

ACCELERATED LEARNING **PROGRAMME**

(ALP)

تسريع التعلم پروگرام

برائے سیکنڈری کلاسز

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جماعت نم کے لیے

أردو

دری کتاب کے اسباق: (مصنفین اور شعرا کے تعارف میں سے کوئی سوال نہیں بنایا جائے گا۔)

🖈 ججرت نبوی صالفتاتیاتی: کلاس ورک: سوال نمبر ۱ (جز الف،ب،ج،د)،۹،۷،۵،۵،۱۰۹،۷،۵،۰

موم ورک: سوال نمبر ا (جزه، و، ز)، ۲، ۳، ۳، ۸

☆ کاہلی: کلاس ورک: سوال نمبر ا (جزالف،ب،ح)، ۲۰۴۰ کہ مضمون

هوم ورک: سوال نمبر ا (جز د)، ۸،۵،۳ م

🖈 آ رام دسکون: کلاس ورک: سوال نمبرا (جزالف،ب،ج،د)، ۳، ۲۰۴۰

هوم ورک: سوال نمبر ا (جزه، و)، ۸،۷،۵،۲

☆امتحان: کلاس ورک: سوال نمبر ا (جزالف، ب، ح)، ۲،۳،۲، جملے کے اجزائے ترکیبی

موم ورک: سوال نمبر ا (جزده)، ۲،۴،۸،۸

🖈 قدرایاز: کلاس ورک: سوال نمبر ۱٬۲۰۱،۹۰۷،۹۱۰، وزمره اورمحاور بے کے کاظ سے غلط فقرات کی در تی

موم ورک: ۳، ۲،۵،۵،۱۱،۸،۵

🖈 حمد نظم): کلاس ورک: سوال نمبرا (جزالف، ب،ج)،۲،۳،۳،۴، قافیه، ردیف

هوم ورک: سوال نمبر ا (جزد، ه)،۹،۸،۷،۵،۹

☆ نعت (نظم): کلاس ورک: سوال نمبرا (جزالف، ب، ج)، ۲، ۵،۵،۴ لمبرا (جزالف، ب، ج) ۸،۵،۴ لمبرا (جزالف، ب، ج) المبرا (جزالف، ب، ج) المبر

بوم ورک: سوال نمبر ا (جز د، ه)، ۲،۲۳

🖈 پیوسته ره شجر سے امید بہار رکھ: کلاس ورک: سوال نمبر ۱۲،۱۱،۱۰،۸،۵،۲۰۱۱

(نظم) هوم ورك: سوال نمبر ۹،۷،۶،۴ ه

بوم ورک: سوال نمبر ا (جزده ه)، ۸،۲،۳

🖈 اسدالله خال غالب (غزل): کلاس ورک: سوال نمبرا (جزالف، ب، ج)،۲،۳،۴، کنایه

موم ورک: سوال نمبر ا (جزد، ه)، ۸،۷،۲،۵،۸

أردوتواعدوانشا:

(الف) خطوط نوليي (صفح نمبر 62 تا67):

کلاس ورک: ☆ والد کے نام (سکول میں امتحانی نتیجہ کی روداد بیان کرنا) ☆ والدہ کے نام (موسم گرما کی تعطیلات کاذکر) ☆ چھاکے نام (مزاج برسی اور چیجی کی بہاری پرتشویش ظاہر کرنا) ہوم ورک: ﷺ چھوٹے بھائی کے نام (اچھی صحبت اختیار کرنے کی نفیحت) ﷺ دوست کے نام (ناراض دوست کومنانا)

ﷺ دوست کے نام (شادی کے موقع پر ہے جااسراف کی فدمت کرنا)

عرائض نو کیی (صفح نمبر 77،77):

کلاس ورک: ﷺ ہیڈ ماسٹرصا حب کے نام چھٹی کی درخواست ﷺ سرٹیفلیٹ کے حصول کے لیے درخواست ہوم ورک: ﷺ بیاری کی درخواست

کلاس ورک: ﷺ جس کا کام ای کوسا جے ﷺ کی برکت ﷺ اتفاق کی برکت ہوم ورک: ﷺ جس کا کام ای کوسا جے ﷺ کی برکت ﷺ اتفاق کی برکت ہوم ورک: ﷺ جھوٹے کی سزا ﷺ دودھ میں پانی ﷺ ہرنی کی دعا

کلاس ورک: ﷺ مریض اور ڈاکٹر کے درمیان ﷺ دکا نداراور خریدار کے درمیان

ہوم ورک: ﷺ مریض اور ڈاکٹر کے درمیان

(ه) جملوں کی تکمیل (صرب الامثال صفح نمبر 46،45): دی گئی تین مثالیں اور پہلی 20 ضرب الامثال

(و) جملوں کی درستی (صفحینمبر 35،34):" نے"،" کو"اور"فعل کی فاعل کے ساتھ مطابقت" کے حوالے سے جملوں کی درستی

ENGLISH

UNIT # 1: THE SAVIOUR OF MANKIND

Classwork: Glossary, Comprehension (B Qs: 1-4), Vocabulary (B & C), Grammar (B & C), Writing Skills (A)

Homework: Comprehension (B Qs: 5-8), Vocabulary (A & D), Grammar (A & D)

UNIT # 2: PATRIOTISM

Classwork: Glossary, Comprehension (A Qs: 1-5), Vocabulary (A & C), Grammar (A & B), Writing Skills (B)

Homework: Vocabulary (B), Grammar (C), Writing Skills (A)

رضى الله تعالى عنها UNIT # 4: HAZRAT ASMA

Classwork: Glossary, Comprehension (A, B, C), Vocabulary (B), Grammar (A, B, D & E), Writing Skills (A)

Homework: Comprehension (D), Vocabulary (A), Grammar (C, F & G) **REVIEW-I is exclued.**

UNIT # 5: DAFFODILS

Classwork: Glossary, Comprehension (A Qs: 1-5), Vocabulary (B & C), Grammar (C, D, E, F & G), Writing Skills (B)

Homework: Vocabulary (A), Grammar (A & B)

UNIT # 6: THE QUAID'S VISION AND PAKISTAN

Classwork: Glossary, Comprehension (A Qs:1-5), Vocabulary (A, D & E), Grammar (B, C, D, E & F), Writing Skills (B)

Homework: Vocabulary (B & C), Grammar (A)

UNIT # 7: SULTAN AHMAD MASJID

Classwork: Glossary, Comprehension (A Qs:1-6), Vocabulary (C & D), Grammar (B, C, D & E)

Homework: Vocabulary (A & B), Grammar (A)

LETTERS (GRAMMAR & COMPOSITION)

Classwork: To your mother who is worried about your health, To your sister congratulating her on her success in the exams, To your father requesting him to send you some extra funds for the payments of hostel dues, To your friend condoling the death of his mother

Homework: To your friend congratulating her on her birthday, To your friend requesting him to lend you some books, To your sister thanking her for a gift

STORY WRITING

Classwork: A Farmer and His Sons, The Kindness of Rasool , Robbers Turn into Good Citizens, The Muslim Brotherhood

Homework: A Friend in Need is a Friend Indeed, The Boy who cried "Wolf"

DIALOGUE WRITING

Between A Teacher and Student, Between Two students regarding Salaht

COMPREHENSION OF A PASSAGE

Classwork: (III), (IV), (V)

Homework: (VII), (IX)

COMPREHENSION OF A PASSAGE (EXERCISES)

Classwork: (5), (7), (9) **Homework:** (13), (15)

ACTIVE AND PASSIVE VOICE (Pages 168-170)

TRANSLATION (TENSES)

All Translated Lessons of all tenses relating to affirmative, negative and interrogative sentences are included. All unsolved Excercises are excluded.

(Pages 69-137)

MATHEMATICS (Science Group)

UNIT - 1: MATRICES AND DETERMINANTS

Classwork: Exercise: 1.1, Q: 1 (C), Q: 3, Exercise: 1.2, Q: 4 (A), Q: 5 (B), Q: 6 (i), Exercise: 1.3, Q: 1 (A), Q: 2 (B), Q: 3 (ii), Q: 4 (ii), Q: 5 (x), Q: 8 (i), Exercise: 1.4,

Q: 1 (i,v), Q: 4 (a), Q: 5 (ii), Execise: 1.5, Q: 1 (ii), Q: 2 (i), Q: 3 (i), Q: 6 (i), Exercise: 1.6, Q: 1 (iii), Q: 4

Homework: Exercise: 1.1, Q: 1 (G, H), Exercise: 1.2, Q: 1-3, Q: 4 (D), Q: 5 (C, E),

Q: 6 (ii), Exercise: 1.3, Q: 1 (B-F), Q: 2 (C, F), Q: 3 (iv, vi), Q: 4 (vi), Q: 5 (vi-ix),

Q: 8 (ii, vi), Exercise: 1.4, Q: 1 (ii-iv), Q: 4 (d, e), Q: 5 (iv), Q: 6 (ii), Execise: 1.5,

Q: 2 (ii-iv), Q: 3 (iii, iv), Q: 6 (ii), Exercise: 1.6, Q: 1 (i, v), Q:3,

Review Exercise: 1, Q: 1, Q: 3, Q: 5, Q: 7 (ii)

UNIT - 2: REAL AND COMPLEX NUMBERS

Classwork: Exercise: 2.1, Q: 1 (i, iii), Q: 2 (iii), Q: 3 (ii), Q: 4 (i), Q: 6 (ii), Exercise: 2.3, Q: 1 (i), Q: 2 (i), Q: 3 (ii), Exercise: 2.4, Q: 1 (i), Q: 3 (ii), Exercise: 2.5, Q: 1 (ii), Q: 2 (iii), Q: 3 (ii), Exercise: 2.6, Q: 1 (v), Q: 2 (iii), Q: 3 (i), Q: 4 (iii), Q: 6 (ii), Q: 7 (i) Homework: Exercise: 2.1, Q: 1 (ii, iv-vi), Q: 2 (iv, vi), Q: 3 (iii, v), Q: 4 (ii, iv), Q: 6 (iii), Exercise: 2.3, Q: 1 (iii), Q: 2 (ii), Q: 3 (iii), Exercise: 2.4, Q: 1 (iv), Q: 3 (iii), Exercise: 2.5,

Q: 1 (iv, vi), Q: 2 (v, vi), Q: 4, Exercise: 2.6, Q: 1 (vi), Q: 2 (iv), Q: 3 (iv), Q: 6 (vi), Q: 7

(ii), Review Exercise: 2, Q: 1, Q: 3 (ii, iv), Q: 4, Q: 5

UNIT -3: LOGARITHMS

Classwork: Exercise: 3.1, Q: 1 (iv), Q: 2 (ii), Exercise: 3.2, Q: 2 (iii), Q: 4 (ii), Q: 6 (i),

Exercise: 3.3, Q: 1 (iii), Q: 3 (ii), Q: 4 (i), Q: 5 (iii), Exercise: 3.4, Q: 1 (i), Q: 4

Homework: Exercise: 3.1, Q: 1 (v), Q: 2 (iii), Exercise: 3.2, Q: 2 (iv), Q: 6 (iv, v),

Exercise: 3.3, Q: 1 (v, vi), Q: 3 (iv), Q: 4 (ii), Q: 5 (iv), Exercise: 3.4, Q: 1 (iii, v, viii),

Review Exercise: 3, Q: 1, Q: 3 (iii, iv), Q: 5 (ii), Q: 6 (i, iii)

UNIT- 4: ALGEBRAIC EXPRESSIONS AND ALGEBRAIC FORMULAS

Classwork: Exercise: 4.1, Q: 1 (iv), Q: 2 (i), Q: 3 (iii), Q: 4 (b), Q: 6 (v), Exercise: 4.2, Q: 3, 13, 14 (i), Exercise: 4.3, Q: 1 (iv), Q: 2 (v), Q: 3 (iv), Q: 4 (v), Exercise: 4.4, Q: 1 (i), Q: 2 (iii), Q: 3 (iii), Q: 5 (i),

Homework: Exercise: 4.1, Q: 1 (ii), Q: 2 (iii), Q: 3 (i, vi), Q: 6 (i, iii), Exercise: 4.2, Q: 5, 8, 11, 14 (ii), Exercise: 4.3, Q: 1 (ii), Q: 2 (i), Q: 3 (i), Q: 4 (i, iv), Exercise: 4.4,

Q: 1 (vi, vii), Q: 2 (vii, viii), Q: 5 (ii), Review Exercise: 4, Q: 1, Q: 4 (ii), Q: 5, Q: 6 (iv), Q: 7 (iii), Q: 8 (i)

UNIT -5: FACTORIZATION

Classwork: Exercise: 5.1, Q: 1 (ii), Q: 3 (ii), Q: 4 (ii), Q: 5 (ii), Exercise: 5.2, Q: 1 (iii), Q: 2 (i), Q: 3 (v), Q: 4 (iii), Q: 5 (ii), Q: 6 (i), Exercise: 5.3, Q: 1 (iv), Q: 4, Exercise: 5.4, Q: 2

Homework: Exercise: 5.1, Q: 1 (v, vi), Q: 3 (iv), Q: 4 (iv), Q: 5 (v, vi), Exercise: 5.2,

Q: 1 (v), Q: 2 (iv), Q: 3 (iv), Q: 4 (v), Q: 5 (iv), Q: 6 (iv), Exercise: 5.3, Q: 1 (i, v), Q: 5,

Exercise: 5.4, Q: 8, Review Exercise: 5, Q: 1, Q: 3 (ii, v, ix)

UNIT- 6: ALGEBRAIC MANIPULATION

Classwork: Exercise: 6.1, Q: 1 (ii), Q: 2 (v), Q: 4 (ii), Q: 5 (iii), Q: 6, Exercise: 6.2, Q: 1, 11, Exercise: 6.3, Q: 1 (v), Q: 2 (v), Q: 3 (ii)

Homework: Exercise: 6.1, Q: 2 (i, iv), Q: 3 (i), Q: 5 (iv), Q: 8, Exercise: 6.2, Q: 4, Q: 6, Exercise: 6.2, Q: 1 (i, ii, vi), Q: 2 (i, ii), Q: 4 (i), Paviery Exercise: 6.2, Q: 1, Q: 6 (ii), Q: 7

Exercise: 6.3, Q: 1 (i, ii, vi), Q: 2 (i, ii), Q: 4 (i), Review Exercise: 6, Q:1, Q: 6 (ii), Q: 7

UNIT -7: LINEAR EQUATIONS AND INEQUALITIES

Classwork: Exercise: 7.1, Q: 1 (i, ix), Q: 2 (v), Exercise: 7.2, Q: 2 (iii, viii),

Exercise: 7.3, Q: 1 (ii), Q: 2 (iii)

Homework: Exercise: 7.1, Q: 1 (ii, v, vi, x), Q: 2 (i, ii, viii), Exercise: 7.2, Q: 2 (v, vii),

Exercise: 7.3, Q: 1 (iv), Q: 2 (iv), Review Exercise: 7, Q: 1, Q: 3 (i, iii), Q: 5 (i)

UNIT-8: LINEAR GRAPH AND THEIR APPLICATION

Classwork: Exercise: 8.1, Q: 1, Q: 2 (ii), Q: 3 (i), Q: 4 (b), Q: 5 (ii),

Exercise: 8.2, Q: 3 (b), Q: 4 (iii), Exercise: 8.3, Q: 1

Homework: Exercise: 8.1, Q: 2 (iii, vii, viii), Q: 3 (v), Q: 4 (c), Q: 5 (v), Exercise: 8.2,

Q: 3 (e), Q: 4 (iv), Exercise: 8.3, Q: 4, Review Exercise: 8, Q: 1, Q: 4 (ii, v)

UNIT-9: INTRODUCTION TO COORDINATE GEOMETRY

DESCRIPTIVE GEOMETRY

Classwork: Exercise: 9.1, Q: 1 (a), Q: 2 (ii), Exercise: 9.2, Q: 1, 10, Exercise: 9.3, Q: 1 (a), Q: 3 Homework: Exercise: 9.1, Q: 1(c, f), Q: 2 (iii, vi), Exercise: 9.2, Q: 3, 4, 9, Exercise: 9.3,

Q: 1 (d, f), Q: 2, Review Exercise: 9, Q: 1, Q: 3 (ii), Q: 4 (i, ii), Q: 5

UNIT-10: CONGRUENT TRIANGLES

Classwork: Review Exercise: 10, Q: (3, 4) Homework: Review Exercise: 10, O: (2, 5)

UNIT-11: PARALLELOGRAMS AND TRIANGLES

Classwork: Review Exercise: 11, Q: (3, 4) Homework: Review Exercise: 11, Q: (5, 6)

UNIT-12: LINE BISECTORS AND ANGLE BISECTORS

Classwork: Theorem 12.1.1, Theorem 12.1.4, Review Exercise:12, Q: 4 Homework: Theorem 12.1.1, Theorem 12.1.4, Review Exercise:12, O: 5

UNIT-13: SIDES AND ANGLES OF A TRIANGLE

Classwork: Review Exercise:13, Q: (3, 5) Homework: Review Exercise:13, Q: (2, 4) UNIT-14: RATIO AND PROPORTION

Classwork: Review Exercise:14, Q: (3, 5, 6)

Homework: Review Exercise: 14, Q: 2 **UNIT-15: PYTHAGORAS' THEOREM**

Classwork: Exercise:15, Q: 1 (i), Q: 3, Q: 6 (ii), Q: 7

Homework: Exercise: 15, Q:1 (iv), Q: 8, Review Exercise: 15, Q: 2

UNIT-16: THEOREM RELATED WITH AREA

Classwork: Review Exercise: 16, Q: 2 (i, ii), Q: 3 Homework: Review Exercise: 16, Q: 2 (iii, iv)

UNIT-17: PRACTICAL GEOMETRY-TRIANGLES

Classwork: Exercise: 17.1, Q: 1 (iv), Q: 2 (ii), Q: 4 (ii), Q: 5 (i), Exercise: 17.2, Q: 1 (ii),

Q: 2 (iii), Q: 3 (i), Q: 4 (ii), Exercise: 17.3, Q: 1 (ii), Q: 3, Exercise: 17.5, Q: 1

Homework: Exercise: 17.1, Q: 1 (i, vi, vii), Q: 4 (iii), Q: 5 (ii), Exercise: 17.2, Q: 3 (ii), Q: 4 (iii), Exercise: 17.3, Q: 1 (i), Exercise: 17.5, Q: 4, 6, Review Exercise: 17, Q: 2, Q: 3

UNIT-1: PERCENTAGE, RATIO AND PROPORTION

Classwork: Exercise: 1.1, Q: 1 (iii, xi), Q: 2 (iv, xii), Q: 3 (i), Q: 4 (xii), Exercise: 1.2, Q: 1, 9,

Exercise: 1.3, Q: 1 (i), Q: 2 (i, ix), Exercise: 1.4, Q: 1, 9, Exercise: 1.5, Q: 1, 11

Homework: Exercise: 1.1, Q: 1 (v, ix, xii), Q: 2 (vi, ix, xi), Q: 3 (iii, iv, x, xi), Q: 4 (i, iii,

v, xi), Exercise: 1.2, Q: 3, 6, 7, Exercise: 1.3, Q: 1 (iv, vi), Q: 2 (ii, iii, viii), Exercise: 1.4,

Q: 3, 5, 6, Exercise: 1.5, Q: 2, 5, 6, 10, Review Exercise: 1, Q: 1, Q: 3, Q: 6

UNIT-2: ZAKAT, USHR AND INHERITANCE

Classwork: Exercise: 2.1, Q: 1, 7, 12

Homework: Exercise: 2.1, Q: 3, 6, 9, 10, Review Exercise: 2, Q: 1, Q: 3, Q: 5

UNIT-3: BUSINESS MATHEMATICS

Classwork: Exercise: 3.1, Q: 1 (iii), Q: 3 (ii), Q: 5, Exercise: 3.2, Q: 1 (ii), Q: 6,

Exercise: 3.3: Q: 1, 5

Homework: Exercise: 3.1, Q: 1 (i, v), Q: 3 (iv, v), Q: 7, Exercise: 3.2, Q: 2 (iii), Q: 4, 8,

Exercise: 3.3, Q: 3 Review Exercise: 3, Q: 1, Q: 3, Q: 4

UNIT-4: FINANCIAL MATHEMATICS

Classwork: Exercise: 4.1, Q: 4, Exercise: 4.2, Q: 1, 10, 14, Exercise: 4.3, Q: 3,

Exercise: 4.4, Q: 4, 7, Exercise: 4.5, Q: 5 (ii)

Homework: Exercise: 4.1, Q: 5, Exercise: 4.2, Q: 3, 6, 12, Exercise: 4.3, Q: 1, 6, 9,

Exercise: 4.4, Q: 3, 8, Exercise: 4.5, Q: 2 (ii), Review Exercise: 4, Q: 1, Q: 3

UNIT-5:CONSUMER MATHEMATICS

Classwork: Exercise: 5.1, Q: 1, 6, Exercise: 5.2, Q: 1(i), Q: 2 (ii), Q: 3 (ii), Exercise: 5.3, Q: 6 (ii)

Homework: Exercise: 5.1, Q: 2, 8, Exercise: 5.2, Q: 1 (ii, vi), Q: 2 (iii), Q: 3 (v, vi),

Exercise: 5.3, Q: 2,5, Review Exercise: 5, Q: 1, Q: 3, Q: 4

UNIT-6: EXPONENTS AND LOGARITHMS

Classwork: Exercise: 6.1, Q: 1 (ii), Q: 2 (iii), Q: 3 (iii), Q: 4 (iii, vii, xi), Q: 5 (viii, ix, xi),

Exercise: 6.2, Q: 1 (ii), Q: 3, 15, 18, 27 (iii), Q: 28 (ii), Q: 29 (iii), Exercise: 6.3, Q: 8, 10, 15,

5 (ii), Q: 8 (i),Q: 10

Homework: Exercise: 6.1, Q: 1 (v, vi), Q: 2 (iv), Q: 3 (ii, vii, viii), Q: 4 (i, viii, xii), Q: 5 (ii, iv, xiii),

Exercise: 6.2, Q: 1 (v, vi), Q: 6, 9, 13, 17, 21, 24, 26 (i, vi), Q: 28 (i, v), Q: 29 (i, iv,

viii), Exercise: 6.3, Q: 1, 4, 12, 13, Exercise: 6.4, Q: 1 (ii, vi), Q: 2 (i, v), Q: 4 (ii),

Exercise: 6.5, Q: 1 (ii), Q: 2 (iv, v), Q: 3 (ii), Q: 5 (iv), Q: 8 (v, vi),

Review Exercise: 6, Q: 1, Q: 3 (i), Q: 4 (ii), Q: 6 (i, ii)

UNIT-7: ARITHMETIC AND GEOMETRIC SEQUENCES

Classwork: Exercise: 7.1, Q: 1 (iv), Q: 2 (ii), Q: 3 (v), Exercise: 7.2, Q: 1 (ii), Q: 2 (ii), Q: 5 (vii), Exercise: 7.3. Q: 1 (ii), Q: 5, Exercise: 7.4, Q: 3, 12, Execise: 7.5, Q:

1 (iii), Q: 3 (ii), Q: 4

Homework: Exercise: 7.1, Q: 1 (i, viii, ix), Q: 2 (v, vi), Q: 3 (i, ii), Exercise: 7.2, Q: 1 (iii, v), Q: 2 (i, iv, vi), Q: 5 (ix), Exercise: 7.3, Q: 1 (iv), Q: 3, 7, 8, Exercise: 7.4,

O: 1, 4, 8, 10, Exercise: 7.5, O: 2 (ii), O: 12, Review Exercise: 7, O:1, O: 3, O: 5, O: 7

UNIT-8: SETS AND FUNCTIONS

Classwork: Exercise: 8.1, O: 5, Exercise: 8.2, O: 4, 5

Homework: Exercise: 8.1, Q: 6, 7, Exercise: 8.2, Q: 2, 7, Review Exercise: 8, Q: 1, Q: 4, Q: 5

UNIT -9: LINEAR GRAPH

Classwork: Exercise: 9.1, O: 1 (i), O: 3 (ii), Exercise: 9.2, O: 2, O: 11 (i), Exercise: 9.3,

Q: 1 (a), Q: 3 (a)

Homework: Exercise: 9.1, Q: 1 (iv, vi, viii), Q: 3 (iii), Exercise: 9.2, Q: 1, 5, 9,

Q: 12, Exercise: 9.3, Q: 1 (b), Q: 3 (b), Review Exercise: 9, Q: 1,Q: 3 (i), Q: 4 (iii, iv)

UNIT-10: BASIC STATISTICS

Classwork: Exercise: 10.1, O: 1, Exercise: 10.2, O: 1 (i), O: 3, Exercise: 10.3, O: 1 (i),

Exercise: 10.4, Q: 1 (i)

Homework: Exercise: 10.1, Q: 3, Exercise: 10.2, Q: 1 (iii), Exercise: 10.3, Q:1 (iv),

Exercise: 10.4, O: 1 (iv, v), Review Exercise: 10, O: 1, O: 3, O: 5

الجزءالاول: من هدى القرآن الكريم ، سورة الانفال الدرس الاول ، الف الدرس الاول ، الف كلاس ورك: مشقى سوالات ، سوال نمبر 1 هوم ورك: مشقى سوالات ، سوال نمبر 2 تا 3

كلاس ورك: مشقى سوالات، سوال نمبر 1 تا 2 موم ورك: مشقى سوالات، سوال نمبر 3 تا 4

كلاس وركي: مشقى سوالات، سوال نمبر 1 تا 2 مهم ورك: مشقى سوالات، سوال نمبر 3

كلاس ورك: مشقى سوالات، سوال نمبر 1 تا 2 موم ورك: مشقى سوالات، سوال نمبر 3 تا 4 الجزءالثاني:من هدى الحديث

کلاس ورکُ: حدیث نمبر 1 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا موم ورك: ترجمها ورتشر تك نوث بك پرلكهنا اوريا وكرنا

کلاس ورک: حدیث نمبر 2 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا **موم ورک:** ترجمها ورتشری نوٹ بک برلکھنا اور بادکرنا

حديث تمبر 4

کلاس ورک: حدیث نمبر 4 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا

موم ورک: ترجمه اورتشریخ نوٹ یک پرلکھنا اور یا دکرنا

حدیث نمبر 6

کلا<u>ں ورک</u>: حدیث نمبر 6 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا

ہوم ورک: ترجمہاورتشر تکے نوٹ یک پرلکھنااور بادکرنا

حديث تمبر 8

کلاس ورک: حدیث نمبر 8 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا

کلاس ورک: ترجمها ورتشریج نوٹ بک پرلکھنا اور یا دکرنا

الجزءالثالث

قرآن مجيد (تعارف،حفاظت اورفضائل)

ہوم ورک: مشقی سوالات، سوال نمبر 3 كلاس ورك: مشقى سوالات ،سوال نمبر 1 تا 2

الله تعالیٰ اوراس کے رسول صلی الله علیه وآله بهلم کی محبت واطاعت

. **بوم ورک:** مشقی سوالات ،سوال نمبر 3 كلاس ورك: مشقى سوالات ،سوال نمبر أتا 2

مطالعهٔ پاکستان

باب1: ياكستان كى نظرياتى اساس

نظر بیر کی تعریف، ماخذ اوراہمیت (نظریہ) نظریہ کے ماخذ (مشتر کہ مذہب،مشتر کہ سیاسی مقاصد،مشتر کتعلیمی مقاصد،مشتر کہ معاثی مقاصد،مشتر کہ ثقافتی مقاصد) ،نظریہ کی اہمیت،نظریۂ یا کستان کامفہوم، اسلامی ریاست اوراقلیتوں کےحقوق،نظریۂ یا کستان کےعناصر (عقائد عبادات، قانون کی حکمرانی،اخوت ومساوات،عدل وانصاف) ، برصغیر کےمسلمانوں کی مذہبی،ثقافتی ،ساجی ومعاثثی محرومی کےحوالے سے دوقو می نظر یہ کی ابتدا اور ارتفا کی وضاحت (دوقو می نظر یہ: ابتدا اور ارتفا کی وضاحت، برصغیر میں دوقو می نظریے کی ابتدا ، سرسيداحمدخان اور دوقو مي نظريه، چودهري رحمت على اور دوقو مي نظريهه)،علا مه محمدا قبال رحمة الله عليه اور قائد اغظم محمرعلي جناح رحمة الله عليه کےارشادات کی روشنی میں نظریۂ یا کستان کی وضاحت (نظر یہ یا کستان اورعلامہ مجمدا قبال ؓ نظر یہ یا کستان اور قائداعظم ؓ)۔

كلاس ورك: مشقى سوالات: سوال 1 (مكمل)، سوال 2 (i,iii-v)، سوال 3 (dahu) ، سوال 3

بوم ورك: مشقى سوالات: سوال (i-iv,vi) بسوال 5 (i-iv,vi)

باب2: تحريك ياكستان اورياكستان كاقيام

تحريب يا كستان كالپس منظر تحريك على گڑھاورسر سيداحمد خان تقسيم بنگال، شمله وفد، مسلم ليگ كا قيام، ميثاق كھنو تحريك خلافت، تحريكِ بْجرت، نهرور يورٹ ، قائد اعظم ؒ كے چودہ نكات ،علامه مجمد اقبالؒ كا خطبہ اللہٰ آباد ،قر اردادِ لا ہُور، 3 جون 1947ء كا منصوبہ، قانون آزادی ہند 1947ء، ریڈ کلف ابوارڈ ، صبح آزادی، قائداعظم محمعلی جناح رحمۃ الله علیہ کی سیاسی اور آئینی کوششوں کے حوالے سے قیام یا کتان میں کردار، گورنر جزل کی حیثیت سے قائد اعظم محمطی جناح رحمة الله علیه کی خد مات اور کارنا ہے، قرار دادِ

مقاصد، پاکستان – بھارت جنگ 1965ء، جنگ کے اہم واقعات، جنگ کے اثرات ، مشرقی پاکستان کی علیحدگی اور بنگلہ دلیش کا قیام،
مشرقی پاکستان کی علیحدگی کے اسباب –
کلاس ورک: مشقی سوالات: سوال (i-v,vii,x)، سوال (i-iii))، سوال (i-iiv,vi,viii)
ہوم ورک: مشقی سوالات: سوال (i,iii,vi)، سوال (i-iv,vi,viii)
ہوم ورک: مشقی سوالات: سوال (i,iii,vi)، سوال کا انسانی زندگی پر اثرات، گلیشیر، گلیشیرز کی اہمیت، پاکستان کے در یا،
پاکستان کا گل وقوع ، محل وقوع کی اہمیت، آب و ہوا کے انسانی زندگی پر اثرات، گلیشیر، گلیشیرز کی اہمیت، پاکستان کے در یا،
جنگلات، جنگلات کی اہمیت، اہم ما حولیاتی مسائل اوران کا طل آلودگی، جنگلات کا کٹاؤہ سے وتصور۔
کلاس ورک: مشقی سوالات: سوال (i,iii)، سوال کر کممل)، سوال کر ازار، قیام پاکستان ہم بیا کہ استان کے دوا تین کو بااختیار بنانا
ہوم ورک: مشقی سوالات: سوال (i,iii) ہو اورخوا تین پر تشد دکی تعریف، پاکستان میں خوا تین پر تشد دکے طاحتے کے لیے حکومتی سطح پر قوی میں خوا تین کی خدمات، تشد داورخوا تین پر تشد دکی احتیار بنانے میں حکومتی کردار۔
تومی ترقی میں خوا تین کی خدمات، تشد داورخوا تین پر تشد دکی تعریف، پاکستان میں خوا تین پر تشد دکے خاتمے کے لیے حکومتی کٹی پر اثرات، خوا تین کی خدمات، تشد داورخوا تین پر تشد دکی خاتم کے لیے حکومتی کٹی پر کلاس ورک: مشقی سوالات: سوال (دکمل)، سوال (کمل)، سوال (کمل (کمل)، سوال (کمل (کمل)، سوال (کمل)، سوال (کمل

PHYSICS

(Note: All questions given in "Mini Exercises and Quick Quizs" are excluded.) CHAPTER 1: PHYSICAL QUANTITIES AND MEASUREMENT

Physical Quantities (Pg. 4), Base Quantities (Pg. 5), Derived Quantities (Pg. 5), International System of Units (Pg. 5), Base Units (Pg. 5, 6), Derived Units (Pg. 6), Prefixes (Pg. 7, 8), Scientific Notation (Pg. 8), Vernier Callipers (Pg. 10, 11), Significant Figures (Pg. 20-22), Example: 1.4 (Pg. 22)

Exercise:

Classwork: Q: 1.1 (iv, v, vii, x) (Pg. 24) (1.4-1.7, 1.13) (Pg. 25), Problems: (1.2, 1.6, 1.8) (Pg. 25, 26)

Homework: Q: 1.1 (i-iii) (Pg. 24) (1.2, 1.3, 1.8, 1.12) (Pg. 24, 25),

Problems: (1.4, 1.5, 1.9) (Pg. 25, 26)

CHAPTER 2: KINEMATICS

Rest and Motion (Pg. 29), Scalars and Vectors (Pg. 33, 34), Terms Associated with Motion (Pg. 34-39), Graphical Analysis of Motion (Pg. 40), Distance-Time Graph (Pg. 40, 41), Speed-Time Graph (Pg. 42, 43), Equations of Motion (Pg. 44-46), Motion of Freely Falling Bodies (Pg. 49), Examples: 2.4-2.8, 2.10 (Pg. 39-43, 46, 47)

Exercise:

Classwork: Q: 2.1 (iv-vi, ix, x, xii) (Pg. 52, 53), (2.6-2.8, 2.13) (Pg. 53, 54),

Problems: (2.3-2.5, 2.8) (Pg. 54)

Homework: Q: 2.1 (iii, viii, xi) (Pg. 53), (2.4, 2.5, 2.9, 2.10) (Pg. 53),

Problems: (2.1, 2.2, 2.6) (Pg. 54)

CHAPTER 3: DYNAMICS

Force, Inertia and Momentum (Pg. 57, 59), Newton's Laws of Motion (Pg. 59, 60, 63, 64), Mass and Weight (Pg. 62, 63), Force and Momentum (Pg. 67, 68), Law of Conservation of Momentum and its Daily Life Applications (Pg. 69-71), Friction, Coefficient of Friction (F= μ R) (Pg. 72, 73), Rolling Friction (Pg. 74, 75), Centripetal Force (Pg. 77, 78), Examples: 3.1, 3.3, 3.6, 3.8 (Pg. 61, 62, 68, 69, 78, 79)

Exercise:

Classwork: Q: 3.1 (iii, viii) (Pg. 81,82), (3.3, 3.6, 3.7, 3.9, 3.10, 3.12, 3.13, 3.17) (Pg. 83), Problems: (3.5, 3.9) (Pg. 83)

Homework: Q: 3.1 (i, ii, v, vii, ix) (Pg. 81, 82), (3.2, 3.4, 3.11, 3.16, 3.17) (Pg. 82),

Problems: (3.1, 3.3, 3.8, 3.10) (Pg. 83)

CHAPTER 4: TURNING EFFECT OF FORCES

Like and Unlike Parallel Forces (Pg. 86), Addition of Forces (Pg. 86, 87), Head to Tail Rule (Pg. 87), Resolution of Forces (Pg. 88-90), Torque or Moment of a Force (Pg. 90-92), Principle of Moments (Pg. 92), Centre of Gravity (Pg. 94-96), Equilibrium (Pg. 97), First Condition of Equilibrium (Pg. 97, 98), Second Condition of Equilibrium only (Pg. 98, 99), Examples: 4.2-4.5 (Pg. 89, 92, 93, 98)

Exercise:

Classwork: Q 4.1: (iv, vi) (Pg. 104), (4.4, 4.5, 4.7-4.9, 4.11) (Pg. 104, 105),

Problems: (4.1, 4.3, 4.7, 4.8) (Pg. 105)

Homework: Q 4.1 : (i-iii) (Pg. 104), (4.6, 4.10) (Pg. 104, 105),

Problems: (4.2, 4.4-4.6) (Pg. 105)

CHAPTER 5: GRAVITATION

The Force of Gravitation (Pg. 107), Law of Gravitation (Pg. 107, 108), Law of Gravitation and Newton's Third Law of Motion (Pg. 108), Mass of Earth (Pg. 110), Artificial Satellites (Pg. 112, 113), Examples: 5.1, 5.2 (Pg. 108, 109, 111, 112)

Exercise:

Classwork: Q 5.1: (ii) (Pg. 114), (5.8-5.10) (Pg. 115) Problems: (5.4, 5.8, 5.9) (Pg. 115, 116)

Homework: Q 5.1: (i, iv) (Pg. 114), (5.2, 5.3, 5.16) (Pg. 115)

Problems: (5.1-5.3, 5.7) (Pg. 115, 116)

CHAPTER 6: WORK AND ENERGY

Energy (Pg. 121), Kinetic Energy (K.E.=1/2 mv²) (Pg. 121, 122), Potential Energy (P.E.=mgh) (Pg. 123, 124), Efficiency (Pg. 136), Power (Pg. 137), Examples: 6.2, 6.3, 6.5, 6.7 (Pg. 122-124, 136-139)

Exercise:

Classwork: Q: 6.1 (ii, iii, vii) (Pg. 140, 141), (6.5, 6.6, 6.13, 6.14) (Pg. 141), **Problems:** (6.4-6.6) (Pg. 142)

Homework: Q: 6.1 (v, ix) (Pg. 140, 141), (6.7, 6.15, 6.16) (Pg. 141), Problems: (6.2, 6.3, 6.9) (Pg. 142)

CHAPTER 7: PROPERTIES OF MATTER

Density (Pg. 147), Pressure (Pg. 148, 149), Atmospheric Pressure only (Pg. 149), Pressure in Liquids (Pg. 151, 152), Pascal's Law (Pg. 152), Application of Pascal's Law, Hydraulic Press (Pg. 152, 153), Elasticity (Pg. 160, 161), Hooke's Law (Pg. 161), Young's Modulus (Pg. 162), Examples: 7.1, 7.2, 7.7 (Pg. 148, 153, 154, 162, 163)

Exercise:

Classwork: Q7.1: (i, iii, vii, viii) (Pg. 164), (7.16, 7.22) (Pg. 165), Problems: (7.3, 7.6, 7.12) (Pg. 166) Homework: Q7.1: (iii) (Pg. 164), (7.6, 7.15, 7.17) (Pg. 165), Problems: (7.1, 7.5, 7.11) (Pg. 166) CHAPTER 8: THERMAL PROPERTIES OF MATTER

Temperature and Heat (Pg. 169, 170), Specific Heat Capacity (Pg. 174, 175), Importance of Large Specific Heat Capacity of Water (Pg. 175), Heat Capacity (Pg. 176), Change of State (Pg. 177), Latent Heat of Fusion (Pg. 178, 179), Latent Heat of Vaporization (Pg. 180-182), The Evaporation (Pg. 182,183), Thermal Expansion (Pg. 183, 184), Linear Thermal Expansion in Solids (Pg. 184), Volume Thermal Expansion (Pg. 185, 186), Examples: 8.5-8.7 (Pg. 175, 176, 184-187)

Exercise:

Classwork: Q 8.1: (vi, vii) (Pg. 191), (8.7-8.9) (Pg. 191) Problems: (8.4, 8.9) (Pg. 192) Homework: Q 8.1: (iv, v, viii) (Pg. 191), (8.3, 8.10) (Pg. 191) Problems: (8.3, 8.7) (Pg. 192) CHAPTER 9: TRANSFER OF HEAT

Transfer of Heat (Pg. 195), Conduction (Pg. 195, 196), Thermal Conductivity (Pg. 196, 197), Convection (Pg. 199), Convection Currents in Air (Pg. 200), Use of Convection Currents (Pg. 200), Land and Sea Breezes only (Pg. 200, 201), Radiation (Pg. 201, 202), Example: 9.1 (Pg. 198, 199)

Exercise:

Classwork: Q 9.1: (ii, vi-viii) (Pg. 207), (9.4, 9.6, 9.7) (Pg. 208), Problems: (9.2) (Pg. 208) **Homework**: Q 9.1: (i, iii, v, ix) (Pg. 207, 208), (9.2, 9.5) (Pg. 208), Problem: (9.1) (Pg. 208) **EXPERIMENTS:**

- 1. To measure the Volume of a Solid Cylinder by measuring Length and Diameter of a Solid Cylinder with Vernier Callipers.
- 2. To find the Value of "g" by Free Fall Method.
- 3. Investigate the Relationship between Force of Limiting Friction and Normal Reaction to find the Co-efficient of Sliding Friction between a Wooden Block and Horizontal Surface.
- 4. To determine the Resultant of two forces graphically using a Horizontal Force Table.

- 5. To find the Weight of an unknown object by using Principle of Moments.
- 6. To study the Effect of the Length of Simple Pendulum on Time and hence find "g" by calculation.
- 7. To study the Relationship between Load and Extension (Helical Spring) by drawing a graph.
- 8. To find the Specific Heat by the method of mixture using Polystyrene Cups (used as container of negligible Heat Capacity).
- 9. To measure the Specific Heat of Fusion of Ice.

CHEMISTRY

(Note: All questions given in "Test Yourself" are excluded.) CHAPTER NO. 1: FUNDAMENTALS OF CHEMISTRY

Basic Definitions (matter, substance, homogeneous and heterogeneous mixture, physical and chemical properties), Elements, Compound and Mixture, Difference between a compound and a mixture, Atomic Number and Mass Number, Example 1.1, Relative Atomic Mass and Relative Mass Unit, Empirical formula and Molecular formula, Molecular mass and Formula mass, Examples 1.2, 1.3 (Pg. 2-14), Types of Molecules, Avogadro's Number, Mole and Molar mass, Example 1.4, Chemical Calculations, Mole-Mass Calculations, Example 1.5, Mole-Particle Calculations, Examples: 1.6, 1.7 (Pg. 16-22)

Practicals:

1. Separate the given mixture of iron filings and sand by physical method.

Questions:

Classwork: Multiple Choice Questions (6-13) (Pg. 24-25)

Homework: Short Answer Questions (4-8, 10-12, 14-17, 19) (Pg. 25-26);

Long Answer Questions (1, 2, 4) (Pg. 26); Numericals (1, 3, 4, 6, 7, 9) (Pg. 26)

CHAPTER 2: STRUCTURE OF ATOMS

Rutherford's Atomic Model, Defects in Rutherford's Model, Bohr's Atomic Theory, Electronic Configuration, Examples: 2.1, 2.2, 2.3, Electronic Configuration of First 18 Elements (Pg. 31-37)

Practicals:

No Practical

Questions:

Classwork: Multiple Choice Questions (3, 4, 7, 8) (Pg. 42)

Homework: Short Answer Questions (3-8, 12, 13); (Pg. 42-43);

Long Answer Questions (4-8) (Pg. 43)

CHAPTER 3: PERIODIC TABLE AND PERIODICITY OF PROPERTIES

Periodic Law, Modern Periodic Table, Long Form of Periodic Table, Salient Features of Long Form of Periodic Table, Periods, Groups, Periodicity of Properties, Atomic Size and Atomic Radius, Shielding Effect, Ionization Energy, Electron Affinity, Electronegativity (Pg. 46-56)

Practicals:

No Practical

Ouestions:

Classwork: Multiple Choice Questions (1, 2, 4, 5, 6, 7, 9, 10) (Pg. 56-57)

Homework: Short Answer Questions (3, 4, 7-9) (Pg. 57);

Long Answer Questions (8-10) (Pg. 57)

CHAPTER 4: STRUCTURE OF MOLECULES

Chemical Bonds, Types of Chemical Bond, Ionic Bond, Covalent Bond and its types, Dative or Coordinate Covalent Bond, Polar and Non-Polar Covalent Bond, Metallic Bond, Intermolecular Forces (Dipole-Dipole Interaction, Hydrogen Bonding) (Page 59-68)

Practicals:

No Practical

Questions:

Classwork: Multiple Choice Questions (5-8, 11-13, 17) (Pg. 72-73) Homework: Short Answer Questions (4, 7, 8, 10-14) (Pg. 73-74);

Long Answer Questions (1, 4-8) (Pg. 74)

CHAPTER 5: PHYSICAL STATES OF MATTER

Boyle's Law, Experimental Verification of Boyle's Law, Examples 5.1, 5.2, Charles's Law, Experimental Verification of Charles's Law, Absolute Temprature Scale, Examples: 5.3, 5.4 (Pg. 78-83), Evaporation, Vapour Pressure (Pg. 84-88)

Practicals:

- 1. Determine the melting point of naphthalene.
- 2. Determine the boiling point of ethyl alcohol.
- 3. Separate the given mixture of alcohol and water by distillation.

Ouestions:

Classwork: Multiple Choice Questions (7, 11) (Pg. 93)

Homework: Short Answer Questions (4, 7) (Pg. 94); Long Answer Questions (1-3)

(Pg. 94); Numericals (2-5, 7-9) (Pg. 94-95)

CHAPTER 6: SOLUTIONS

Solution, Aqueous Solutions, Saturated Solution, Unsaturated Solution, Supersaturated Solution, Dilution of Solution (Pg. 97-99), Concentration Units, Percentage (Mass/Mass Percentage, Mass/Volume Percentage, Volume/Mass Percentage, Volume/Volume Percentage), Example 6.1, Molarity, Preparation of Molar Solution, Examples: 6.2, 6.3, Dilution of Solution, Solubility Only (Pg. 100-104)

Practicals:

- 1. Prepare 100cm³ of 0.1M Sodium Carbonate (Na₂CO₃) solution.
- 2. Prepare 100cm³ of 0.1M Sodium Hydroxide (NaOH) solution from the given 1M solution.
- 3. Demonstrate that temperature affects solubility.

Ouestions:

Class Work: Multiple Choice Questions (4, 11-13) (Pg. 110-111)

Home Work: Short Answer Question (12) (Pg. 111); Long Answer Questions (1-4) (Pg. 112), Numericals (2, 6) (Pg. 112)

CHAPTER 7: ELECTROCHEMISTRY

Oxidation and Reduction Reactions, Oxidation and Reduction in terms of Loss or Gain of Electrons, Oxidation State and Rules for Assigning Oxidation State, Examples: 7.1, 7.2, 7.3, Oxidizing and Reducing Agents, Oxidation-Reduction Reactions, Electrochemical Cells, Concept of Electrolytes (Weak and Strong Electrolytes), Non-electrolyte (Pg. 114-121) Corrosion and its Prevention, Rusting of Iron, Prevention of Corrosion, Prevention of Corrosion by Physical Methods, Electroplating (Electroplating of Silver and Chromium) (Pg. 128-131)

Practicals:

No Practical

Questions:

Class Work: Multiple Choice Questions (5, 6, 8-10) (Pg. 135)

Home Work: Short Answer Questions (8-10, 18-22) (Pg. 136);

Long Answer Questions (1, 2, 4, 7, 9, 10) (Pg. 137)

CHAPTER 8: CHEMICAL REACTIVITY

Metals, Electropositive Character, Trends of Electropositivity, Electropositivity and Ionization Energy (Pg. 138-141), Inertness of Noble Metals (Silver, Gold and Platinum), Non-Metals, Physical and Chemical Properties of Non-Metals, Comparison of Reactivity of the Halogens, Important Reactions of Halogens (Reaction with hydrogen, water, methane and NaOH) (Pg. 144-148)

Practicals:

1. Demonstrate that Some Chemical Processes Absorb Energy.

Questions:

Class Work: Multiple Choice Questions (1-3, 7-11) (Pg.150-151)

Home Work: Short Answer Questions (6-12) (Pg.151);

Long Answer Questions (2, 3, 5, 7-9, 11) (Pg. 151)

BIOLOGY

CHAPTER 1: INTRODUCTION TO BIOLOGY

Introduction to Biology, Divisions and Branches of Biology (Pg. 2-3), Quran and Biology (Pg. 6-7), The Levels of Organization (Pg. 7-13)

Practicals:

- 1. Study of external morphology of mustard plant and microscopic examination of root, stem, leaf, flower, fruit and seeds
- 2. Identification of major organs and organ systems in a dissected frog (Dissection by demonstrator / teacher)

Ouestions:

Classwork: Multiple Choice Questions (Pg. 1-10) (Pg. 17)

Homework: Understanding the Concepts (Qs: 1, 2, 3, 5, 6, 7), Short Question (1) (Pg. 18)

CHAPTER 2: SOLVING THE BIOLOGICAL PROBLEM

Biological Method, Biological Problem, Hypothesis, Deductions and Experiments, (Pg. 20-23) Theory, Law and Principle, Data Organization and Data Analysis (Pg. 26-28)

Practicals:

No Practical **Ouestions:**

Classwork: Multiple Choice Questions (1-9) (Pg. 29-30)

Homework: Understanding the Concepts (Q: 3), Short Questions (1, 2) (Pg. 30)

CHAPTER 3: BIODIVERSITY

Biodiversity, Importance of Biodiversity, Classification, Aims of Classification, Basis of Classification, Taxonomic Hierarchy, Species-Basic Unit of Classification (Pg. 31-35), Five Kingdom Classification System, The Five Kingdoms, Binomial Nomenclature (Pg. 37-40)

Practicals:No Practicals

Questions:

Classwork: Multiple Choice Questions (1-11) (Pg. 48-49)

Homework: Understanding the Concepts (Qs: 1-5), Short Questions (1-3, 5) (Pg. 49)

CHAPTER 4: CELL BIOLOGY

Cellular Structures and Functions, Cell Wall, Cell Membrane, Cytoplasm, Cell Organelles, Nucleus, Ribosomes, Mitochondria, Plastids, Endoplasmic Reticulum, Golgi Apparatus, Lysosomes, Centrioles, Vacuoles, Difference between Prokaryotic and Eukaryotic Cells (Pg. 57-66), Passage of Molecules Into and Out of Cells, Diffusion, Facilitated Diffusion, Osmosis, Filtration, Active Transport, Endocytosis, Exocytosis (Pg. 69-74)

Practicals:

1. Identify from fresh preparations, the cell membrane, nucleus and cytoplasm in an animal cell and the cell wall, cell membrane, sap vacuole, cytoplasm, nucleus and chloroplasts in a plant cell

Questions:

Classwork: Multiple Choice Questions (1, 3-15) (Pg. 83-84)

Homework: Understanding the Concepts (Qs: 1-5, 6, 7), Short Questions (2-3) (Pg. 84)

CHAPTER 5: CELL CYCLE

Cell Cycle, Mitosis, Phases of Mitosis, Significance of Mitosis (Pg. 87-93), Meiosis, Phases of Meiosis, Significance of Meiosis (Pg. 95-100), Comparison between Mitosis and Meiosis (Pg. 101)

Practicals:

1. Observation of various stages of mitosis and meiosis by slides, model and charts **Ouestions:**

Classwork: Multiple Choice Questions (1-15) (Pg. 104-105)

Homework: Understanding the Concepts (Qs: 1-8), Short Questions (1-4) (Pg. 105)

CHAPTER 6: ENZYMES

Enzymes, Characteristics of Enzymes (Pg. 107-109), Mechanism of Enzyme Action (Pg. 111-112)

Practicals:

1. Experiment to show working of enzyme in vitro e.g. Pepsin working on meat in test tube **Ouestions:**

Classwork: Multiple Choice Questions (1-4) (Pg. 115)

Homework: Understanding the Concepts (Qs: 1, 2, 7), Short Question (1) (Pg. 116)

CHAPTER 7: BIOENERGETICS

Oxidation-Reduction Reactions, ATP - The Cell's Energy Currency, Photosynthesis, Mechanism of Photosynthesis, Light Reactions, Dark Reactions (Pg. 118-122), Respiration, Aerobic and Anaerobic Respiration (Excluding importance of fermentation) (Pg. 130-131), Tables: 7.1, 7.2 (Pg. 135, 136)

Practicals:

- 1. Demonstration of the process of photosynthesis using an aquatic plant, like Hydrilla
- 2. Investigation of the release of carbon dioxide and heat during Aerobic Respiration in germinating seeds

Questions:

Classwork: Multiple Choice Questions (3, 4, 9) (Pg. 137)

Homework: Understanding the Concepts (Qs: 4, 5, 7, 8), Short Questions (1-4) (Pg. 137-138)

CHAPTER 8: NUTRITION

Components of Human Food, Carbohydrates, Lipids, Proteins, Minerals (Excluding Role of Calcium and Iron), Table 8.2 (Pg. 143-144), Vitamins (Table 8.3: Functions, deficiencies and sources of important Vitamins - Table only) (Pg. 146), Effects of Water and Dietary Fiber, Digestion in Humans, Human Alimentary Canal, Role of Liver (Pg. 157-164)

Practicals:

1. Microscopic examination of a transverse section of the small intestine to show the villi **Ouestions:**

Classwork: Multiple Choice Questions (1, 2, 4, 5, 7, 11, 13, 15) (Pg. 167- 168)

Homework: Understanding the Concepts (Qs: 3, 4, 6, 10-11), Short Questions (1, 3, 5) (Pg.168- 169)

CHAPTER 9: TRANSPORT

Transport in Plants, Water and Ion Uptake, Transpiration, Opening and Closing of Stomata

(Pg. 171-174), Significance of Transpiration (Pg. 176), Transport of Water, Transport of Food, Transport in Human, Blood, Blood Plasma, Blood Cells, (Pg. 181-187), Human Heart, Pulmonary and systemic circulation, Heart Beat, Heart Rate and Pulse Rate (Pg. 192-196), Blood Vessels (Excluding arteries, veins and capillaries – keeping only Table 9.1 of Comparison of arteries, capillaries and veins) (Pg. 199), Cardiovascular Disorders, Atherosclerosis and Arteriosclerosis, Myocardial Infarction (Pg. 202-204)

Practicals:

1. Observation of root hairs on a growing root of onion, carrot etc.

Identification of red and white blood cells under the light microscope on prepared slides and in diagrams and photomicrographs

Questions:

Classwork: Multiple Choice Questions (1-5, 7-10, 12-17, 19) (Pg. 205-206)

Homework: Understanding the Concepts (Qs: 1, 2, 6, 10, 14, 15),

Short Questions (1, 2, 4, 6-8) (Pg. 207)

COMPUTER SCIENCE

UNIT 1: PROBLEM SOLVING

Problem Solving Steps (Pg. 2-6), Flowcharts (Pg. 6-8), Examples of Flowcharts (1, 4, 6, 7, 8, 11) (Pg. 8-15), Algorithm (Pg.15), Definition (Pg. 15-16), Formulation of an Algorithm (Pg. 17), Examples of Algorithms (1, 2, 5, 7, 9), Efficiency of Algorithms (Pg. 21-23), Identification of Errors(Pg. 27-29)

Classwork: Q: 1.1 (1-4) (Pg. 30), Q: 1.2 (Pg. 30-31), Q. 1.3 (Pg. 31), Q. 1.4 (1, 3, 5) (Pg. 31)

Homework: Q: 1.1 (5) (Pg. 30), Q. 1.4 (2,4) (Pg. 31)

UNIT 2: BINARY SYSTEM

Introduction to Number Systems (Pg. 34), Number System Conversion (Decimal to Binary and Binary to Decimal, Hexadecimal to Binary and Binary to Hexadecimal) (Pg. 35-39), Memory and Data Storage (39-40), Measurement of Size of Computer Memory(Pg. 43), Boolean Algebra (Boolean Preposition, Truth Values, Logical Operators (AND, OR, NOT), Truth Table (Pg. 44-47), Logical Expressions (Pg. 49-50)

Classwork: Q: 2.1 (Pg. 51), Q. 2.2 (2, 3, 5) (Pg. 51-52), Q. 2.3, Q. 2.4 (Pg. 52)

Homework: Q: 2.2 (4) (Pg. 51), Activity 2.8 (Pg. 52)

UNIT 3: NETWORKS

Computer Networks (Pg. 54-56), Basics of Data Communication (Pg. 60-62), Computer Network Models (Pg. 62-64), Protocols in TCP/IP Suit (Pg. 64-65), Understanding IP Addressing (Pg. 67-68), Routing (Pg. 68-69)

Classwork: Q: 3.1 (Pg. 71), Q. 3.2 (Pg. 71-72), Q. 3.3 (1-3) (Pg. 72), Q. 3.4 (4) (Pg. 72)

Homework: Q: 3.3 (4-7), Q. 3.4 (2) (Pg. 72)

UNIT 4: DATA AND PRIVACY

Introduction (Pg. 74) Ethical Issues Related to Security (Pg.74-78), Simple Encryption (Pg. 81-85), Encryption with Keys and Passwords (Pg. 89-90), Cybercrime (Pg. 90-91)

Classwork: Q: 4.1 (Pg. 96), Q. 4.2, Q. 4.3(1, 5) (Pg. 96)

Homework: Q: 4.3 (2,4) (Pg. 97), Activity 4.8 (Pg. 97)

UNIT 5: DESIGNING WEBSITE

Introduction to HTML (Pg. 100-103), Text Formatting (Pg. 103,104), Define a Hyperlink to a Webpage (Pg. 109,110)

Classwork: Q: 5.1, 5.2 (Pg. 113-114), Q. 5.3 (1,3) (Pg. 115), Q. 5.4 (Pg. 115)

Homework: Q: 5.3 (2) (Pg. 115), Q. 5.5 (Pg. 116) Activity 5.7 (Pg. 116)

List of Practicals:

- 1. Draw a flowchart that calculates the sum and product of two numbers.
- 2. Draw a flowchart that calculates the difference and division of two numbers.
- 3. Draw a flowchart that calculates the modulus of an integer with respect to another integer.
- 4. Draw a flowchart that calculates the area of a rectangle.
- 5. Draw a flowchart that calculates the area of a triangle when three side are given.
- 6. Draw a flowchart that calculates the volume of a cylinder.
- 7. Draw a flowchart that calculates the temperature from Centigrade to Fahrenheit.
- 8. Write a program to print the distance covered by a car having an average speed.
- 9. Draw a flowchart that takes a number as input and displays whether it is even or odd.
- 10. Draw a flowchart that takes three integers as input and displays the largest two.
- 11. Draw a flowchart that prints the grade of a student.
- 12. Draw a flowchart that prints first 10 integers using loop.
- 13. Draw a flowchart that prints odd numbers from 1 to 10.
- 14. Draw a flowchart that takes a number as an input and prints its multiplication table up to 10.
- 15. Draw a flowchart that takes two numbers as input and prints the multiplication table of the first number up to the second number.
- 16. Draw a flowchart that prints integers from 10 to 1 (reverse order using loop).
- 17. Draw a flowchart that takes input "n" from the user and prints the sum of first "n" numbers and their average.
- 18. Draw a flowchart that takes few numbers as input from the user and prints them in reverse order.
- 19. Draw a flowchart that takes 10 numbers as input from the user and prints all the odd ones.
- 20. Draw a flowchart that takes two numbers "m" and "n" as input from the user and calculates "m" to the power on "n"
- 21. Draw a flowchart that takes two numbers as input and calculates the GCD of the numbers using Euclidean Algorithm.
- 22. Creating a HTML page which has following tags:
 - html body
- 23. Create an HTML page which has following additional tags:
 - title paragraph line break

24. Create an HTM page which has following additional functions heading up to three levels:

-bold, -italic, -underline

- 25. Create a website with two webpages linked to each other. The links are in text.
- 26. Create an HTML page which has a table and the border of the table is of a specified width and border type.
- 27. Create a website which has multiple pages and the following components: html, body, title, paragraph, line break, bold, italic, underline

GENERAL SCIENCE

CHAPTER 1: INTRODUCTION AND ROLE OF SCIENCE

Introduction, Concept of Science in Islam, Contribution of Muslim and Pakistani Scientists, Branches of Science (from Physics to Geography) (Pg. 1-8), Role of Science and Technology in our Life (Pg. 9)

Classwork: Exercise Question No. 5, 11, 12 (Pg. 13)

Homework: Exercise Question No. 1-4, 6, 10 (Pg. 11, 13)

CHAPTER 2: OUR LIFE AND CHEMISTRY

The basic building elements for life, Carbon and its importance, Organic chemistry, Water, Air (Pg. 14-23)

Classwork: Exercise Question No. 4-6 (Pg. 28)

Homework: Exercise Question No. 1 (i-v, vii), 2 (i-iv), 3 (i) (Pg. 27, 28)

CHAPTER 3: BIOCHEMESTRY AND BIOTECHNOLOGY

Introduction, Metabolism, Enzymes, Blood and its Functions (Pg. 29-32),

Antibiotics and Vaccines (Pg. 35, 36)

Classwork: Exercise Question No. 5-8, 11 (Pg. 39)

Homework: Exercise Question No. 1, 2, 3 (i,iii, iv, v), 4 (i, ii, iv) (Pg. 38, 39)

CHAPTER 4: HUMAN HEALTH

Introduction, Food and its Major Components, Food and Energy, Balanced Diet (Pg. 40-45), Exercise and Health, First Aid (Pg. 47-49)

Classwork: Exercise Question No. 5-9 (Pg. 51)

Homework: Exercise Question No. 1 (i-iv), 2 (i-iv), 3 (i-iii), 4 (i-iv) (Pg. 50, 51)

CHAPTER 5: DISEASES - CAUSE AND PREVENTION

Introduction, Diseases Caused by Germs, Agents Spreading the Germs, Protection from Germs (Pg. 52-65)

Classwork: Exercise Question No. 4-6 (Pg. 70)

Homework: Exercise Question No. 1 (i-vi), 2 (i-iv), 3 (i-v) (Pg. 69, 70)

جماعت دہم کے لیے

أردو

ورسی کتاب کے اسباق: (مصنفین اور شعرائے تعارف میں سے کوئی سوال نہیں بنا یا جائے گا۔)

🖈 حمد (نظم): کلاس ورک: سوال نمبر ۱٬۹٬۸٬۲٬۵۰۱ نظم ،غزل نظم اورغزل میں فرق

هوم ورک: سوال نمبر ۲، ۳، ۴، ۱۱،۷،۱۱

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\(\sigma \text{id} \)
\(\sim \text{id} \)
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بوم ورک: سوال نمبر ا (جز د،ه)، ۲،۵،۳،۷

🖈 نظریه یا کستان: کلا**س ورک:** سوال نمبر ۱ (جزالف، ب، ج، د، ه)، ۲، ۳، ک

موم ورک: سوال نمبر ا (جز د، ز، ح)، ۲،۵،۴

🖈 مجھے میرے دوستوں سے بچاؤ: کلا**س ورک:** سوال نمبر ا (جزالف،ب،ج)،۲،۵،۷،۵،افسانه

موم ورک: سوال نمبر ا (جز د، ه)، ۲، ۳، ۴

المُملِّع: كلاس ورك: سوال نمبر ا (جزالف، ب، ج)، ٣٠،٥،٣٠ كلاس ورك: سوال نمبر ا

موم ورک: سوال نمبر ا (جز د،ه)، ۸،۴،۲، م

🖈 چغل خور: کلاس ورک: سوال نمبر ا (جزالف،ب،ج)، ۲،۲،۲، جمله معترضه

موم ورک: سوال نمبر ا (جزد)، ۳،۴°، ۵

☆ نام دیومالی: کلاس ورک: سوال نمبر ۱ (جزالف، ب، ج، د)، ۲،۵،۴،۵،۲، ک، ذومعنی الفاظ

موم ورک: سوال نمبر ا (جزه، و)، ۹،۸،۳،۲

لاس ورک: سوال نمبر ۱ (جزالف، ب، ج)، ۲، ۳، ۹، ۴، ۹، ۴، ۹، ۴، ۹، ۴، ۹، ۴، ۹، ۴، ۹، ۴، ۹، ۴، ۹، ۴، ۱۰ بخش:

موم ورک: سوال نمبر ا (جزد، ه)، ۸،۷،۲،۵،

همیدان کر بلامیں گرمی کی شدّت: کلاس ورک: سوال نمبر ۱۹،۸،۷،۴، استعاره (نظم) مورک: سوال نمبر ۱۰،۲،۵،۳،۲

🖈 فاطمه بنت عبدالله (نظم): کلا**س ورک: سوال نمبر ا** (جزالف،ب،ج)،۲،۴،۵،۵

هو**م ورک:** سوال نمبر ا (جز د، ه)، ۸،۲،۳

المرتة مومانی (غزل): كلاس ورك: سوال نمبر ۲۰۵،۴۰، مطلع، مقطع هوم ورك: سوال نمبر ۸۰۷،۳۰۲ الله ۸۰۷،۳۰۲

کلاس ورک: سوال نمبر ا (جزالف، ب، ج)، ۲، قافیه، ردیف، هم جگر مراد آبادی (غزل): موم ورک: سوال نمبر ا (جز د، ه)، ۳۰، ۲۰،۵۰۴

أردوقواعدوانشا

(الف) مضمون نگاری (صفح نمبر 84 تا 100):

کلاس ورک: ☆ زم___زم ﴿ علامهُ هُمُ اقبالٌ ﴿ قائدِ اعظمٌ ﴿ يُومِ آزادی ﴿ مُحنت کی برکتیں موم ورک: ☆ ماں باپ کے ساتھ سلوک ۞ شہری اور دیہاتی زندگی ﴿ وقت کی پابندی (ب) تفہیم عبارات (صفح نمبر 117 تا 124،3 عبارت نمبر 15،13،10،9،8،7،6،1):

کلاس ورک: ﷺ پنجاب کی حد۔۔۔۔اوسان جاتے رہے۔
ﷺ معشروں۔۔۔۔۔سر باندھاہے۔ ﷺ اسلام نے۔۔۔۔۔نہیں ہے۔
ﷺ میشد۔۔۔۔۔کارنامہ ہے۔
ﷺ اقبال ؓ کی ۔۔۔۔عطاکیا۔

ENGLISH

AN EMBODIMENT OF JUSTICE عليها UNIT # 1: HAZRAT MUHAMMAD

Classwork: Glossary, Vocabulary (B, C & D), Reading Comprehension (B & C), Grammar (A, C & D), Writing Skills (B)

Homework: Vocabulary (A), Reading Comprehension (A), Grammar (B & E)

UNIT # 3: TRY AGAIN (POEM)

Classwork: Vocabulary (B), Reading Comprehension (A Qs: 1-6, B & C), Grammar (B, D & F), Writing Skills (B, C & D)

Homework: Vocabulary (A), Reading Comprehension (D), Grammar (A, C & E), Writing Skills (A)

UNIT # 4: FIRST AID

Classwork: Glossary, Vocabulary (A & C), Reading Comprehension (B), Grammar

(B, C, D & E), Writing Skills (B)

Homework: Vocabulary (B), Reading Comprehension (A), Grammar (A)

REVIEW-I is excluded.

UNIT # 6: TELEVISION VS. NEWSPAPERS

Classwork: Glossary, Vocabulary (B), Reading Comprehension (C), Grammar (B &

C), Writing Skills (B)

Homework: Vocabulary (A), Reading Comprehension (A), Grammar (A & D)

UNIT #8: PEACE (POEM)

Classwork: Vocabulary (C, D & E), Reading Comprehension (A & B), Grammar

(B & C), Writing Skills (C & D)

Homework: Vocabulary (A & B), Grammar (A), Writing Skills (A)

REVIEW-II is excluded.

UNIT # 10: A WORLD WITHOUT BOOKS

Classwork: Glossary, Vocabulary (A), Reading Comprehension (A & B),

Grammar (A, C & D),

Homework: Vocabulary (B), Grammar (B & E)

UNIT # 13: FAITHFULNESS

Classwork: Glossary, Vocabulary (A, B & C), Reading Comprehension (Qs. 1-6),

Grammar (A, C, D & E)

Homework: Vocabulary (D), Grammar (B & F)

REVIEW-III is excluded.

(Grammar & Composition)

WRITING AN ESSAY

Classwork: Sports and Games, Libraries, Health, The Moon Soon / A Rainy Day

Homework: A Hockey Match, A True Muslim, Quaid-e-Azam Muhammad Ali Jinnah

TRANSLATION OF (URDU) PARAGRAPHS INTO ENGLISH

Classwork: (2), (6), (7), (8), (9), (10), (13), (16), (19), (23)

Homework: (24), (25), (28), (29), (31), (32), (33), (34), (37) (38)

DIRECT AND INDIRECT SPEECH

Classwork: (Pages 172-177)

Homework: Practice will be given.

PAIR OF WORDS

Classwork: 1, 2, 3, 6, 8, 9, 10, 12, 13, 15, 17, 19, 20, 22, 24, 27, 28, 30, 32 & 34

Homework: 36, 38, 39, 43, 45, 49, 51, 52, 54, 56, 58, 62, 63, 65, 66, 71, 72, 75 & 78

UNIT - 1: QUADRATIC EQUATIONS

Classwork: Exercise: 1.1, Q: 1 (iii), Q: 2 (ii), Q: 3 (v, ix), Exercise: 1.2, Q: 1 (iii),

Exercise: 1.3, Q: 10, 12, Exercise: 1.4, Q: 1, 9

Homework: Exercise: 1.1, Q: 1 (i, iv), Q: 2 (iv, v), Q: 3 (i, v), Exercise: 1.2, Q: 1 (i, vii, viii),

Exercise: 1.3, Q: 2, 7, 9, 10, 14, Exercise: 1.4, Q: 3, 8, Miscellaneous Exercise: 1, Q: 1, Q: 2

UNIT - 2: THEORY OF QUADRATIC EQUATIONS

Classwork: Exercise: 2.1, Q: 1 (ii), Q: 2 (i), Q: 3, Exercise: 2.2, Q: 2 (vi), Q: 4, Exercise:

2.3, Q: 1 (i), Q: 2 (ii), Q: 5 (ii), Exercise: 2.5, Q: 1 (f), Q: 2 (b), Q: 3 (b), Exercise: 2.6,

Q: 1, 2, 5, Exercise: 2.8, Q: 4, 10

Homework: Exercise: 2.1, Q: 1 (iv), Q: 2 (iv), Q: 4 (iii), Q:10, Exercise: 2.2, Q: 2 (ii, viii),

Exercise: 2.3, Q: 1 (v, vi), Q: 6 (i), Exercise: 2.5, Q: 1 (g, h), Q: 2 (d, e), Exercise: 2.7,

Q: 2, 5, 10, 13, Exercise: 2.8, Q: 1, 5, 9, Miscellaneous Exercise: 2, Q: 1, Q: 2 (i-vii)

UNIT - 3: VARIATIONS

Classwork: Exercise: 3.1, Q: 4, 9, Q: 11 (iv), Exercise: 3.2, Q: 1 (iii), Q: 8, 11,

Exercise: 3.3, Q: 1 (i), Q: 2 (iv, vi), Q: 3 (i), Q: 4 (iii): Exercise: 3.4, Q: 1 (i), Q: 2 (iv, vii),

Exercise: 3.5, Q: 1, Exercise: 3.6, Q: 1 (iii), Q: 2 (ii), Exercise: 3.7, Q: 2

Homework: Exercise: 3.1, Q: 1 (iv, v), Q: 5, 7, Q: 11 (v), Exercise: 3.2, Q: 2 (ii), Q: 5,

10,13, Exercise: 3.3, Q: 1 (iv, vi), Q: 2 (ii, v), Q: 3 (iv), Q: 4(ii), Exercise: 3.4, Q: 1 (v,viii),

Q: 2 (ii, v), Exercise: 3.5, Q: 3, 5, Exercise: 3.6, Q: 1 (ii, vi), Exercise: 3.7, Q: 3, 9,

Miscellaneous Exercise: 3, Q:1, Q:2

UNIT - 4: PARTIAL FRACTIONS

Classwork: Exercise: 4.1, Q: 8, Exercise: 4.2, Q: 2, Exercise: 4.3, Q: 8, Exercise: 4.4, Q:2

Homework: Exercise: 4.1, Q: 2, 4, 7, Exercise: 4.2, Q: 1, 6, 8, Exercise: 4.3, Q: 1, 6,

Exercise: 4.4, O: 3, 6, Miscellaneous Exercise: 4, O: 1, O: 2 (i-v)

UNIT - 5: SETS AND FUNCTIONS

Classwork: Exercise: 5.1, Q: 1 (i), Q: 3 (i, vi), Q: 4 (i), Q: 6 (i), Exercise: 5.2, Q: 1 (v),

Q: 2 (iv), Exercise: 5.3, Q: 1 (i), Q: 2 (iii), Q: 4 (iii), Exercise: 5.4, Q: 3 (iii),

Exercise: 5.5, Q: 3 (i), Q: 5 (ii)

Homework: Exercise: 5.1, Q: 1 (ii, iii, iv), Q: 3 (ii, iii, iv, v), Q: 4 (iii), Q: 6 (ii), Exercise:

5.2, Q: 1 (vi-viii), Q: 3, Q: 4 (ii), Exercise: 5.3, Q: 1 (iii, v), Q: 2 (ii), Q: 4 (v), Exercise: 5.4,

Q: 5 (ii), Exercise: 5.5, Q: 3 (ii, iii), Q: 5 (iii), Miscellaneous Exercise: 5, Q: 1, Q: 2

UNIT - 6: BASIC STATISTICS

Classwork: Exercise: 6.1, Q: 1, Exercise: 6.2, Q: 3, 7, Exercise: 6.3, Q: 5 (ii)

Homework: Exercise: 6.1, Q: 3, Exercise: 6.2, Q: 11, 12, Exercise: 6.3, Q: 4, Q: 7,

Miscellaneous Exercise: 6, Q: 1, Q: 2

UNIT - 7: INTRODUCTION TO TRIGONOMETRY

Classwork: Exercise: 7.1, Q: 1 (vii), Q: 2 (ii), Q: 3 (v), Q: 4 (viii), Q: 5 (iii), Exercise: 7.2,

Q: 1 (ii), Exercise: 7.3, Q: 1 (ii), Q: 2 (i), Q: 3 (iv), Q: 4 (vi), Q: 9, Q: 12 (viii) Exercise: 7.4, Q: 7, 20, Exercise: 7.5, Q: 1, 9

Homework: Exercise: 7.1, Q: 1 (ii, iii), Q: 3 (ii, vi), Q: 4 (ii, iii, v), Q: 5 (vii, viii), Exercise: 7.2, Q: 3 (i), Q: 5, 6, Exercise: 7.3, Q: 1 (iii), Q: 2 (ii), Q: 3 (iii), Q: 4 (ii), Q: 8, Q: 12 (i, v, xi) Exercise: 7.4, Q: 10, 11, 16, 24, Exercise: 7.5, Q: 3, 4, 8, Miscellaneous Exercise: 7, Q: 1, Q: 2

UNIT - 8: PROJECTION OF A SIDE OF A TRIANGLE

Classwork: Theorem: 2, Miscellaneous Exercise: 8, Q: 3, 5, 8 (Exercises are excluded)

Homework: Theorem: 2, Miscellaneous Exercise: 8, Q: 3, 5, 8 (Exercises are excluded)

UNIT - 9: CHORDS OF A CIRCLE

Classwork: Theorem: 2, 4 (Exercises are excluded)

Homework: Theorem: 2, 4, Miscellaneous Exercise: 9, Q: 1 (v-xiv)

(Exercises are excluded)

UNIT - 10: TANGENT TO A CIRCLE

Classwork: Theorem: 1, 3 (Exercises are excluded)

Homework: Theorem: 1,3 Miscellaneous Exercise: 10, Q:1(v-xi), (Exercises are excluded)

UNIT - 11: CHORDS AND ARCS

Classwork: Theorem: 1, 4 (Exercise is excluded)

Homework: Theorem: 1, 4, Miscellaneous Exercise: 11, Q: 1, (Exercise is excluded)

UNIT - 12: ANGLE IN A SEGMENT OF A CIRCLE

Classwork: Theorem: 1, 2 (Exercise is excluded)
Homework: Theorem: 1, 2 (Exercise is excluded)

UNIT - 13: PRACTICAL GEOMETRY-CIRCLES

Classwork: Exercise: 13.1, Q: 1, Q: 4, Exercise 13.2, Q: 4, Q: 5, Exercise: 13.3,

Q: 6, 9, 11

Homework: Exercise: 13.1, Q: 1, Q: 4, Exercise 13.2, Q: 4, Q: 5, Exercise: 13.3, Q: 6,

9, 11, Miscellaneous Exercise: 13, Q: 1

MATHEMATICS (Arts Group)

UNIT - 1: ALGEBRAIC FORMULAS AND APPLICATIONS

Classwork: Exercise: 1.1, Q: 1, 8, 11, 14, 15, 27, 32, Exercise: 1.2, Q: 1, 8, 14, 21,

Exercise: 1.3, Q: 1 (ii), Q: 2 (iii), Q: 3 (iv), Q: 5

Homework: Exercise: 1.1, Q: 3, 5, 9, 16, 19, 20, 28, 31, Exercise: 1.2, Q: 3, 5, 9, 11,

16, 18, Exercise: 1.3, Q: 2 (vi), Q: 3 (ii, vi, viii), Q: 8, 9, Review Exercise: 1, Q: I

UNIT - 2: FACTORIZATION

Classwork: Exercise: 2.1, Q: 1, 11, 16, Exercise: 2.2, Q: 2, 12, Exercise: 2.3, Q: 7, 9, 20,

Exercise: 2.4, Q: 1, 15, 22, Exercise: 2.5, Q: 3, 6, 19

Homework: Exercise: 2.1, Q: 3, 6, 8, 13, Exercise: 2.2, Q: 4, 8, 11, Exercise: 2.3, Q:1,

11, 16,18, Exercise: 2.4, Q: 3, 8, 10, 13, 17, 21, Exercise: 2.5, Q: 1, 10, 12, 16, 18,

Review Exercise: 2, Q: I

UNIT - 3: ALGEBRAIC MANIPULATION

Classwork: Exercise: 3.1, Q: 1, 11, 15, Exercise: 3.2, Q: 1, 10, Exercise: 3.3, Q: 1, 9, 15,

Exercise: 3.4, Q: 1, 8, 17, Exercise: 3.5, Q: 2, 12, Exercise: 3.6, Q: 4, 5, 9

Homework: Exercise: 3.1, Q: 2, 5, 7, 12, Exercise: 3.2, Q: 3, 6, 9, Exercise: 3.3, Q: 3, 7, 12,

14, Exercise: 3.4, Q: 3, 7, 9, 12, 15, Exercise: 3.5, Q: 1, 6, 7, 11, Exercise: 3.6, Q: 1, 8, 12,

Review Exercise: 3, Q: I

UNIT - 4: LINEAR EQUATIONS AND INEQUALITIES

Classwork: Exercise: 4.1, Q: 1 (ii), Q: 3, 10, 18, Exercise: 4.2, Q: 3, 12,16

Homework: Exercise: 4.1, Q: 1 (iii), Q: 5, 8, 16, 20, Exercise: 4.2, Q: 6, 9, 15,

Review Exercise: 4, Q: I

UNIT - 5: QUADRATIC EQUATIONS

Classwork: Exercise: 5.1, Q: 1, 8, 15, 19, 25, Exercise: 5.2, Q: 3, 12, Exercise: 5.3, Q: 2

Homework: Exercise: 5.1, Q: 2, 9, 12, 13, 14, 18, 24, Exercise: 5.2, Q: 1, 4, 8, 9,

Exercise: 5.3, Q: 8, Review Exercise: 5, Q: I

UNIT - 6: MATRICES AND DETERMINANTS

Classwork: Exercise: 6.1,Q: 4 (A, J), Exercise: 6.2, Q: 3 (C), Q: 7 (A), Exercise: 6.3, Q: 1

(v), Q: 2 (C), Q: 3 (ii), Q: 8,10, Exercise: 6.4, Q: 2, 7, 14, 16, Exercise: 6.5, Q: 1 (ii), Q: 2

(iii), Q: 3(ii), Q: 4 (b), Exercise: 6.6, Q: 1, Q: 2 (ii), Q: 4 (ii), Q: 5 (ii)

Homework: Exercise: 6.1, Q: 4 (B-I, K, L), Exercise: 6.2, Q: 3 (D), Q:7 (B, C),

Exercise: 6.3, Q: 1 (ii, vi), Q: 2 (B, E), Q: 5 (ii), Q: 6, 11, Exercise: 6.4, Q: 5, 6, 12,

Exercise: 6.5, Q: 1 (iv), Q: 3 (vi, vii), Exercise: 6.6, Q: 2 (v, vi), Q: 4 (v, vi), Q: 5 (iv),

Review Exercise: 6, Q: I

UNIT - 7: FUNDAMENTALS OF GEOMETRY

Classwork: Exercise: 7.1, Q: 2, Q: 7 (iii, vii), Exercise: 7.2, Q:2, Exercise: 7.3, Q: 2, 5,

Exercise: 7.4, Q: 1 [a (i, iii), d], Q: 5

Homework: Exercise: 7.1, Q: 4, 5, Q: 7 (iv, ix), Exercise: 7.3, Q: 3 Review Exercise: 7, Q: I

UNIT - 8: PRACTICAL GEOMETRY

Classwork: Exercise: 8.1, Q: 1, 9, 13, 25, 28

Homework: Exercise: 8.1, Q: 3, 4, 11, 15, 17, 20, 24, 27, Review Exercise: 8, Q: I

UNIT - 9: AREA AND VOLUMES

Classwork: Exercise: 9.1, Q: 1 (i), Q: 3, 10, Exercise: 9.2, Q: 2, 14, 19,

Exercise: 9.3, Q: 1, 3, 8

Homework: Exercise: 9.1, Q: 1 (iii), Q: 6, 7, Exercise: 9.2, Q: 1, 6, 12, 17, Exercise:

9.3, Q: 2, 4, 5, 6, 7, Review Exercise: 9, Q: I

UNIT - 10: INTRODUCTION TO COORDINATE GEOMETRY

Classwork: Exercise: 10.1, Q: 1 (ii, vii), Q: 2 (ii), Q: 4, 9, 11

Homework: Exercise: 10.1, Q: 1 (i, vi, x), Q: 2 (iv), Q: 6, 10, Review Exercise: 10, Q: I

اسلامیات (لازمی)

الجزءالا ول:من هدى القرآن الكريم ، سورة الاحزاب ،سورة المتحنه

الدرس الرابع ،الف

ہوم ورک:مشقی سوالات،سوال نمبر 2 تا 3

كلاس ورك:مشقى سوالات ،سوال نمبر 1

الدرس الرابع ، ب

موم ورك: مشقى سوالات، سوال نمبر 2 تا 3

كلاس ورك:مشقى سوالات ،سوال نمبر 1

الدرس الرابع ، ج

كلاس ورك: مشقى سوالات، سوال نمبر 1: جز الف، ب جوم ورك: مشقى سوالات، سوال نمبر 1: جزج

الدرس الخامس ، الف

۾وم ورک:مشقى سوالات،سوالنمبر 3 (مکمل)

كلاس ورك:مشقى سوالات ،سوال نمبر 1 تا2

الدرس السابع ،الف

ہوم ورک:مشقی سوالات،سوال نمبر 3 تا4

کلاس ورک:مشقی سوالات ،سوال نمبر 1 تا2

الجزءالثاني بمن هدى الحديث

حديث نمبر 11

کلاس ورک: حدیث نمبر 11 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا

ہوم ورک: ترجمہ اورتشر تک نوٹ یک پرلکھنا اور یا دکرنا

حديث نمبر 13

کلاس ورک: حدیث نمبر 13 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا

موم ورک: ترجمها ورتشریخ نوٹ یک پرلکھنا اور یا دکرنا

حدیث نمبر 15

کلاس ورک: حدیث نمبر 15 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا

موم ورک: ترجمه اورتشریخ نوٹ یک پرلکھنا اور بادکرنا

حديث نمبر 17

کلاس ورک: حدیث نمبر 17 کے متن کی درست تلفظ کے ساتھ ادائیگی کرنا، ترجمہ اور تشریح کرنا

ہوم ورک: ترجمہاورتشر تکے نوٹ یک برلکھنااور بادکرنا

حديث نمبر 20

كلاس وركُ: حديث نمبر 20 كمتن كى درست تلفظ كي ساتهدادا يُكَّى كرنا، ترجمه اور تشريح كرنا

هوم ورک: ترجمها ورتشریج نوٹ بک پرلکھنا اور یا دکرنا

الجزءالثالث

عائلی زندگی کی اہمیت

كلاس ورك: مشقى سوالات، سوال نمبر 1 تا 2 جوم ورك: مشقى سوالات، سوال نمبر 3 تا 5

ہجرت وجہاد

كلاس ورك: مشتى سوالات، سوال نمبر 1 تا 2 جوم ورك: مشتى سوالات، سوال نمبر 3 تا 5

حقوق العباد

كلاس ورك: مشقى سوالات، سوال نمبر 1 تا 2 جوم ورك: مشقى سوالات، سوال نمبر 3 تا 5

مطالعهُ يا كستان

باب6: تاريخ II

(3) لیبراصلاحات، (4) زرعی اصلاحات، 1973ء کے آئین کے اہم پہلو، 1977ء سے 1988ء کے درمیان پاکستان میں نفاذ اسلام

كها بهم پهلو، يا كستان بطورايٹى طاقت،لوكل گورنمنٹ مايان2000ء،انتخاب2002ءاور بحالى جمهوريت _

كلاس ورك: مشقى سوالات: سوال 1 جز الف (2,4,5,7)، سوال 1 جز ب (1,7,10)

موم ورك: مشقى سوالات: سوال 2 (4-1)

باب7: پاکستان کے خارجہ تعلقات

یا کتان کی خارجہ یالیسی کے مقاصد، یا کتان کے ہمسایہ ممالک کے ساتھ تعلقات (یاک چین تعلقات، یاک بھارت

تعلقات، پاک ایران تعلقات، پاک افغانستان تعلقات)،مسله تشمیر کی ابتدا اورار تقا، پاکستان کے اسلامی کانفرنس کی تنظیم کے رکن

مما لک کےساتھ تعلقات (یا کستان اور سعودی عرب، یا کستان اور تر کی)، یا ک امریکہ تعلقات، وسطی ایشیائی مما لک کےساتھ

تعلقات ،اقوام متحدہ ،اقوام متحدہ کے ادار ہے، دنیا میں قیام امن کے لیے پاکستان کا کر دار۔

كلاس ورك: مشقى سوالات: سوال 1 جز الف (11-8,10-1)، سوال 1 جز ب (9-1)

هوم ورك: مشقى سوالات: سوال 3(7,9,11,12-1)

باب8: معاشى ترقى

معاشی ترقی کی تعریف معیشت کے اہم شعبے، (الف) معدنیات، (ب) زراعت، پاکستان کی زرعی پیداواری صلاحیت اس کے مسائل

اور پیداوار میں اضافے کے لیےا قدامات، پاکستان کی اہم نہریں،سندھ طاس معاہدہ، زراعت میں جدّت پیندی، ہماری زراعت کو در پیش اہم مسائل ، زرعی مسائل کا حل، پاکستان کی صنعتیں، توانائی کے مختلف وسائل (بجلی،قدرتی گیس،معدنی تیل،کوئلہ)، غربت کی وجو ہات اوراس کے خاتمے کے لیےا قدامات۔

كلاس ورك: مشقى سوالات: سوال 1 جز الف(9-1,3,7)، سوال 1 جزب (1,3,4,9)

جوم ورك: مشقى سوالات: سوال 2(9-4.8-1)

باب9: آبادی معاشره اور یا کستان کی ثقافت

پاکستان میں افزائش آبادی اورتقسیم، شہری اور دیمی بنیاد پر آبادی کی تقسیم، صنفی لحاظ سے آبادی کی تقسیم، پاکستان میں شرح خواندگی، پاکستان میں تعلیم کی صورت حال، پاکستان کا تعلیمی ڈھانچہ، پاکستان کے تعلیمی مسائل، تعلیمی مسائل کے حل کے حوالے سے تجاویز، پاکستانی معاشر سے اور ثقافت کی نمایاں خصوصیات، پاکستان کے اہم معاشرتی مسائل، قومی اور علاقائی، زبانیں (اردو)، علاقائی زبانیں، پاکستان میں غیرمسلم اقلیتوں کا کردار۔

كلاس ورك: مشقى سوالات: سوال 1 جز الف (9-1,3,5,7)، سوال 1 جز ب (5,7,9-1)

هوم ورك: مشقى سوالات: سوال 2(4,6,8)

باب10: تحقّطِ نسوال

صنفی حساسیت اوراس کی آگہی (صنف کی تعریف مبنفی کردارسازی مبنفی کردارسازی کےادارے)،اسلام اورصنف، پنجاب

حكومت كاتحفّظ نسوال ا يكٹ2016ء تحفّظ نسوال ضلعى تمينى كے افعال۔

كلاس ورك: مشقى سوالات: سوال 1 (مكمل)، سوال 2 (مكمل)

روم ورك: مشقى سوالات: سوال 3 (مكمل) معنى سوال 3 (مكمل)

PHYSICS

(Note: All Conceptual questions are excluded.)

CHAPTER 10: SIMPLE HARMONIC MOTION AND WAVES

Simple Harmonic Motion (Pg. 2), Motion of Mass Attached to a Spring (Pg. 2, 3), Motion of a Simple Pendulum (Pg. 4-6), Wave Motion (Pg. 7, 8), Activity: 10.2 (Pg. 7), Types of Mechanical Waves (Pg. 8-11), Relation between Velocity, Frequency and Wavelength ($v=f\lambda$) (Pg. 11-12),

Examples: 10.1, 10.2 (Pg. 6, 12)

Exercise:

Classwork: MCQs: (i-vi, viii, ix) (Pg. 16), Review Questions: (10.1, 10.4, 10.5) (Pg. 17), Numerical Problems: (10.1-10.3) (Pg. 17, 18)

Homework: Review Questions: (10.2, 10.7) (Pg. 17), Numerical Problem: (10.4) (Pg. 18)

CHAPTER 11: SOUND WAVES

Sound Waves (Pg. 20), Sound Requires Material Medium for its Propagation (Pg. 21),

Longitudinal Nature of Sound Waves (Pg. 21, 22), Characteristics of Sound (Loudness, Pitch, Quality, Intensity) (Pg. 22-24), Sound Intensity Level (Pg. 24, 25), Speed of Sound (Pg. 27), Audible Frequency Range (Pg. 30,31), Examples: 11.1, 11.2 (Pg. 25-28)

Exercise:

Classwork: Review Questions: (11.4, 11.5, 11.7-11.11) (Pg. 34),

Numerical Problems: (11.1-11.4, 11.6) (Pg. 35)

Homework: MCQs: (i-vii) (Pg. 33), Review Questions: (11.1, 11.2) (Pg. 33, 34),

Numerical Problem: (11.9) (Pg. 35)

CHAPTER 12: GEOMETRICAL OPTICS

Spherical Mirrors (Pg. 38-40), Image Location by Spherical Mirror Formula (Pg. 40, 41), Sign Conventions (Pg. 41), Refraction of Light (Pg. 42, 43), Laws of Refraction (Pg. 43), Refractive Index (Pg. 43), Total Internal Reflection (Pg. 44), Refraction through Prism (Pg. 46, 47), Lenses (Pg. 47, 48), Image Location by Lens Equation (Pg. 51, 52), Sign Conventions for Lenses (Pg. 52), Examples: 12.1-12.6 (Pg. 41, 42, 44, 52, 53)

Exercise:

Classwork: MCQs: (ix, x) (Pg. 64, 65), Review Questions: (12.6, 12.8-12.10) (Pg. 65), Numerical Problems: (12.2-12.5, 12.8-12.10) (Pg. 67)

Homework: MCQs: (i-vii) (Pg. 64), Review Questions: (12.4, 12.7, 12.12) (Pg. 65),

Numerical Problem: (12.1) (Pg. 66)

CHAPTER 13: ELECTROSTATICS

Electrostatic Induction (Pg. 70, 71), Coulomb's Law (Pg. 73, 74), Electric Field and Electric Field Intensity (Pg. 74-76), Electrostatic Potential (Pg. 76, 77), Capacitors and Capacitance (Pg. 77, 78), Combination of Capacitors (Pg. 79), Capacitors in Parallel (Pg. 79, 80), Capacitors in Series (Pg. 80, 81), Uses of Capacitors (Pg. 83), Examples: 13.1-13.4 (Pg. 74, 78-82)

Exercise:

Classwork: MCQs: (i, vi-xi) (Pg. 86-88), Review Questions: (13.2, 13.8-13.11, 13.13) (Pg. 88), Numerical Problems: (13.1-13.8) (Pg. 89)

Homework: Review Questions: (13.14, 13.17) (Pg. 88), Numerical Problems: (13.9, 13.10) (Pg. 89)

CHAPTER 14: CURRENT ELECTRICITY

Electric Current (Pg. 91, 92), The Measurement of Current (Pg. 93, 94), Potential Difference (Pg. 94, 95), Electromotive Force (e.m.f) (Pg. 95, 96), The Measurements of Potential Difference and Electromotive Force (Pg. 96, 97), Ohm's Law (Pg. 97, 98), *V-I* Characteristics of Ohmic and Non-Ohmic Conductors (Pg. 98, 99), Combination of Resistors (Pg. 101), Series Combination (Pg. 101, 102), Parallel Combination (Pg. 102, 103), Electrical Energy and Joule's Law (Pg. 104, 105), Electric Power (Pg. 106), Kilowatt-Hour (Pg. 106, 107), Examples: 14.1, 14.2,

14.4, 14.5, 14.8 (Pg. 92, 98, 102-104, 107)

Exercise:

Classwork: Review Questions: (14.1, 14.6, 14.8) (Pg. 115), Numerical Problems: (14.3, 14.6) (Pg. 116)

Homework: MCQs: (i-ix) (Pg. 114, 115), Review Questions: (14.3-14.5, 14.10, 14.11) (Pg. 115), Numerical Problems (14.1, 14.2, 14.4, 14.5, 14.7) (Pg. 116)

CHAPTER 15: ELECTROMAGNETISM

Magnetic Effects of a Steady Current (Pg. 119, 120), Direction of Magnetic Field (Pg. 120), Magnetic Field of a Solenoid (Pg. 120, 121), Electromagnetic Induction (Pg. 125, 126), Direction of Induced e.m.f – Lenz's Law (Pg. 128), Mutual Induction (Pg. 130, 131), Transformer (Pg. 131, 132), Working of a Transformer (Pg. 132), Example: 15.1 (Pg. 132, 133)

Exercise:

Classwork: MCQs: (iii, vii) (Pg. 136), Review Questions: (15.3, 15.7, 15.9), (Pg. 136, 137) Numerical Problems: (15.3, 15.4) (Pg. 138)

Homework: MCQs: (i, ii, viii, ix) (Pg. 135, 136), Review Questions: (15.11, 15.12) (Pg. 137), Numerical Problems: (15.1, 15.2) (Pg. 138)

CHAPTER 16: BASIC ELECTRONICS

Analogue and Digital Electronics (Pg. 143-145), Basic Operations of Digital Electronics – Logic Gates (Pg. 144, 145), AND Operation (Pg. 146,147), OR Operation (Pg. 147, 148), NOT Operation (Pg. 148, 149), NAND Gate (Pg. 149, 150), NOR Gate (Pg. 150), Uses of Logic Gates (Pg. 150), House Safety Alarm (Pg. 150, 151)

Exercise:

Classwork: Review Questions: (16.8, 16.9) (Pg. 154)

Homework: MCQs: (iii-vii) (Pg. 153), Review Questions: (16.7, 16.10) (Pg. 153, 154)

CHAPTER 17: INFORMATION AND COMMUNICATION TECHNOLOGY

Information and Communication Technology (Pg. 156), Components of Computer Based Information System (CBIS) (Pg. 156-158), Transmission of Light Signals through Optical Fibres only (Pg. 161, 162), Internet (Pg. 168, 169), Internet Services (Pg. 169), Browsers (Pg. 169), Electronic Mail (Pg. 169, 170)

Exercise:

Classwork: Review Questions: (17.2, 17.11) (Pg. 173)

Homework: MCQs: (i, iii, vi, vii) (Pg. 172, 173), Review Questions: (17.1, 17.3, 17.7) (Pg. 173)

CHAPTER 18: ATOMIC AND NUCLEAR PHYSICS

Atom and Atomic Nucleus (Pg. 175), Isotopes (Pg. 176), Natural Radioactivity (Pg. 176, 177), Background Radiations (Pg. 177), Nuclear Transmutations (Pg. 177-179), Half-Life and its Measurement (Pg. 180, 181), Radioisotopes and their Uses (Pg. 182-184), Fission Reaction (Pg. 185, 186), Nuclear Fusion (Pg. 187), Examples: 18.1, 18.2, 18.4 (Pg. 175, 176, 181, 184)

Exercise:

Classwork: MCQs: (i-ix) (Pg. 189, 190), Review Questions: (18.1, 18.3, 18.5-18.9, 18.11-18.13) (Pg. 190), Numerical Problems: (18.1-18.3, 18.5, 18.7, 18.9) (Pg. 191, 192) Homework: Review Questions: (18.2, 18.4, 18.10) (Pg. 190)

EXPERIMENTS:

- 1. To verify the Laws of Refraction by using a Glass Slab.
- 2. To determine the Critical Angle of Glass using a Semi Circular Slab and a Light Ray Box or by Prism.
- 3. To trace the path of a ray of light through Glass Prism and measure the Angle of Deviation.
- 4. To find the Focal Length of a Convex Lens by Parallax Method.
- 5. Verify Ohm's Law (using Wire as Conductor).
- 6. To study Resistors in Series Circuit.
- 7. To study Resistors in Parallel Circuit.
- 8. To find the Resistance of Galvanometer by Half Deflection Method.
- 9. To verify the Truth Tables of OR, AND, NOT, NOR and NAND Gates.

CHEMISTRY

CHAPTER 9: CHEMICAL EQUILIBRIUM

Reversible Reaction and Dynamic Equilibrium, Law of Mass Action, Derivation of the Expression for Equilibrium Constant for General Reactions, Equilibrium Constant and its Units, Problems: 9.1, 9.2, 9.3 (Pg. 2-12)

Practicals:

No Practical

Ouestions:

Classwork: Multiple Choice Questions (1, 3, 4, 5, 9, 12, 13) (Pg. 16-17)

Homework: Short Answer Questions (2, 3, 5-9,11) (Pg. 18); Extensive Questions (3, 4)

(Pg. 18); Numericals (1, 4) (Pg. 18-19)

CHAPTER 10: ACIDS, BASES AND SALTS

Concepts of Acids and Bases, General Properties and uses of Acids, General Properties and uses of Bases (Pg. 21-23, 25-30), pH Scale, Indicators, Problems: 10.2, 10.3, Salts and its Preparation only (Pg. 32-40)

Practicals:

- 1. Standardize the Given NaOH Solution Volumetrically.
- 2. Determine the Exact Molarity of a Solution of Oxalic Acid Volumetrically.
- 3. Demonstrate that Some Natural Substances are Weak Acids.
- 4. Classify Substances as Acidic, Basic or Neutral.

Questions:

Classwork: Multiple Choice Questions (1-3, 5, 7, 9, 10-13, 17-19) (Pg.46-47)

Homework: Short Answer Questions (1-9) (Pg. 48); Extensive Questions (1-5) (Pg. 49);

Numericals (1, 4); (Pg. 50)

CHAPTER 11: ORGANIC CHEMISTRY

Organic Compounds, Classification of Organic Compounds (Pg. 52-57), Alkanes and Alkyl Radicals, Functional Groups (Pg. 66-71)

Practicals:

- 1. Identify Carboxylic Acids using Sodium Carbonate Test.
- 2. Identify Phenol using Ferric Chloride Test.

Questions:

Classwork: Multiple Choice Questions (10-12, 15, 22, 23) (Pg. 77-78)

Homework: Short Answer Questions (5-11) (Pg. 78);

Extensive Questions (3, 5, 7-10, 12) (Pg. 79)

CHAPTER 12: HYDROCARBONS

Hydrocarbons and its types, Alkanes, Alkenes and Alkynes (Pg. 81-93)

Practicals:

1. Identify Saturated and Unsaturated Organic Compounds by KMnO₄Test.

Questions:

Classwork: Multiple Choice Questions (1, 3, 4, 6-8, 12-16) (Pg. 97-98)

Homework: Short Answer Questions (2, 4, 5, 7, 9-13, 15, 18) (Pg. 99)

Extensive Questions (1, 3, 4, 6) (Pg. 100)

CHAPTER 13: BIOCHEMISTRY

Carbohydrates and its three types, Proteins and its Building Blocks only (Amino Acids), Lipids, Fatty Acids (Excluding their Sources and Uses) (Pg. 102-106)

Practicals:

1. Demonstrate that Sugar Decomposes into Elements and other Compounds.

Questions:

Classwork: Multiple Choice Questions (1-8, 12-15) (Pg.114-115)

Homework: Short Answer Questions (1-6, 8-10, 13) (Pg.116);

Long Answer Questions (1-3, 5) (Pg. 116)

CHAPTER 14: ENVIRONMENTAL CHEMISTRY-I (THE ATMOSPHERE)

Layers of Atmosphere, Pollutants its sources and types, Oxides of Carbon (CO₂ and CO), Greenhouse Effect and Global Warming (Pg. 118-123), Acid Rain and its Effects, Ozone Depletion and its Effects (Pg. 128-130)

Practicals:

No Practical

Questions:

Classwork: Multiple Choice Questions (1, 3-8, 10, 13-16, 18) (Pg.134-135)

Homework: Short Answer Questions (3, 5, 7, 8, 10, 12) (Pg. 136);

Long Answer Questions (2, 3, 5, 8) (Pg. 136)

CHAPTER 15: ENVIRONMENTAL CHEMISTRY-II (WATER)

Water as Solvent, Soft and Hard Water, Disadvantages of Hard Water, Water Pollution, Waterborne Infectious Diseases (Pg. 139-147)

Practicals:

No Practical

Questions:

Classwork: Multiple Choice Questions (3, 8-12, 14-16) (Pg. 151-152)

Homework: Short Answer Questions (2-4, 11-14) (Pg. 152-153);

Extensive Questions (1, 3, 5, 7-9) (Pg. 153)

CHAPTER 16: CHEMICAL INDUSTRIES

Basic Metallurgical Operations, Manufacture of Sodium Carbonate by Solvay's Process (Pg. 155-162), Manufacture of Urea, Importance and Status of Urea (Pg. 164, 165)

Practicals:No Practical

Questions:

Classwork: Multiple Choice Questions (1-9) (Pg. 174-175) Homework: Short Answer Questions (1-9) (Pg. 175-176);

Extensive Questions (1-3, 5) (Pg. 176)

BIOLOGY

CHAPTER 10: GASEOUS EXCHANGE

Gaseous Exchange in Plants (Pg. 2, 3), Gaseous Exchange in Humans, The Air Passageway, The Mechanism of Breathing (Pg. 4-8), Respiratory Disorders (Bronchitis, Pneumonia and Asthma Only), Bad Effects of Smoking (Pg. 11-15)

Practicals:

No Practicals

Questions:

Classwork: Multiple Choice Questions (1-6, 9, 10) (Pg. 16)

Homework: Short Questions (1-3) Understanding the Concept (Qs: 1, 2, 4) (Pg. 17)

CHAPTER 11: HOMEOSTASIS

Homeostasis in Plants, Removal of Extra Carbon dioxide and Oxygen, Removal of Extra Water, Removal of Other Metabolic Wastes (Pg. 18-20), The Urinary System of Humans, Structure of Kidney, Functioning of Kidney, Osmoregulatory Function of Kidney (Pg. 22-26)

Practicals:

No Practicals

Questions:

Classwork: Multiple Choice Questions (1-9) (Pg. 29-30)

Homework: Short Question (2), Understanding the Concept (Qs: 1-5) (Pg. 30)

CHAPTER 12: COORDINATION AND CONTROL

Types of Coordination, Coordinated Action, Human Nervous System, Nerve Cell or

Neuron, Divisions of the Nervous System, Brain, Spinal Cord, Peripheral Nervous System, Reflex Action (Pg. 32-41), Endocrine System, Important Endocrine Glands, Feedback Mechanisms (Pg. 47-51)

Practicals:

No Practicals

Ouestions:

Classwork: Multiple Choice Questions (1, 4, 6-10) (Pg. 53)

Homework: Short Questions (1-5, 8), Understanding the Concept (Qs: 1-3, 9-11) (Pg. 54)

CHAPTER 13: SUPPORT AND MOVEMENT

Human Skeleton, Role of Skeletal System, Bone and Cartilage, Components of Human Skeleton, Types of Joints, Roles of Tendons and Ligaments, Muscles and Movement (Pg. 57-64)

Practicals:

1. Investigation of the nature of bone (by putting three pieces of rib bone of lamb in water, NaOH and dilute HCl)

Ouestions:

Classwork: Multiple Choice Questions (1, 2, 4-10) (Pg. 66-67)

Homework: Short Questions (1, 2, 4), Understanding the Concept (Qs: 1-4) (Pg. 67)

CHAPTER 14: REPRODUCTION

Reproduction, Methods of Asexual Reproduction, Binary Fission, Fragmentation, Budding, Spore Formation, Parthenogenesis (Pg. 70-74), Artificial Vegetative Propagation (Pg. 76), Sexual Reproduction in Plants, Pollination, Germination of Seed, Sexual Reproduction in Animals (Pg. 84), Fertilization (Pg. 86), AIDS - A Sexually Transmitted Disease (Pg. 89)

Practicals:

- 1. Observation of binary fission of amoeba using slides, photomicrographs or charts
- 2. Observation of budding in yeast from prepared slides

Questions:

Classwork: Multiple Choice Questions (1, 2, 5, 6) (Pg. 91)

Homework: Short Questions (2-5), Understanding the Concept (Qs: 1, 3, 5) (Pg. 92)

CHAPTER 15: INHERITANCE

Introduction to Genetics, Chromosomes and Genes, Watson Crick Model of DNA, How does DNA of Chromosomes Work?, Genotype and its Types, Mendel's Laws of Inheritance, Mendel's Law of Segregation, Mendel's Law of Independent Assortment (Pg. 94-101)

Practicals:

No Practicals

Questions:

Classwork: Multiple Choice Questions (1-7) (Pg. 109-110)

Homework: Short Questions (1-3), Understanding the Concept (Qs:1-3) (Pg.110)

CHAPTER 16: MAN AND HIS ENVIRONMENT

Levels of Ecological Organization, Components of Ecosystem (Pg. 113, 114), Flow of Materials (Pg. 116, 117), Interactions in Ecosystems (Pg. 122, 123), Symbiosis (Parasitism, Mutualism, Commensalism) (Pg. 123-125), Conservation of Nature, Basic Information about Dengue Fever (Pg. 132-134)

Practicals:

No Practicals

Ouestions:

Classwork: Multiple Choice Questions (1, 4, 6, 7) (Pg. 135)

Homework: Short Questions (1, 2, 4, 5), Understanding the Concept (Qs: 1, 4) (Pg. 135, 136)

CHAPTER 17: BIOTECHNOLOGY

Introduction of Biotechnology (Pg. 135), Fermentation (Alcoholic Fermentation, Lactic Acid Fermentation), Fermentation in Biotechnology, Applications of Fermentation (Pg. 139-142), Genetic Engineering, Basic Steps in Genetic Engineering, Achievements of Genetic Engineering (Pg. 144-147)

Practicals:

No Practicals

Questions:

Classwork: Multiple Choice Questions (1-4) (Pg. 148)

Homework: Short Questions (1-3, 5), Understanding the Concept (Qs: 1, 3, 4) (Pg. 148)

CHAPTER 18: PHARMACOLOGY

Medicinal Drugs(Pg. 150-151), Addictive Drugs, Sedatives, Narcotics, Hallucinogens, Drug Addiction and Associated Problems, Antibiotics and Vaccines, Antibiotics, Antibiotic Resistance, Vaccines, Mode of Action of Vaccines (Pg. 153-156)

Practicals:

No Practicals

Questions:

Classwork: Multiple Choice Questions (1-8) (Pg. 157)

Homework: Short Questions (1, 2, 4, 5), Understanding the Concept (Qs: 1-5)

(Pg. 157- 158)

UNIT 1: PROBLEM SOLVING

Problem Solving Method (List of Steps of Problem-Solving, Design Algorithm and Draw Flowchart, Write the Program (Coding), Test and Debug the Program) (Pg. 1-3), Algorithm (Pg. 4), Strategy for Developing Algorithm (Pg. 4, 5), Problem 2 (Pg. 6), Flowchart (Pg. 8, 9)

Classwork: Q: 2, 5, 7, 10 (i, v, vii, ix, x) (Pg. 10-12)

Homework: Q: 6, 8, 10 (iv, viii) (Pg. 12)

UNIT 2: DATA TYPES, ASSIGNMENT AND INPUT / OUTPUT STATEMENTS

Introduction (Pg. 13), Writing Programs in GW-BASIC (Create and Save the Program, Load the Program, Execute the Program) (Pg. 14, 15), Structure of BASIC Program (Pg. 15), Reserved Words (Pg. 17), Variables (Rules for Naming Variables in BASIC, Type Declaration Characters, Types of Variables) (Pg. 17, 18), Constants (Pg. 18, 19), BASIC Commands (AUTO, EDIT, LIST, LOAD, RUN, SAVE, SYSTEM) (Pg. 19-26), BASIC Statements (END, REM) (Pg. 27), Operators in BASIC (Pg. 28-31), BASIC Statements (READ/DATA, INPUT, PRINT (Pg. 33-37)

Classwork: Q: 2, 4, 6, 10 (ii, ix) (Pg 38-40) **Homework:** Q: 5, 7, 9, 10 (vii, viii) (Pg. 39, 40)

UNIT 3: CONTROL STRUCTURES

Introduction (Pg. 41), Selection Structure (Pg. 45-48), Loops (Pg. 48-50)

Classwork: Q: 2, 4, 7, 12, 14 (Pg. 51, 52)

Homework: Q: 5, 8, 10 (Pg. 52)

UNIT 4: ARRAYS

Introduction (Pg. 53), What is an Array? (Pg. 53, 54), Filling and Printing of an Array (Pg. 54, 55), Types of Array (Pg. 56), One-Dimensional Array only(Pg. 56, 57)

Classwork: Q: 2, 6, 11,18 (Pg. 59, 60)

Homework: Q: 5, 10, 9, 14, 17 (vii, viii) (Pg. 60)

UNIT 5: SUB-PROGRAM AND FILE HANDLING

Introduction (Pg. 61), Built-in-Function (ABS, INT, RND, LOG, DATE\$, VAL, MID\$, RIGHT\$, CHR\$ only) (Pg. 61-67), User-Defined Functions (Pg. 67-69)

Classwork: Q: 2, 5, 10, 11, 13 (Pg.76, 77)

Homework: Q: 4, 6, 9, 12 (Pg. 77) UNIT 6: GRAPHICS IN BASIC

Introduction (Pg. 79), SCREEN Statement (Pg. 80, 81), PSET Statements (Pg. 83, 84),

LINE, CIRCLE, DRAW Statements (Pg. 84-86) Classwork: Q: 2, 7, 8, 10 (Pg. 87, 88)

Homework: Q: 4, 9, 11, 15 (Pg. 88)

UNIT 7: MICROSOFT WORD

Entire unit excluded.

LIST OF PRACTICALS FOR GRADE IX (OLD)

UNIT 1: DEMONSTRATION OF COMPUTER COMPONENTS

Entire Unit Excluded

UNIT 2: DOS INTERNAL COMMANDS

- 1. Demonstration of DIR Command in detail including switches used with it
- 2. Demonstration of CD, MD, RD, and CLS Commands
- 3. Demonstration of Copy and DEL/ Erase Command
- 4. Demonstration of TIME, DATE, VOL and VER Commands
- 5. Demonstration of Xcopy Commands
- 6. Demonstration of CHKDSK and DISKCOPY Commands
- 7. Demonstration of ATTRIB Commands
- 8. Demonstration of FORMAT Commands

UNIT 3: INTRODUCTION TO WINDOWS

- 9. Creating New Folder
- 10. How to Search for a File or Folder
- 11. To Cut/Copy and Paste a File Folder from one location to another
- 12. How to Use Recycle Bin
- 13. To Display the My Recent Document Folder on Start Menu and Open Recently used document
- 14. How to Open and Make Selections from a Menu
- 15. How to Access Control Panel and Set the Time & Date
- 16. How to Arrange a Remove Icons
- 17. How to Add or Remove Programs and Windows Components

LIST OF PRACTICALS FOR GRADE X

UNIT 1: INTRODUCTION TO GW BASIC

- 1. Write a Program to find sum and average of three numbers
- 2. Write a Program to find area of a rectangle
- 3. Write a Program to find area and circumference of a circle
- 4. Write a Program to calculate surface area and volume of a cube
- 5. Write a Program to convert temperature from Fahrenheit to Centigrade
- 6. Write a Program to calculate distance covered by a car moving at an average speed of V (m/s) in time t (sec). The Program should input average speed and time.
- 7. Write a Program that asks for name, roll number, class, section and marks in different subjects of a students of class 10. The program should calculate and display total obtained marks and percentage of marks.
- 8. Write a Program to input a number and display whether it is even or odd
- 9. Write a Program to calculate grade of a student

- 10. Write a Program to write first ten natural numbers using for next loop
- 11. Write a Program to sum the series 2, 4, 6..., 100
- 12. Write a Program to display a table of given number up to ten values
- 13. Write a Program for the use of iteration of statement, (Read 5 values from keyboard and find their mean gravity and compare the mean value against actual value 9.8 metres / sec²
- 14. Write a program to find Factorial of a given number
- 15. Write a program to fill an array with letters a, b, c, d
- 16. Write a program to enter integer type data into an array and then to print the values in reverse order
- 17. Write a program to read an array with 20 numbers and find the product of numbers in that array
- 18. Write a program to find largest number out of given 10 numbers using an array
- 19. Write a program to input numbers in two-dimensional array with 2 columns and 2 rows and display the result in third array by adding these array
- 20. Write a program to sort the list of 20 names in descending order
- 21. Write a program using subroutine named mean and call this in main function
- 22. Write a program to print characters "tan" from the string "Pakistan Zindabad" using mid\$ function
- 23. Write a program to print first three characters from any string given by user, using left\$ function
- 24. Write a program to draw a line using LINE statement

CHAPTER 6: ENVIRONMENT AND NATURAL RESOURCES

Earth's Atmosphere, Environmental Pollution (Pg. 71-79) Dairy and Poultry Farming, Wildlife and National Parks (Pg. 83-85)

Classwork: Exercise Question No. 4-8, 11 (b, c, d) (Pg. 90)

Homework: Exercise Question No. 1 (i-v, viii, ix), 2 (i-iv), 3 (i-iii, v) (Pg. 88, 89)

CHAPTER 7: ENERGY

Introduction, Work and Energy, Different Forms of Energy (Pg. 91-94), Demand of Energy, Production of Electrical Energy, Measurement of Energy (Pg. 95-101)

Classwork: Exercise Question No. 5, 6, 8-10 (Pg. 109)

Homework: Exercise Question No. 1, 2, 3 (i-iv), 4 (i-ii, v) (Pg. 108, 109)

CHAPTER 8: CURRENT ELECTRICITY

Introduction, Electric Current (Pg. 110, 111), Potential Difference, Ohm's Law, Resistance, Components of a Circuit, Direct and Alternating Current, Uses of D.C. and A.C, Domestic Electric Supply (Pg. 112-119), Dangers of Electricity and Precautionary Measures (Pg. 120-122)

Classwork: Exercise Question No. 5-9 (Pg. 127)

Homework: Exercise Question No. 1, 2 (i-iv), 3 (ii-v), 4 (i-ix) (Pg. 126, 127)

CHAPTER 9: BASIC ELECTRONICS

Introduction, Semi-Conductors (Pg. 128-130), Radio Waves, Computer

(Pg. 131-139), Information Technology (Pg. 142-146)

Classwork: Exercise Question No. 4, 6, 7, 9, 10 (Pg. 149)

Homework: Exercise Question No. 2 (i-iv), 3 (iii, iv, v) (Pg. 148, 149)

CHAPTER 10: SCIENCE AND TECHNOLOGY

Role of Science and Technology, Lasers, Fiber Optics, Satellites and Radars (Pg. 150-154), X-Rays, Ultrasound, E.C.G. (Pg. 156-159) M.R.I., C.T. Scan, Angiography (Pg. 159, 160)

Classwork: Exercise Question No. 5-8, 11, 12 (Pg. 167)

Homework: Exercise Question No. 1 (i-iii, v), 2 (ii-iv) (Pg. 166)

CHAPTER 11: SPACE AND NUCLEAR PROGRAMME OF PAKISTAN

Importance of Space Programme, Space Programme of Pakistan, Nuclear Power Programme of Pakistan (Pg. 168-173)

Classwork: Exercise Question No. 4-7 (Pg. 175) Homework: Exercise Question No. 1-3 (Pg. 174)



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