / Smart Phone / internet • Board • Marker • Available A/V Aids • reliable websites for relevant information

Week	Topic/ Objectives	Study Guidelines	Resources
	<ul style="list-style-type: none"> • Self-Assessment Exercise 16.1 • Review Questions <p>Objectives: At the end of lesson students will be able to:</p> <ul style="list-style-type: none"> • define and describe metallurgical operations • indicate the importance of metals in our daily life • identify some important ores and their chemical formulae • explain different steps involved in metallurgy • differentiate between roasting and smelting • describe the extraction procedure in detail • explain purification of metals through electro refining and distillation • do the Self-Assessment Exercise independently • solve relevant questions from the exercise independently 	<p>chemistrydesk.blogspot.com/2011/08/metallurgical-operations.html https://www.chemguide.co.uk/inorganic/extraction/introduction.html</p> <p>Written work: Topic related objectives & subjective questions. The students must do the written work to practice writing answers in a precise and required way.</p>	

Block 5: Biology Week 24

Wks	Time line	Course Content Unit /Chapter/Topics
Week 24	Nov 30- Dec 05	Chapter 18: Pharmacology <ul style="list-style-type: none"> • Medicinal drugs • Antibiotics and vaccines • Antibiotics Resistance • Vaccines • The Mode of action of Vaccines • Exercise

Syllabus Pack Block 5 (week 24)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 24	Chapter 18: Pharmacology <ul style="list-style-type: none"> • Introduction • Medicinal drugs • Antibiotics and vaccines • Antibiotics Resistance • Vaccines • The Mode of action of Vaccines • Exercise Objectives: Students will be able to <ul style="list-style-type: none"> • define Pharmacology, drug, pharmaceutical drug • describe Medicinal drugs and their different sources 	Explanation and Discussion: Explanation of <ul style="list-style-type: none"> • Definition of pharmacology • Difference between pharmaceutical and addictive drugs • Medicinal drugs and their different sources • Definition of antibiotics • Major groups of antibiotics • Difference between cephalosporins, tetra cyclines and sulfonamides • Effects of antibiotics • Broad spectrum antibiotics • Definition of vaccine • Importance of vaccines • Difference between antigens and antibiotics Written work: All topic related questions from exercise	<ul style="list-style-type: none"> • Biology 10 PLD Publishers, Lahore • Laptop / Tab / Smart Phone/internet • Board • Marker • Available A/V Aids • Recommended On-line learning websites by the teacher

Week No	Topic/ Objectives	Study Guidelines	Resources
	<ul style="list-style-type: none">• classification of drugs on the basis of chemical properties• describe major groups of antibiotics• discuss antibiotic resistance• definition of vaccines• importance of vaccines• distinguish between antibiotics and antigens• answer the questions given in the exercise .	Short and long Qs of the topics developed by the teacher as required.	

Block 5: Computer Science Week 24

Wks	Time line	Course Content Unit /Chapter/Topics
Week 24	Nov 30- Dec 05	<p>Chapter # 6 <u>Computer logics and Gates.</u></p> <ul style="list-style-type: none"> • Unit introduction • Data Representation in Computer. • Logic Gates • Digital Logic and Logic Gates • Basic Logic Gates • Truth Tables • Logic Gates and their Truth Tables <ul style="list-style-type: none"> ▪ The exclusive-OR gate ▪ The exclusive NOR gate • Relevant Questions of the exercise at the end of chapter

Syllabus Pack Block 5 (week24)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 24	<p>Chapter # 6 <u>Computer logics and Gates.</u></p> <ul style="list-style-type: none"> • Unit introduction • Data Presentation in Computer. • Logic Gates • Digital Logic and Logic gates • Basic Logic gates • Truth Tables • Logic gates and 	<ul style="list-style-type: none"> • Read all important definitions and topics given in chapter. • Use Computer Laptop, Tabs /smart phone to go over the internet and search on Google about Digital Logics, Logic gates and Truth Tables. • Explain the concept of data representation in computer. • Describe different types of logic gates. • Explain digital logic vs logic gates. • Explain the digital circuits AND, OR, NOT. • Explain the methods to write the inputs and outputs in truth table. • Explain truth table and discuss how a logic circuit's output responds to all the possible combinations of the input. 	<ul style="list-style-type: none"> - Textbook of Computer Science Grade 10 - National Book Foundation Islamabad As Federal Textbook Board- Islamabad pgs 114-118 - Exercise(MCQs Short Q/A, Long Q/A) <p>Reference Links:</p> <ul style="list-style-type: none"> - Watch the topic related

Week No	Topic/ Objectives	Study Guidelines	Resources
	<p>their Truth Tables</p> <ul style="list-style-type: none"> ▪ The exclusive-OR gate ▪ The exclusive NOR gate <p>Students will be able to</p> <ul style="list-style-type: none"> • Understand the representation of data in computer. • Define digital logic and logic gates. • Describe AND, OR, NOT gates. • Define Truth Table. • Know the logic gates and their truth tables. • Know the difference between Exclusive-OR and NOR gate 	<ul style="list-style-type: none"> • Explain the difference between Exclusive-OR and Exclusive NOR gate. <p>Explain all the relative MCQ's,short answer questions and Extensive questions from the exercise at the end of the chapter.</p> <p><u>Written work</u></p> <ul style="list-style-type: none"> • Write the answers of Questions given at the end of chapter Q#2(i,ii) Q 5. 	<p>videos on sabaq.pk</p> <ul style="list-style-type: none"> - Solve the practice test given with topics on sabaq.pk

نصابی مواد باب/سبق/موضوعات	ٹائم لائن	ہفتہ نمبر
باب اول: من ہدی القرآن الکریم ☆سورۃ الاحزاب (آیات 1-8) دہرائی	30 نومبر - 05 دسمبر	چوبیسواں ہفتہ

سلیبس پیکبلاک-5 (چوبیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات/مقاصد	ہفتہ نمبر
<ul style="list-style-type: none"> اسلامیات لازمی (9-10) (ص: 27-28) قرآن مجید ترجمہ تفسیر قرآن انٹرنیٹ (قاری کی تلاوت) 	<ul style="list-style-type: none"> سورۃ الاحزاب (آیات 1-8) طلبا پڑھ چکے ہیں۔ لہذا امتحانات کی تیاری کو مد نظر رکھتے ہوئے، طلبا سورۃ الاحزاب کی آیات کی اچھی طرح دہرائی کریں۔ طلبا درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کریں۔ کسی معروف قاری کی آواز میں آیات مبارکہ کی تلاوت سن کر ان کی طرح پڑھنے کی مشق کی جائے۔ آیات مبارکہ کو سمجھ کر ان کا ترجمہ و تشریح نوٹ بکس پر لکھیں۔ آیات مبارکہ میں بیان کردہ احکامات و واقعات پر زبانی تبادلہ خیال کیا جائے۔ آیات کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کی جائے۔ 	<p>باب اول: من ہدی القرآن الکریم ☆سورۃ الاحزاب (آیات 1-8) دہرائی طلبا اس قابل ہوں گے کہ:</p> <ul style="list-style-type: none"> درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کر سکیں۔ آیات مبارکہ کو سمجھ کر ان کا ترجمہ و تشریح کر سکیں۔ سبق کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کر سکیں۔ 	چوبیسواں ہفتہ

نصابی مواد باب/سبق/موضوعات	ہفتہ / دن	ہفتہ
پانچواں باب: مشاہیر • کانٹ • پڑھائی مکمل سبق • تحریری کام (ص: 78) جزو (الف) سوال نمبر 1	نومبر 30- دسمبر 05	چوبیسواں ہفتہ

سلیبس پیکیلاک-5 (چوبیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات/مقاصد	ہفتہ نمبر
☆ اخلاقیات (9-10) پنجاب ٹیکسٹ بک بورڈ لاہور صفحات 76 تا 79 ☆ بورڈ، مارکر	<ul style="list-style-type: none"> • طلباء کو اٹھارہویں صدی کے نامور فلاسفر عمان ویل کانٹ کا تعارف کرواتے ہوئے اُن کی ابتدائی زندگی اور خاندانی حالات کے بارے میں بتایا جائے۔ سبق کی تدریس کے دوران طلباء کو کانٹ کی زندگی کے کچھ دلچسپ اور سبق آموز واقعات کے بارے میں بتایا جائے کہ کس طرح انہوں نے اپنی علمی کاوشوں کو ذاتی زندگی پر ترجیح دی اور تمام عمر ایک منظم زندگی گزاری۔ • طلباء کو کانٹ کے فلسفہ اخلاق اور سزا کے بارے میں کانٹ کے نقطہ نظر کے بارے میں معلومات دی جائیں۔ • طلباء کانٹ کے بارے میں دی گئیں تمام سبقی معلومات پڑھیں، سمجھیں اور تبادلہ خیال کریں۔ • سبقی معلومات کا اعادہ کیا جائے اور صفحہ 79 پر دی گئیں سرگرمیوں پر (جس قدر ممکن ہو) تبادلہ خیال کروایا جائے۔ <p align="center"><u>تحریری کام (ص 78)</u></p> <ul style="list-style-type: none"> • طلباء جزو (الف) سوال نمبر 1 تبادلہ خیال کے بعد انفرادی طور پر نوٹ بکس میں کریں۔ 	<p align="center"><u>پانچواں باب: مشاہیر</u> <u>کانٹ</u> طلباء اس قابل ہوں گے کہ:</p> <ol style="list-style-type: none"> 1. عمان ویل کانٹ کے بارے میں جان سکیں۔ 2. کانٹ کے فلسفہ اخلاق سے آگاہ ہوں۔ 3. مشقی سوالات حل کر سکیں۔ 	چوبیسواں ہفتہ

Block 5: Pakistan Studies Week 24

# of wks	Time line	Course Content Unit /Chapter / Topics	Check list Complete or incomplete
Week 24	Nov 30- Dec 05	CHAPTER 6: HISTORY OF PAKISTAN II <ul style="list-style-type: none">• Key aspects of the constitution of 1973• Major aspects of the Islamization process during 1977-88• Pakistan as a nuclear power	

Block 5: English Week 25

# of wks	Week Dates	Course Content Unit /Chapter/Topics
Week 25	07 Dec – 12 Dec	<ul style="list-style-type: none"> • Writing skills: Patriotism • Grammar: <ul style="list-style-type: none"> • Subordinating Conjunctions • Adverb Clause

Syllabus Pack Block 5 (week 25)

Week No	Topics / Objectives	Study Guidelines	Resources
Week 25	<p>Essay Writing Patriotism</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • Compare Patriotism vs Nationalism • Relate patriotism to their daily life • Identify some qualities of a patriot & ways how to show patriotism • Write an essay using some patriotic words 	<ul style="list-style-type: none"> • Write the word 'Patriotism' on the board. Brainstorm essay ideas. Start discussion with: <ol style="list-style-type: none"> 1. What is your cultural & natural history? 2. What is Patriotism? 3. Qualities of a patriot 4. How do you show your patriotism in daily life? / Ways to be patriotic. 5. What is the difference between Patriotism vs Nationalism? • Elicit topic related vocabulary: attachment, adherence, bond, devotedness, constancy, loyalty, spirit, nationalism, allegiance etc. • Students to write an essay on the topic 'Patriotism' 	<ul style="list-style-type: none"> • Board
	<p>Unit 12: Population Growth and World Food Supplies</p> <p>Grammar: Subordinating Conjunctions Adverb Clause</p>	<ul style="list-style-type: none"> • Quick review of conjunctions with examples on the board. • Introduction & explanation of Subordinating Conjunctions with reference to the table in textbook pg 145. • Let students identify & differentiate between subordinating conjunctions of Time, Condition, Cause and Effect & Contrast through board work. • Students to read the text in Unit 12 silently & identify words, 	<p>Eng- 10 Textbook Pgs 145-148</p> <p>High School Eng Grammar and Composition by Wren & Martin Multicolour Edition 2016</p>

Week No	Topics / Objectives	Study Guidelines	Resources
	Students will be able to: <ul style="list-style-type: none">• connect two groups of words by making one into a subordinating clause• choose appropriate conjunctions• replace adverb clause by an adverb phrase	phrases or sentences that support the main idea through cause and effect. <ul style="list-style-type: none">• Grammar Ex A to be done in the textbook pg 145, 146.• Similar Ex to be done with Adverb Clause (pgs 146-148) followed by Ex B, C & D to be done in registers• Teacher to prepare topic worksheets for reinforcement work.	Pgs 176-181, 203-205 Topic related worksheet prepared by the teacher

نصابی مواد موضوع: سبق / نظم / غزل کا نام	ہفتے / دن	ہفتے
دہرائی جگر مراد آبادی استعارہ اور ارکانِ استعارہ	۷ دسمبر - ۱۲ دسمبر	پچیسواں ہفتہ

سلیبس پیک بلاک 5 پچیسواں ہفتہ)

ذرائع	طریقہ تدریس	موضوعات / مقاصد	ہفتہ نمبر
☆ اردو (لازمی) برائے جماعت دہم ☆ صفحات (۱۵۵ تا ۱۵۲) ☆ بورڈ مارکر	☆ غزل کی دہرائی مندرجہ ذیل نکات کی مدد سے کی جائے غزل کے معنی و مفہوم کو سمجھنا۔ ☆ غزل کی پڑھائی اور مشکل الفاظ و تراکیب کے لیے لغت کا استعمال۔ پوری غزل کی تشریح مع امثال / حوالہ جات ☆ مشقی سوالات تافیہ، ردیف، صفحہ نمبر ۱۵۳، ۱۵۵	دہرائی جگر مراد آبادی طلباء اس قابل ہوں گے کہ: ۱۔ غزل کی پڑھائی اور الفاظ معانی، مشقی سوالات کے جوابات اور غزل کی تشریح کا اعادہ کر سکیں۔ استعارہ اور ارکانِ استعارہ طلباء اس قابل ہوں گے کہ: ۱۔ استعارہ اور ارکانِ استعارہ کا اعادہ کر سکیں۔	پچیسواں ہفتہ
توابع کی کتب	☆ طلباء شعری مثالوں کے ذریعے استعارہ اور ارکانِ استعارہ کا اعادہ کریں۔ ☆ طلباء مختلف اشعار میں موجود ارکانِ استعارہ کی نشان دہی کریں۔		

Block 5: Mathematics Week 25

Wks	Time line	Course Content Unit /Chapter/Topics
Week 25	Dec 07 – Dec 12	Unit 7 Introduction to Trigonometry 7.4. Trigonometric Identities 7.5. Angle of elevation & angle of depression

Syllabus Pack Block 5 (week 25)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 25	<p>Unit 7 Introduction to Trigonometry</p> <p>7.4. Trigonometric Identities</p> <p>Exercise 7.4</p> <p>Q8; Q9; Q11; Q12; Q13; Q16; Q17; Q18; Q20; Q21; Q23; Q24</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • prove fundamental trigonometric identities and apply them to show different trigonometric relations • prove that the angle in a semi-circle is a right angle in a segment greater than a semi-circle is less than a right angle. 	<p>7.4 Trigonometric Identities: Pgs 163-165</p> <ul style="list-style-type: none"> • Recap the lesson taught in the previous week. • Introduce the basic trigonometric ratios. • Describe the methods to derive trigonometric identities given on pages 163-164. • Explain the use of trigonometric identities to simplify and verify mathematical relations by solving examples given on pg. 164. Explain that all trigonometric functions can be expressed in terms of one trigonometric function by substitution. • Students to do Q8; Q9; Q11; Q12; Q13; Q16; Q17; Q18; Q20; Q21; Q23; Q24 of Exercise 7.4 under teacher's guidance and same may be given as H.W. 	<ul style="list-style-type: none"> • Mathematics 10 Textbook • Laptop / Tab / Smart Phone • Watch relevant videos on www.sabaq.pk

Week No	Topic/ Objectives	Study Guidelines	Resources
	<p>7.5. Angle of elevation & angle of depression.</p> <p>Exercise 7.5 Q5; Q6; Q7; Q8; Q9; Q10; Q12</p> <p>Misc Ex 7 Q1; Q3</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • find angle of angle of elevation and depression • solve real life problems by involving trigonometric ratios and angle of elevation and depression 	<p><u>7.5 Angle of elevation and depression:</u> Pgs 166-170</p> <ul style="list-style-type: none"> • Explain and illustrate angle of elevation and depression using real life examples. • Describe the difference between the angle of elevation and depression by giving relevant examples. • Tell the students how to find the relevant data and make the diagram after reading the word problem. • Do examples 1 & 2 with students' input to enable them to solve word problems. • Students to do Q5; Q6; Q7; Q8; Q9; Q10; Q12 of Exercise 7.5 under teacher's guidance and same may be given as H.W. • Ask the students to solve the Q1; Q3 of Misc. Ex. 7 after discussion in the class. 	

Block 5: Physics Week 25

Wks	Time line	Course Content Unit /Chapter/Topics
Week 25	Dec 07 – Dec 12	CHAPTER 18 Contd... ATOMIC AND NUCLEAR PHYSICS 18.4 NUCLEAR TRANSMUTATIONS

Syllabus Pack Block 5 (week 25)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 25	<p>CHAPTER 18 Contd... ATOMIC AND NUCLEAR PHYSICS</p> <p>18.1 NUCLEAR TRANSMUTATIONS</p> <ol style="list-style-type: none"> 1. Alpha (α)-decay 2. Beta (β)-decay 3. Gamma (γ)-decay <ul style="list-style-type: none"> • Nature and properties of radiations • Ionizing effect • Penetrating ability <p>Review Questions 18.4-18.6, 18.8, 18.14 & 18.15</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • explain the cause of nuclear transmutations • represent three modes of 	<p>Possible Teaching Methods</p> <ul style="list-style-type: none"> • Concept Teaching • Lecture Method • Demonstration Method <p>Explanation & Discussion (pg 183-186, 196 & 197)</p> <ul style="list-style-type: none"> • Recap radioactivity. • Nuclear transmutations: Instability of heavier nuclei and their tendency to become stable via the following modes, general equations and examples (Concept Teaching/ Graphic Organizer) <ul style="list-style-type: none"> ➤ Alpha (α)-decay ➤ Beta (β)-decay ➤ Gamma (γ)-decay • Nature and properties of radiations: (Concept Teaching/ Graphic Organizer) <ul style="list-style-type: none"> ➤ Ionizing effect ➤ Penetrating ability • Discuss review questions 18.4-18.6, 18.8, 18.14 & 18.15. 	<ul style="list-style-type: none"> • Textbook (X) pgs 183-186, 196 & 197 • Practical Note Book 9th& 10th • Marker • Board • Available A/V aids

Week No	Topic/ Objectives	Study Guidelines	Resources
	radiations by general equations and give their examples <ul style="list-style-type: none">• describe nature and properties of each type of radiations		

Block 5: Chemistry Week 25

Wks	Time line	Course Content Unit /Chapter/Topics
Week 25	Dec 07-Dec 12	Chapter 16: <u>Chemical Industries</u> <ul style="list-style-type: none"> • Solvay Process • Raw Materials • Basic Reactions • Advantages of Solvay Process • Activity 16.1 • Review Questions

Syllabus Pack Block 5 (week 25)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 25	Chapter 16: <u>Chemical Industries</u> <ul style="list-style-type: none"> ➤ 16.2: Solvay Process ➤ 16.2.1: Raw Materials ➤ 16.2.2: Basic Reactions • Advantages of Solvay Process • Activity 16.1 • Self-Assessment Exercise 16.2 • Topic related Exercise Questions <p>Objectives: At the end of lesson students will be able to:</p> <ul style="list-style-type: none"> • define Solvay Process 	<u>Explanation and Discussion:</u> <ul style="list-style-type: none"> • Introduction of Solvay Process • Explanation of list of raw materials required to carry out Solvay Process • Explanation of different steps of Solvay Process and the basic reactions taking place in each step • Developing and explaining a flow sheet diagram for Solvay Process • Discussion on advantages of Solvay Process • Guide students in solving Self-Assessment Exercises • Assessment of students learning through multiple tests and quizzes • Demonstration of Activity 16.1 followed by practice by students in guided supervision <p><u>Reference Links:</u> https://study.com/.../the-solvay-process-process-products-environmental-issues.html</p>	<ul style="list-style-type: none"> • Textbook of Chemistry Grade 10 National Book Foundation as Federal Textbook Board-Islamabad • Laptop / Tab / Smart Phone / internet • Board • Marker • Available A/V Aids • reliable websites for relevant information

Week No	Topic/ Objectives	Study Guidelines	Resources
	<ul style="list-style-type: none">• make a list of raw materials for Solvay Process• outline the basic reactions in Solvay Process• explain the process of recovery of Ammonia• develop a flow sheet for Solvay Process• perform activity 16.1• discuss the advantages of Solvay process• represent ammonia recovery procedure through flow chart• do the Self-Assessment Exercise independently• solve relevant questions from the exercise independently		

Block 5: Biology Week 25

Wks	Time line	Course Content Unit /Chapter/Topics
Week 25	Dec 07-Dec 12	Chapter 11: Homeostasis <ul style="list-style-type: none"> Recapitulation and revision of the topics and Exercise

Syllabus Pack Block 5 (week 25)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 25	<p>Chapter 11: Homeostasis</p> <ul style="list-style-type: none"> Recapitulation and revision of the topics of chapter 11 Practice of solving board papers and attempting questions from chapter 11 <p>Objectives: Students will be able to</p> <ul style="list-style-type: none"> recapitulate and revise the previously taught topics of chapter 11 describe and explain the topics included in chapters 11 answer all the questions related to the topics in exercise and developed by the teacher describe and explain the different terminologies used in the chapters write answers as required in board papers 	<p>Discussion and Explanation:</p> <ul style="list-style-type: none"> ➤ Recapitulate the previously taught topics of chapters 11 ➤ Explanation of difficult topics , terminologies and tables given in these chapters using relevant A/V Aids and different teaching strategies as per requirement ➤ Preparation of relevant Worksheets to be solved by students ➤ Supervision and guidance of students during practical work ➤ Discussion and guidance to students about attempting board papers and answering the questions related to the chapters 	<ul style="list-style-type: none"> Biology 10 PLD Publishers, Lahore Board Marker

Block 5: Computer Science Week 25

Wks	Time line	Course Content Unit /Chapter/Topics
Week 25	Dec 07- Dec 12	Chapter # 6 <u>Computer logics and Gates.</u> <ul style="list-style-type: none"> • Creating NAND, NOR, XOR and XNOR gates using basic Gates. • Creating NAND and NOR gates using basic Gates. • Creating XOR and XNOR gates using basic Gates. • A Boolean Expression and Boolean Function. • Conversion of Boolean function or Expression to Logic Circuit. • Relevant Questions of the exercise at the end of chapter

Syllabus Pack Block 5 (week 25)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 25	Chapter # 6 <u>Computer logics and Gates.</u> <ul style="list-style-type: none"> • Creating NAND, NOR, XOR and XNOR gates using basic gates. • Creating NAND and NOR gates using basic gates. • Creating XOR and XNOR gates using basic gates. • A Boolean Expression and Boolean Function. • Conversion of Boolean function to logic circuit 	<ul style="list-style-type: none"> • Read all important definitions and topics given in chapter. • Use Computer Laptop, Tabs /smart phone to go over the internet and search on Google about NAND, NOR, XOR and XNOR gates. • Explain how NAND, NoR, XOR and XNOR gates can be easily created using AND, OR and NOT gates. • Explain Boolean function with binary variables, parenthesis and equal sign. • Explain the conversion of Boolean function into logic circuits given on the page # 120 and 121. <p>Explain all the relative MCQ's, short answer questions and Extensive questions from the exercise at the end of the chapter.</p> <p><u>Written work</u></p> <ul style="list-style-type: none"> • Write the answers of Questions given at the end of chapter Q#2(iii), Q3, Q4, Q7. 	<ul style="list-style-type: none"> - Textbook of Computer Science Grade 10 - National Book Foundation Islamabad As Federal Textbook Board- Islamabad pgs 118-121. - Exercise(MCQs Short Q/A, Long Q/A) <p>Reference Links:</p> <ul style="list-style-type: none"> - Watch the topic related videos on sabaq.pk - Solve the practice test given with topics on sabaq.pk

Week No	Topic/ Objectives	Study Guidelines	Resources
	<p>Students will be able to</p> <ul style="list-style-type: none">• Describe how other logic gates can be created using the basic logic gates.• Understand the conversion of Boolean expression to logic circuit.• Understand the conversion of Boolean expression to logic circuit.		

نصابی مواد باب / سبق / موضوعات	ٹائم لائن	ہفتہ نمبر
باب اول: من ہدی القرآن الکریم ☆ سورۃ الاحزاب (آیات 9 - 20) دہرائی	07 دسمبر - 12 دسمبر	پچیسواں ہفتہ

سلیبس سیکلہاک-5 (پچیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات / مقاصد	ہفتہ نمبر
<ul style="list-style-type: none"> اسلامیات لازمی (9-10) (ص: 29-31) قرآن مجید مع ترجمہ تفسیر قرآن انٹرنیٹ (قاری کی تلاوت) 	<ul style="list-style-type: none"> سورۃ الاحزاب (آیات 9 - 20) طلبا پڑھ چکے ہیں۔ لہذا امتحانات کی تیاری کو مد نظر رکھتے ہوئے، طلبا سورۃ الاحزاب کی آیات کی اچھی طرح دہرائی کریں۔ طلبا درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کریں۔ کسی معروف قاری کی آواز میں آیات مبارکہ کی تلاوت سُن کر اُن کی طرح پڑھنے کی مشق کی جائے۔ آیات مبارکہ کو سمجھ کر اُن کا ترجمہ و تشریح نوٹ بکس پر لکھیں۔ آیات مبارکہ میں بیان کردہ احکامات و واقعات پر زبانی تبادلہ خیال کیا جائے۔ آیات کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کی جائے۔ 	<p>باب اول: من ہدی القرآن الکریم ☆ سورۃ الاحزاب (آیات 9 - 20) دہرائی طلبا اس قابل ہوں گے کہ:</p> <ul style="list-style-type: none"> درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کر سکیں۔ آیات مبارکہ کو سمجھ کر اُن کا ترجمہ و تشریح کر سکیں۔ سبق کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کر سکیں۔ 	پچیسواں ہفتہ

نصابی مواد باب/سبق/موضوعات	ہفتہ	ہفتے/دن
پانچواں باب: مشاہیر • کانٹ • دہرائی مکمل سبق • تحریری کام (ص: 78-79) جزو ”ب“ (1-5) جزو ”ج“ (1-4) اور جزو ”د“ کالم ملائیں۔	پچیسواں ہفتہ	دسمبر 07- دسمبر 12

سلیبس سیکل بلاک-5 (پچیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات/مقاصد	ہفتہ نمبر
☆ اخلاقیات (9-10) پنجاب ٹیکسٹ بک بورڈ لاہور صفحات 76 تا 79 ☆ بورڈ، مارکر	<ul style="list-style-type: none"> • طلباء سبق ”کانٹ“ کیدہرائی کریں اور سبق میں دی گئیں معلومات پر تبادلہ خیال کریں اور مشقی سوالات کے جوابات تحریر کریں اور زبانی یاد کریں۔ تحریری کام (ص: 78-79) • جزو (ب) 1 تا 5 سوالات کے مختصر جوابات انفرادی طور پر نوٹ بکس میں تحریر کریں۔ • جزو (ج) (1-5) اور جزو (د) کالم ملائیں گھر سے نوٹ بکس پر کر کے لائیں۔ 	<p>پانچواں باب: مشاہیر کانٹ طلباء اس قابل ہوں گے کہ:</p> <p>1- سبقی معلومات کا اعادہ کر سکیں۔ 2- مشقی سوالات حل کر سکیں۔</p>	پچیسواں ہفتہ

Block 5: Pakistan Studies Week 25

# of wks	Time line	Course Content Unit /Chapter / Topics
Week 25	Dec 07- Dec.12	CHAPTER 6: HISTORY OF PAKISTAN II <ul style="list-style-type: none">• The system of devolution of power initiated by Prevez Musharaf with particular emphasis on local self-government• Local government plan 2000

Block 5: English Week 26

# of wks	Week Dates	Course Content Unit /Chapter/Topics
Week 26	14 Dec – 19 Dec	<ul style="list-style-type: none"> • <u>Letter Writing</u> Write a letter to the editor of a newspaper regarding increasing rate of street crimes. • <u>Grammar</u> Phrasal Verbs Narration

Syllabus Pack Block 5 (week26)

Week No	Topics / Objectives	Study Guidelines	Resources
Week 26	<u>Letter Writing</u> Write a letter the editor of a newspaper regarding increasing rate of street crimes.	<ul style="list-style-type: none"> • Brainstorm the term 'Street Crimes'. Explain what it generally encompasses. • Find & discuss causes for increasing rate of some common street crimes. Who are involved in such crimes? What are some of the noticeable effects of such crimes in the society? How can we prevent such crimes to happen in future? • Revise the letter format & organization of the content before students draft a final letter in registers. • For H.W, students to read some good newspaper article on the topic available on internet. 	Board Newspaper article on the Internet
	<u>Grammar</u> Phrasal Verbs Students will be able to: find meanings of phrasal verbs and use them in sentences	<ul style="list-style-type: none"> • Quick revision of the phrasal verbs done earlier. • Explain the meaning and use of phrasal verbs. • Give sound practice (at least 10 -15) through written work in registers • Give 10 phrasal/prepositional phrase for H.W. 	<ul style="list-style-type: none"> • Sr#1-60 (Pages 159 – 161, English Grammar and Composition, PTB, Lahore, 1st Edition March, 2020)
	<u>Grammar</u> Narration Students will be able to: <ul style="list-style-type: none"> • convert direct speech into indirect speech and vice versa 	<ul style="list-style-type: none"> • Reinforcement of the rules for the conversion with examples on the board. • Give students thorough practice through written practice in registers. • H.W: Give 10 sentences for conversion 	<ul style="list-style-type: none"> • Board • High School Eng Grammar and Composition by Wren & Martin Pgs. 207-209 and 210

ذرائع	طریقہ تدریس	موضوعات / مقاصد	ہفتہ نمبر
	☆ نظم کی تشریح اور مشقی سوالات کے جوابات اپنے الفاظ میں تحریر کریں۔		
☆ اردو قواعد و انشاء 9-10 ☆ صفحات (۸۴، ۸۵، ۹۵، ۹۶) ☆ بورڈ مارکر	عیادتِ مریض ☆ طلباء اردو قواعد و انشاء میں صفحہ نمبر (84) پر دیے گئے مضامین کے اصول و ضوابط کا بغور مطالعہ کریں ☆ اہم نکات: (ضرورت و اہمیت، اسلام میں عیادتِ مریض کی اہمیت، عیادت کا مریض کی صحت پر خوشگوار اثرات، مریض کی عیادت اور احتیاطی تدابیر ☆ طلباء اہم نکات کی روشنی میں دیے گئے موضوع پر اپنے الفاظ میں مضمون تحریر کریں۔ مضمون کو زیادہ اچھا بنانے کے لیے اشعار اور اقوال بھی شامل کر سکتے ہیں، اس سے امتحان میں نمبر زیادہ ملیں گے۔	مضمون نویسی طلباء اس قابل ہوں گے کہ: ۱۔ اصول و ضوابط کو پڑھ سکیں۔ ۲۔ دیے گئے موضوع پر مضمون لکھ سکیں۔	
☆ اردو (لازمی) برائے جماعت دہم صفحات ۲۰، ۳۶ ☆ بورڈ مارکر	☆ خاکہ نگاری اردو نثر کی ایک اہم صنفِ سخن ہے جس میں کسی شخص کی سوانح عمری لکھنے کی بجائے اسکی زندگی کے چند پہلوؤں کو اجاگر کیا جاتا ہے اور اسکی شخصی خصوصیات مثلاً اس کے افکار و کردار کی خوبیوں اور خامیوں کو اجاگر کیا جاتا ہے۔ ☆ طلباء اردو (لازمی) برائے جماعت دہم صفحہ نمبر ۲۰ پر دی گئی خاکہ نگاری کی تعریف یاد کریں اور مزید اردو ادب کے مشہور خاکہ نگاروں کے بارے میں تحقیق کر کے اگائی حاصل کریں۔ ☆ مضمون عربی زبان کا لفظ ہے جس کے معنی ہیں ضمن میں لیے ہوئے مضمون میں منتخب موضوع پر دلائل کے ساتھ بحث کی جاتی ہے اور آخر میں نتیجہ پیش کیا جاتا ہے ☆ طلباء اردو (لازمی) برائے جماعت دہم صفحہ نمبر ۳۶ پر دی گئی مضمون کی تعریف یاد کریں۔	خاکہ نگاری مضمون طلباء اس قابل ہوں گے کہ: ۱۔ اردو اصنافِ نثر خاکہ نگاری اور مضمون کو جان سکیں۔	

Block 5: Mathematics Week 26

Wks	Time line	Course Content Unit /Chapter/Topics
Week 26	Dec 14 – Dec 19	Unit 6 Basic Statistics 6.1. Frequency Distribution 6.2. Cumulative Frequency Distribution

Syllabus Pack Block 5 (week 26)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 26	<p>Unit 6 Basic Statistics 6.1. Frequency Distribution 6.1(i) Construction of Frequency Table (ii) Construction of Histogram (iii) Construction of Frequency Polygon 6.2. Cumulative Frequency Distribution 6.2(i) Construction of Cumulative Frequency Frequency Table (ii) Drawing a Cumulative Frequency Polygon or Ogive Exercise 6.1 Q1; Q2; Q4; Q5 Students will be able to:</p> <ul style="list-style-type: none"> Construct histograms with equal and unequal class intervals Construct a frequency polygon 	<p>Introduce the field of basic statistics and its applications in a general discussion with the class but limit the discussion to the contents pertaining to the reduced syllabus.</p> <p>6.1 Frequency Distribution: Pgs. 108-115</p> <ul style="list-style-type: none"> Explain and illustrate construction of frequency table using real life examples. Solve the relevant examples 1, 2 and 3 on pgs. 108-110 for conceptual clarity of students. Explain and illustrate construction of histograms for equal and unequal intervals using real life examples. Solve the relevant examples 1, 2 and 3 on pgs. 111-113 for conceptual clarity of students. Explain and illustrate construction of frequency polygon using real life examples. Solve the relevant example 1 on pgs. 114-115 for conceptual clarity of students. Explain and illustrate Cumulative Frequency Distribution and its examples in the textbook. Solve Q1; Q2; Q4; Q5 of Ex 6.1 and give the same as H.W for practice. Remaining periods may be used for revision and feedback sessions of reduced syllabus questions of covered chapter 1 i.e. "Quadratic Equations" for an effective preparation of exams in parallel. 	<ul style="list-style-type: none"> Mathematics 10 Textbook Laptop / Tab / Smart Phone Watch relevant videos on www.sabaq.pk

Block 5: Physics Week 26

Wks	Time line	Course Content Unit /Chapter/Topics
Week 26	Dec 14 – Dec 19	CHAPTER 18 Contd... ATOMIC AND NUCLEAR PHYSICS 18.5 HALF-LIFE 18.6 RADIOISOTOPES AND THEIR USES

Syllabus Pack Block 5 (week 26)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 26	<p>CHAPTER 18 Contd... ATOMIC AND NUCLEAR PHYSICS</p> <p>18.1 HALF-LIFE Examples 18.2, 18.3 Numerical Problems 18.1-18.9</p> <p>18.2 RADIOISOTOPES AND THEIR USES</p> <ul style="list-style-type: none"> • Uses of radioisotopes <ol style="list-style-type: none"> 1. Tracers 2. Medical treatment 3. Carbon Dating <p>Example 18.4 Numerical Problem 18.1-18.9 Review Questions 18.3, 18.7 & 18.10</p> <p>Students will be able to:</p> <ul style="list-style-type: none"> • describe that radioactive emissions occur randomly over 	<p>Possible Teaching Methods</p> <ul style="list-style-type: none"> • Concept Teaching • Lecture Method • Demonstration Method <p>Explanation & Discussion (pg 186-191 & 196-198)</p> <ul style="list-style-type: none"> • Recap radioactivity. • Half-life and its measurement (Concept Teaching/ Graphic Organizer). • Teacher to solve examples 18.2 & 18.3 and numerical problems 18.1, 18.6 & 18.8 with active participation of students. • Students to solve questions numerical problems 18.4-5 in pairs and 18.7, 18.9 in groups. • Radioisotopes: Method of changing stable elements into radioactive elements (Concept Teaching). • Handling, storage and dispose mechanism of isotopes in brief. • Uses of radioisotopes (Lecture Method/Concept Teaching). <ul style="list-style-type: none"> ➤ Tracers ➤ Medical treatment ➤ Carbon Dating 	<ul style="list-style-type: none"> • Textbook (X) pgs 186-191 & 196-198 • Marker • Board • Available A/V aids

Week No	Topic/ Objectives	Study Guidelines	Resources
	<p>space and time</p> <ul style="list-style-type: none">• define half-life• calculate the rate of the half-life of radioactive materials• make a list of some applications of radioisotopes in medical, agriculture and industrial fields• make estimation of age of ancient objects by the process of carbon dating#• solve numerical problems related to half-life of nuclei	<ul style="list-style-type: none">• Teacher to solve example 18.4 with active participation of students.• Students to solve questions numerical problems 18.9.• Discuss review questions 18.3, 18.7 & 18.10 with the students.	

Block 5: Chemistry Week 26

Wks	Time line	Course Content Unit /Chapter/Topics
Week 26	Dec 14-Dec 19	<ul style="list-style-type: none"> • Urea • Raw Materials • Petroleum • Important fractions of Petroleum • Fractions of petroleum and their uses • Activity 16.2 • Review Questions

Syllabus Pack Block 5 (week 26)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 26	<p>Chapter 16: <u>Chemical Industries</u></p> <ul style="list-style-type: none"> ➤ 16.3: Urea • Activity 16.2 ➤ 16.3.2 Raw Materials • Self-Assessment Exercise 16.3 ➤ 16.4.1: Petroleum ➤ 16.4.4: Important fractions of Petroleum ➤ 16.2: Fractions of petroleum and their uses • Review Questions 	<p><u>Explanation and Discussion:</u></p> <ul style="list-style-type: none"> • Description of the composition of urea • Explanation of Raw materials and procedure for manufacturing of urea • Development of a flow sheet diagram for urea manufacturing • Definition of petroleum • Origin and composition of petroleum and natural gas • Mining of petroleum • Description of important fractions of petroleum • Description of fig 16.9 and Table 16.2 • Explanation of process of fractional distillation • Description of fractional distillation of petroleum • Explanation of different fractions of petroleum obtained at different temperatures discussion regarding physical properties of different fractions of petroleum • Explanation of uses of different fractions of petroleum • Guidance to students in solving Self-Assessment Exercises and Review Questions 	<ul style="list-style-type: none"> • Textbook of Chemistry Grade 10 National Book Foundation as Federal Textbook Board- Islamabad • Laptop / Tab / Smart Phone / internet • Board • Marker • Available A/V Aids • reliable websites for relevant information

Week No	Topic/ Objectives	Study Guidelines	Resources
	<p>Objectives: At the end of lesson students will be able to:</p> <ul style="list-style-type: none"> ➤ describe the composition of urea ➤ develop a flow sheet diagram for the manufacturing of urea ➤ analyze the uses of urea ➤ define petroleum ➤ describe composition and origin of petroleum and natural gas ➤ describe briefly the fractional distillation of petroleum ➤ describe properties of different fractions of petroleum ➤ describe physical properties of different fractions of petroleum ➤ explain uses of different fractions of petroleum ➤ discuss the ➤ solve self-assessment exercise 16.4 ➤ solve relevant questions from the exercise independently 	<p>Reference Links:</p> <ul style="list-style-type: none"> ➤ www.essentialchemicalindustry.org/chemicals/urea.html ➤ https://www.icis.com/resources/news/.../urea-production-and-manufacturing-process/ ➤ vitchesa.weebly.com/uploads/1/3/4/8/13483162/urea_production_me.ppt 	

Block 5: Biology Week 26

Wks	Time line	Course Content Unit /Chapter/Topics
Week 26	Dec 14-Dec 19	Chapter 12: Coordination and Control Recapitulation and revision of the topics and Exercise

Syllabus Pack Block 5 (week 26)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 26	<p>Chapter 12: Coordination and Control</p> <ul style="list-style-type: none"> Recapitulation and revision of the topics of chapter 12 Practice of solving board papers and attempting questions from chapter 12 <p>Practical Study of human eye, ear and brain</p> <p>Objectives: Students will be able to</p> <ul style="list-style-type: none"> recapitulate and revise the previously taught topics of chapter 12 describe and explain the topics included in chapter 12 answer all the questions related to the topics in 	<p>Discussion and Explanation:</p> <ul style="list-style-type: none"> ➤ Recapitulate the previously taught topics of chapter 12 ➤ Explanation of difficult topics , terminologies and tables given in the chapter using relevant A/V Aids and different teaching strategies as per requirement ➤ Preparation of relevant Worksheets by teacher to be solved by students ➤ Discussion and guidance to students about attempting board papers and answering the questions related to the chapters ➤ Supervision and guidance of students during practical work 	<ul style="list-style-type: none"> Biology 10 PLD Publishers, Lahore Board Marker

Subject: Biology– X**Session (2020-2021)**

Week No	Topic/ Objectives	Study Guidelines	Resources
	exercise and developed by the teacher <ul style="list-style-type: none">• describe and explain the different terminologies used in the chapters• write answers as required in board papers		

Block 5: Computer Science Week 26

Wks	Time line	Course Content Unit /Chapter/Topics
Week 26	Dec 14- Dec 19	Chapter # 6 <u>Computer logics and Gates</u> <ul style="list-style-type: none"> • Karnaugh Map • Simplification of Two-variable Boolean function using Karnaugh map. • Simplification of Three-variable Boolean function using Karnaugh map. • Relevant Questions of the exercise at the end of chapter

Syllabus Pack Block 5 (week 26)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 26	Chapter # 6 <u>Computer logics and Gates.</u> <ul style="list-style-type: none"> • Karnaugh Map • Simplification of Two-variable Boolean function using Karnaugh map. • Simplification of Three-variable Boolean function using Karnaugh map. Students will be able to <ul style="list-style-type: none"> • Describe K-Map • Simplify two variable Boolean function/expression. • Simplify three variable Boolean function/expression. • Build logic circuits from the simplified expressions. 	<ul style="list-style-type: none"> • Read all important definitions and topics given in chapter. • Use Computer Laptop, Tabs /smart phone to go over the internet and search on Google about the Karnaugh Map and Simplification of Boolean functions using Karnaugh map • Define K-map and explain why it is called a pictorial form of truth table. • Explain Simplification of Two variable K-map with the help of fig. 6.20,6.21,6.22. • Explain Simplification of Three variable K-map with the help of fig. 6.23,6.24 & 6.25. • Explain with the help of examples given on pg#124 Explain all the relative MCQ's, short answer questions and Extensive questions from the exercise at the end of the chapter <u>Written work</u> <ul style="list-style-type: none"> • Write the answers of Questions given at the end of chapter Q#2(iv,v) & Q#6,Q 7. 	<ul style="list-style-type: none"> - Textbook of Computer Science Grade 10 - National Book Foundation Islamabad As Federal Textbook Board- Islamabad pgs 121-125 - Exercise(MCQs Short Q/A, Long Q/A) Reference Links: <ul style="list-style-type: none"> - Watch the topic related videos on sabaq.pk - Solve the practice test given with tpics on sabaq.pk

نصابی مواد باب / سبق / موضوعات	تائیم لائن	ہفتہ نمبر
باب اول: من ہدی القرآن الکریم ☆سورۃ الاحزاب (آیات 21 - 27) دہرائی	14 دسمبر - 19 دسمبر	چھبیسواں ہفتہ

سلیبس پیکبلاک-5 (چھبیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات / مقاصد	ہفتہ نمبر
<ul style="list-style-type: none"> اسلامیات لازمی (9-10) (ص: 32-33) قرآن مجید مع ترجمہ تفسیر قرآن انٹرنیٹ (قاری کی تلاوت) 	<ul style="list-style-type: none"> سورۃ الاحزاب (آیات 21-27) طلباء پڑھ چکے ہیں۔ لہذا امتحانات کی تیاری کو مد نظر رکھتے ہوئے، طلباء سورۃ الاحزاب کی آیات کی اچھی طرح دہرائی کریں۔ طلباء درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کریں۔ کسی معروف قاری کی آواز میں آیات مبارکہ کی تلاوت سن کر ان کی طرح پڑھنے کی مشق کی جائے۔ آیات مبارکہ کو سمجھ کر ان کا ترجمہ و تشریح نوٹ بکس پر لکھیں۔ آیات مبارکہ میں بیان کردہ احکامات و واقعات پر زبانی تبادلہ خیال کیا جائے۔ آیات کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کی جائے۔ 	<p>باب اول: من ہدی القرآن الکریم ☆سورۃ الاحزاب (آیات 21 - 27) دہرائی</p> <p>طلباء اس قابل ہوں گے کہ:</p> <ul style="list-style-type: none"> درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کر سکیں۔ آیات مبارکہ کو سمجھ کر ان کا ترجمہ و تشریح کر سکیں۔ سبق کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کر سکیں۔ 	چھبیسواں ہفتہ

نصابی مواد باب/سبق/موضوعات	ہفتہ	ہفتے/دن
پانچواں باب: مشاہیر • سری اربندو • پڑھائی مکمل سبق • تحریری کام (ص: 85): جزو (الف) سوال نمبر 1-2	چھبیسواں ہفتہ	دسمبر 14-دسمبر 19

سلیبس پیکیلاک-5 (چھبیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات/مقاصد	ہفتہ نمبر
☆ اخلاقیات (9-10) پنجاب ٹیکسٹ بک بورڈ لاہور صفحات 84 تا 86 ☆ بورڈ، مارکر	<ul style="list-style-type: none"> • طلباء کو سری اربندو سے متعارف کرواتے ہوئے ان کی ہمہ گیر شخصیت کے مختلف پہلوؤں کے بارے میں بتایا جائے۔ طلباء کو بتایا جائے کہ کس طرح سری اربندو سیاست سے روحانیت کی طرف مائل ہوئے نیز سری اربندو کے پیش کردہ ”ملکوئی ماں“ کے تصور کے بارے میں معلومات دی جائیں۔ • طلباء سری اربندو کے بارے میں دی گئیں تمام سبقی معلومات پڑھیں، سمجھیں اور تبادلہ خیال کریں۔ • سبق میں دی گئیں تمام معلومات کا اعادہ کیا جائے اور صفحہ 86 پر دی گئیں سرگرمیوں پر (جس قدر ممکن ہو) تبادلہ خیال کروایا جائے۔ <p>تحریری کام (ص: 85)</p> <ul style="list-style-type: none"> • طلباء جزو (الف) سوال نمبر 1 اور 2 تبادلہ خیال کے بعد نوٹ بکس پر کریں۔ 	<p>پانچواں باب: مشاہیر سری اربندو</p> <p>طلباء اس قابل ہوں گے کہ:</p> <ol style="list-style-type: none"> 1. سری اربندو کی شخصیت کے مختلف پہلوؤں سے آگاہ ہوں۔ 2. مشقی سوالات حل کر سکیں۔ 	چھبیسواں ہفتہ

Block 26: Pakistan Studies Week 26

# of wks	Time line	Course Content Unit /Chapter / Topics
Week 26	Dec14 – Dec 19	CHAPTER 7: FOREIGN RELATIONS OF PAKISTAN <ul style="list-style-type: none">• Objectives of Pakistan's foreign policy• Pak-India relation, Pak-China relation, Pak-Afghan relation

Subject: English– X

Session (2020-2021)

Block 5: English Week 27

# of wks	Week Dates	Course Content Unit /Chapter/Topics
Week 27	21 Dec – 24 Dec	<ul style="list-style-type: none">• Need based Revision

Syllabus Pack Block 5 (week27)

Week No	Topics / Objectives	Study Guidelines	Resources
Week 27	Need based Revision		
	Teachers to use time either for syllabus completion or for reinforcement of grammar topics		

نصابی مواد موضوع: سبق / نظم / غزل کا نام	ہفتے / دن	ہفتے
درخواست نویسی کہانی نویسی ترکیب نحوی غزل اور نظم میں فرق	۲۱ دسمبر - ۲۲ دسمبر	ستائیسواں ہفتہ

سلیبس پیک بلاک 5 (ستائیسواں ہفتہ)

ذرائع	طریقہ تدریس	موضوعات / مقاصد	ہفتہ نمبر
☆ اردو قواعد و انشاء 9-10 ☆ صفحات ۶۱ تا ۵۹ ☆ بورڈ مارکر	☆ اپنے سکول پر نپیل کے نام درخواست لکھ کر استدعا کریں کہ آپ کے سکول میں یوم اقبال کی تقریب کا انعقاد کیا جائے۔ ☆ طلباء اردو قواعد و انشاء میں صفحہ نمبر ۷۲ پر دیے گئے درخواست نویسی کے اصول و ضوابط کا بغور مطالعہ کریں۔ ☆ طلباء دیے گئے موضوع پر درخواست تحریر کریں۔	درخواست نویسی طلباء اس قابل ہوں گے کہ: ۱۔ دیے گئے موضوع پر درخواست لکھ سکیں۔	ستائیسواں ہفتہ
☆ اردو قواعد و انشاء 9-10 ☆ صفحات (۱۱۵، ۱۰۶) ☆ بورڈ مارکر	نادان کی دوستی ☆ طلباء اردو قواعد و انشاء کے صفحہ نمبر ۱۰۶ پر کہانی کے اصول و ضوابط کو بغور پڑھیں۔ ☆ صفحہ نمبر ۱۱۵ پر کہانی نادان کی دوستی کے اشارات دیے گئے ہیں ان اشارات کو مد نظر رکھ کر طلباء اپنے الفاظ میں کہانی لکھیں۔	کہانی نویسی طلباء اس قابل ہوں گے کہ: ۱۔ کہانی نویسی کے اصول و ضوابط کو پڑھ کر کہانی تحریر کر سکیں۔	

ذرائع	طریقہ تدریس	موضوعات / مقاصد	ہفتہ نمبر
☆ اردو (لازمی) برائے جماعت دہم صفحات ۱۹، ۲۰ ☆ بورڈ مارکر	☆ طلباء جماعت نہم میں جملہ فعلیہ اور جملہ اسمیہ کی ترکیبِ نحوی کر چکے ہیں انہی اصول و ضوابط کو مد نظر رکھتے ہوئے مندرجہ ذیل جملوں کی ترکیبِ نحوی کریں۔ • علامہ اقبال ہمارے قومی شاعر ہیں۔ • مالی نے پھول توڑا۔ • قومی ترانہ حفیظ جالندھری نے لکھا • علی شرارتی ہے۔ • پاکستان زرعی ملک ہے۔ • لڑکوں نے کرکٹ کھیلی۔	ترکیبِ نحوی طلباء اس قابل ہوں گے کہ: ۱۔ مختلف جملوں کی ترکیبِ نحوی کر سکیں۔	
☆ اردو (لازمی) برائے جماعت دہم ☆ صفحات ۵، ۶ ☆ بورڈ مارکر	☆ نظم میں مرکزی خیال کو مد نظر رکھتے ہوئے اپنے خیالات و تاثرات کا اظہار کیا جاتا ہے جبکہ غزل کا ہر شعر ایک مکمل خیال پیش کرتا ہے اور ایک ہی غزل میں مختلف خیالات کا اظہار کیا جاسکتا ہے۔ ☆ طلباء اردو (لازمی) برائے جماعت دہم صفحہ نمبر ۵، ۶ پر نظم اور غزل میں فرق کو پڑھیں اور یاد کریں۔	غزل اور نظم میں فرق طلباء اس قابل ہوں گے کہ: ۱۔ طلباء نظم اور غزل میں موجود فرق کا اعادہ کر سکیں۔	

Block 5: Mathematics Week 27

Wks	Time line	Course Content Unit /Chapter/Topics
Week 27	Dec 21 – Dec 24	Need based Revision

Syllabus Pack Block 5 (week 27)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 27	Need based Revision		
	Students will go through a thorough interactive discussion/ problem solving and revision session for Chapters 10, 11, 12 & 13 along the lines of exam preparation (focused and limited to the content given in the reduced syllabus i.e.		
	Unit 10	Tangent to a Circle	
	Ex. 10.1	Q1	
	Ex. 10.2	Q1; Q2	
	Theorems	Theorem 3; Theorem 4(A); Theorem 4(B)	
	Miscellaneous Ex 10	Q1	
	Unit 11	Chords and Arcs	
	Ex. 11.1	Q1; Q2;	
	Theorems	Theorem 1; Theorem 3; Theorem 4	
	Miscellaneous Ex 11	Q1	
	Unit 12	Angle in a Segment of Circle	
	Theorems	Theorem 1; Theorem 3	
	Miscellaneous Ex 12	Q1	
	Unit 13	Practical Geometry- Circle	
	Ex. 13.1	Q3(ii); Q5; Q6	
	Ex. 13.2	Q1; Q2; Q3; Q6; Q7	
	Ex. 13.3	Q1; Q2; Q3; Q5; Q6; Q9	
	Miscellaneous Ex 13	Q1; Q2; Q3	

Block 5: Physics Week 27

Wks	Time line	Course Content Unit /Chapter/Topics
Week 27	Dec 21 – Dec 24	Need based Revision

Syllabus Pack Block 5 (week 27)

Week	Topic/ Objectives	Study Guidelines	Resources
Week 27	<p style="text-align: center;">Need based Revision</p> <p>Students will go through a thorough interactive discussion/ problem solving and revision session for Unit 11 “Sound” along the lines of exam preparation (focused and limited to the content given in the reduced syllabus i.e.</p> <p>11.1 SoundWaves 11.2 Characteristic of sound(Loudness,pitch,quality,intensity,intensitylevel) 11.3 Reflection of sound(Echo) 11.4 Speed of sound (Measuring speed of sound by Echo Method isexcluded) 11.7 Audible frequencyrange 11.8 Ultrasound (Tables: 11.1, 11.2 areincluded)</p> <p>Relevant Exercise Questions should be reinforced by discussion followed by written practice</p>		

Block 5: Chemistry Week 27

Wks	Time line	Course Content Unit /Chapter/Topics
Week 27	Dec 21-Dec 24	Chapter 9: <u>Chemical Equilibrium</u> <ul style="list-style-type: none"> Revision & Recapitulation of topics

Syllabus Pack Block 5 (week 27)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 27	Chapter 9: Chemical Equilibrium (Revision & Recapitulation of topics) Objectives: Students will be able to: <ul style="list-style-type: none"> revise all the topics of the chapter 9 learn the specific topics that needs further guidance attempt questions that provides a more interactive way of learning attempt all related questions from past papers discuss their problems/ difficulties related to the chapters with teacher present any given topic in the class 	<u>Explanation and Discussion:</u> <ul style="list-style-type: none"> Revision of all the topics included in chapter 9 Discussion on the specific topics that needs further clarification/ explanation Preparation of tests to provides a more interactive way of learning Students to do exercise questions of chapter independently Students to discuss their problems/ difficulties related to the chapter with teacher. <ul style="list-style-type: none"> ➤ Summarize the concepts of the chapter through flow sheet diagram of concepts in brief ➤ Group/Pair discussion to reinforce the concepts that have been learnt. ➤ Practice of solving previous years Board papers 	<ul style="list-style-type: none"> Textbook of Chemistry Grade 10 National Book Foundation as Federal Textbook Board- Islamabad Board Marker Available A/V Aids reliable websites for relevant information

Block 5: Biology Week 27

Wks	Time line	Course Content Unit /Chapter/Topics
Week 27	Dec 21-Dec 24	chapter 13: Support and Movement Recapitulation and revision of the topics and Exercise

Syllabus Pack Block 5 (week 27)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 27	<p>Chapter 13: Support and Movement</p> <ul style="list-style-type: none"> Recapitulation and revision of the topics of chapter 13 Practice of solving board papers and attempting questions from chapter 13 <p>Objectives: Students will be able to</p> <ul style="list-style-type: none"> recapitulate and revise the previously taught topics of chapter 13 describe and explain the topics included in chapter answer all the questions related to the topics in exercise and developed by the teacher describe and explain the different terminologies used in the chapters write answers as required in board papers 	<p>Explanation and Discussion:</p> <ul style="list-style-type: none"> ➤ Recapitulate the previously taught topics of chapter 13 ➤ Explanation of difficult topics, terminologies and tables given in the chapter using relevant A/V Aids and different teaching strategies as per requirement ➤ Preparation of relevant Worksheets by teacher to be solved by students ➤ Discussion and guidance to students about attempting board papers and answering the questions related to the chapters ➤ Supervision and guidance of students during practical work 	<ul style="list-style-type: none"> Biology 10 PLD Publishers, Lahore Board Marker

Subject: Computer Science– X

Session (2020-2021)

Block 5: Computer Science Week 27

Wks	Time line	Course Content Unit /Chapter/Topics
Week 27	Dec 21- Dec 24	Need based Revision

Syllabus Pack Block 5 (week27)

Week No	Topic/ Objectives	Study Guidelines	Resources
Week 27		Need based Revision	

نصابی مواد باب / سبق / موضوعات	ٹائم لائن	ہفتہ نمبر
باب اول: من ہدی القرآن الکریم ☆سورۃ الاحزاب (آیات 28 - 34) دہرائی	21 دسمبر - 24 دسمبر	ستائیسواں ہفتہ

سلیبس پیکبلاک-5 (ستائیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات / مقاصد	ہفتہ نمبر
<ul style="list-style-type: none"> اسلامیات لازمی (9-10) (ص: 34-35) قرآن مجید مع ترجمہ تفسیر قرآن انٹرنیٹ (قاری کی تلاوت) 	<ul style="list-style-type: none"> سورۃ الاحزاب (آیات 28-34) طلباء پڑھ چکے ہیں۔ لہذا امتحانات کی تیاری کو مدد نظر رکھتے ہوئے، طلباء سورۃ الاحزاب کی آیات کی اچھی طرح دہرائی کریں۔ طلباء درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کریں۔ کسی معروف قاری کی آواز میں آیات مبارکہ کی تلاوت سن کر ان کی طرح پڑھنے کی مشق کی جائے۔ آیات مبارکہ کو سمجھ کر ان کا ترجمہ و تشریح نوٹ بکس پر لکھیں۔ آیات مبارکہ میں بیان کردہ احکامات و واقعات پر زبانی تبادلہ خیال کیا جائے۔ آیات کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کی جائے۔ 	<p>باب اول: من ہدی القرآن الکریم ☆سورۃ الاحزاب (آیات 28 - 34) دہرائی</p> <p>طلباء اس قابل ہوں گے کہ:</p> <ul style="list-style-type: none"> درست تلفظ اور قرأت کے ساتھ آیات مبارکہ کی دہرائی کر سکیں۔ آیات مبارکہ کو سمجھ کر ان کا ترجمہ و تشریح کر سکیں۔ سبق کی روشنی میں مشقی سوالات کے جوابات کی دہرائی کر سکیں۔ 	ستائیسواں ہفتہ

نصابی مواد باب/سبق/موضوعات	ہفتے / دن	ہفتہ
پانچواں باب: مشاہیر • سری اربندو • دہرائی مکمل سبق • تحریری کام (ص: 85-86) جزو ”ب“ (5-1) جزو ”ج“ (5-1) اور جزو ”د“ مکالم ملائیں۔	دسمبر 21 – دسمبر 24	ستائیسواں ہفتہ

سلیبس پیکبلاک-5 (ستائیسواں ہفتہ)

ذرائع	تدریسی ہدایات	موضوعات / مقاصد	ہفتہ نمبر
☆ اخلاقیات (9-10) پنجاب ٹیکسٹ بک بورڈ لاہور صفحات 84 تا 86 ☆ بورڈ، مارکر	<ul style="list-style-type: none"> • طلبا سبق کی دہرائی کریں اور تمام سبقی معلومات کا اعادہ کرتے ہوئے مشقی سوالات کے جوابات تحریر کریں اور زبانی یاد کریں۔ • <u>تحریری کام (ص: 85-86)</u> • جزو (ب) 1 – 5 سوالات کے مختصر جوابات انفرادی طور پر نوٹ بکس پر کریں۔ • جزو ”ج“ (5-1) اور جزو ”د“ مکالم ملائیں تبادلہ خیال کے بعد نوٹ بکس پر کریں۔ 	<p><u>پانچواں باب: مشاہیر</u> <u>سری اربندو</u></p> <p>طلباء اس قابل ہوں گے کہ:</p> <ol style="list-style-type: none"> 1- سبقی معلومات کا اعادہ کر سکیں۔ 2- مشقی سوالات حل کر سکیں۔ 	ستائیسواں ہفتہ

Block 5: Pakistan Studies Week 27

# of wks	Time line	Course Content Unit /Chapter / Topics
Week 27	Dec 21- Dec 24	CHAPTER 7: FOREIGN RELATIONS OF PAKISTAN <ul style="list-style-type: none">• Genesis and development of Kashmir issue• Pakistan relation with central Asian countries• Pakistan contribution towards peace-keeping in world