



پنجاب كريكولم اينڈ شكسٹ تک بورڈ، لاہور

www.EduWorldPK.com



Welcome

EduWorldPK.com

Wat to Knowledge!



It's an www.SEDiNFO.net 's presentation



This document is shared & copyright by: © www.EduWorldPK.com

www.EduWorldPK.com

Table of Contents

Class	Subject	Page No.
	English	01-04
	Urdu	05-09
	Islamiyat	09-12
11	Physics	12-14
11	Chemistry	15-18
	Mathematics (Algebra and Trigonometry)	19-21
	Biology	22-26
	Computer	27-28
	English	29-30
	Urdu	30-33
	Mutaliya Pakistan	34-36
12	Physics	36-38
14	Chemistry	39-41
	Mathsmatics (Calculus and Analytical Geometry)	41-43
	Biology	43-47
	Computer	47-49

www.BooksPro.net

FIRST YEAR

ENGLISH BOOK-I

LESSON 1: BUTTON, BUTTON

Classwork: Lesson, Theme, Reading Notes (Pg. 1-7), Exercise (Question: 3 -- Pg. 9), Exercise (Question: 6, 7 -- Pg. 10) Homework: Exercise (Question: 1,3 -- Pg. 8, 9), Exercise (Question: 8 -- Pg. 10) **LESSON 3: DARK THEY WERE, AND GOLDEN-EYED** Classwork: Lesson, Theme, Reading Notes (Pg. 18-23), Exercise (Question: 1, 3, 5, 6 -- Pg. 23, 25) Homework: Exercise (Question: 1,2 -- Pg. 23, 24), Exercise (Question: 5 -- Pg. 25) **LESSON 5: THE PIECE OF STRING** Classwork: Lesson, Theme, Reading Notes (Pg. 32-34), Exercise (Question: 1, 3 -- Pg. 35, 36) Homework: Exercise (Question: 1,2 -- Pg. 35, 36), Exercise (Question: 7, 8 -- Pg. 37) **LESSON 6: THE REWARD** Classwork: Lesson, About the Author, Theme, Reading Notes (Pg. 38-40), Exercise (Question: 1, 3 -- Pg. 41, 42), Exercise (Question: 6, 7 -- Pg. 43) Homework: Exercise (Question: 1, 2 -- Pg. 41, 42), Exercise (Question: 9 -- Pg. 43) **LESSON 8: THE GULISTAN OF SA'DI** Classwork: Lesson, About the Author, Theme, Reading Notes (Pg. 51-53), Exercise (Question: 1, 3 -- Pg. 53, 55), Exercise (Question: 7, 8 -- Pg. 56) Homework: Exercise (Question: 1, 2--Pg. 53-54), Exercise (Question: 6, 8, 9 -- Pg. 56) **LESSON 10: A MILD ATTACK OF LOCUSTS** Classwork: Lesson, Theme, Reading Notes (Pg. 62-64), Exercise (Question: 1, 3, 5, 6 -- Pg. 64-66), Homework: Exercise (Question: 8 -- Pg. 66) LESSON 11: I HAVE A DREAM Classwork: Lesson, About the Author, Theme, Reading Notes (Pg. 67-69), Exercise (Question: 1, 3, 6, 7 -- Pg. 69-72) Homework: Exercise (Question: 1, 2 -- Pg. 69-70), Exercise (Question: 9 -- Pg. 72) **LESSON 13: GOD BE PRAISED** Classwork: Lesson, About the Author, Theme, (Pg.79-85), Exercise (Question: 1 -- Pg.85) Homework: Exercise (Question: 1-- Pg. 85) **LESSON 14: OVERCOAT** Classwork: Lesson, About the Author, Theme, Reading Notes (Pg. 87-91), Exercise (Question: 1, 2 -- Pg. 91-93) **Homework:** Exercise (Question: 3 -- Pg. 93)

1

www.EduWorldPK.com

ENGLISH BOOK-III

Part-I (Plays) PLAY 2: VISIT TO A SMALL PLANET Classwork: Play, About the Author, Theme, Glossary (Pg. 14-27), Exercise (Question: 1,3 -- Pg. 27-29) Homework: Exercise (Question: 4 Pg. 29) **PLAY 3: THE OYSTER AND THE PEARL** Classwork: Play, Theme, Glossary (Pg. 31-48), Exercise (Question: I, II -- Pg. 48-49) Homework: Exercise (Question: III, IV Pg. 50) Part-II (Poems) **POEM 1: THE RAIN** Classwork: Poem, About the Poet, Theme, Paraphrase (Pg. 51), Exercise (Question: 1, 4, 5, 6 -- Pg. 52) Homework: Exercise (Question: 2, 3 Pg. 52) **POEM 3: LOVELIEST OF TREES, THE CHERRY NOW** Classwork: Poem, About the Poet, Theme, Paraphrase, Glossary (Pg. 56-57), Exercise (Question: 1, 4, 5, 6, 7 -- Pg. 58) Homework: Exercise (Question: 2, 3 Pg. 58) **POEM 6: A SINDHI WOMAN** Classwork: Poem, Theme, Paraphrase, Glossary (Pg. 64), Exercise (Question: 3, 4, 5, 6 -- Pg. 65) Homework: Exercise (Question: 1, 2, 7, 8 Pg. 65) **POEM 8: OZYMANDIAS** Classwork: Poem, About the Poet, Theme, Paraphrase, Glossary (Pg. 68-69), Exercise (Question: 5, 6, 7 -- Pg. 70) Homework: Exercise (Question: 1, 2, 3, 4 Pg. 69-70) **POEM 10: THE HOLLOW MAN** Classwork: Poem, About the Poet, Theme, Paraphrase, Glossary (Pg. 73-74), Question: 5, 6, 7, 8-- Pg. 75 Homework: Question: 1, 2, 3, 4 Pg. 74-75 POEM 12: RUBA'IYAT Classwork: Poem, Glossary, Theme (Pg. 78-79), Question: 1,2,3, 4, 5, 6, -- Pg. 79 Homework: Question: 7 Pg. 79 **POEM 16: GOD'S ATTRIBUTES** Classwork: Poem, Glossary, Theme (Pg. 86), Question: 1, 2, 3, 4, 5, 6 -- Pg. 86 Homework: Question: 7 Pg. 86

2

www.EduWorldPK.com

POEM 17: THE DELIGHT SONG

Classwork: Poem, Theme, Glossary (Pg. 87-88),

Exercise (Question: 1, 2,3, 4, 5, 6 -- Pg. 88)

Homework: Exercise (Question: 7 Pg. 88)

POEM 18: LOVE- AN ESSENCE OF ALL RELIGIONS

Classwork: Poem, Glossary, Theme (Pg. 89), Exercise (Question: 1, 2 -- Pg. 90) **Homework:** Exercise (Question: 3, 4 Pg. 90)

POEM 20: IN BROKEN IMAGES

Classwork: Poem, Glossary, Theme (Pg. 93), Exercise (Question: 1, 2, 3, 4 -- Pg. 94) Homework: Exercise (Question: 5, 6, 7 Pg. 94)

ENGLISH GRAMMAR AND COMPOSITION

LETTERS

- 1. Letter to your younger brother advising him to pay attention to his studies and avoid bad company.
- 2. Letter to your father requesting him to increase your monthly allowance.
- 3. Letter to your friend describing him/ her your first impression of college life.
- 4. Letter to your friend inviting him to attend the marriage of your brother/ sister.
- 5. Letter to your mother/ father describing your progress in studies.
- 6. Letter to your younger brother/ sister suggesting some methods for improving English.
- 7. Letter to your brother/ uncle/ friend thanking him for sending you a beautiful gift on your birthday.
- 8. Letter to your friend requesting him/ her to lend you some books.
- 9. Letter to your friend congratulating him/her on his/ her success in his examination.
- 10. Letter to your friend telling him/her about the profession you want to adopt.
- 11. Letter to your friend, condoling on the death of his/her mother.
- 12. Letter to your father about your health and studies.

APPLICATIONS

- 1. Application to the Principal of your college, requesting him/her for full fee concession.
- 2. Application to the Principal of your college, requesting him/her to grant you sick leave on medical grounds.
- 3. Application to the Principal of your college, requesting him/her for the issuance/ grant of character certificate.
- 4. Application to the Principal of your college, requesting him/her for remission of fine.

3

www.EduWorldPK.com

- 5. Application to the Principal of your college, requesting him/her for re-admission in the college.
- 6. Application to the Principal of your college, requesting him/her for grant of scholarship/financial help from a special fund.
- 7. Application to the Principal of your college, requesting him/her for change of subject.
- 8. Application to the Principal of your college, requesting him/her for refund of library security.

STORIES

- 1. Honesty is the Best Policy
- 2. No Pains, No Gains
- 3. A Foolish Stag
- 4. The Hen That Laid Golden Eggs
- 5. The Slave and the Lion
- 6. A Friend in Need is a Friend Indeed
- 7. The King and the Spider
- 8. The Wolf and the Lamb
- 9. A Stitch in Time Saves Nine
- 10. Tit for Tat
- 11. A Rolling Stone Gathers No Moss
- 12. Grapes are Sour

GENERAL STATEMENT

Teachers will teach the following grammar items in the classroom and will assign the same as homework for the reinforcement:

- Correct use of tenses and verbs
- Punctuation
- Pair of words

NOTE:

- o In objective type paper, the question, 'choose the right option of the underlined words" should be given from the retained lessons only.
- o Explanation of the stanza with reference to the context will be given from the retained poems only.
- o Punctuation will be given from the retained lessons of English Book-I.
- o The passage to translate into Urdu will be selected from the retained lessons of English Book-I.
- o The students whose medium of instruction is English will write an essay on an unseen topic.

4

www.EduWorldPK.com

أردو جماعت_11

درسی کتاب کےاسباق

(الف) حصهنثر

1_ أُسوة حسنه (خَاتَمُ التَّبِيَّةِنَ صَلَّى اللهُ عَلَيْهِ وَعَلَى آلِهِ وَأَصْحَابِهِ وَسَلَّمُ)

	کلاس ورک:	سوا ل نمبر 4،1(جزiii,ii,i,i
	، موم ورک:	سوال نمبر 4،3،2(۲, v, iv)، 6
2_ا پڼ مد د آپ	كلاس ورك:	سوال نمبر1(?;iii,ii,i)، 4، 6
	ہوم ورک:	سوال نمبر 1 (v,،iv;z)،5،3،2،
3_ابوالقاسم زہراویؓ	کلاس ورک:	سوال نمبر 2((iii,ii,i; 2،
	ہوم ورک:	سوال نمبر 2،1(v,،iv; v,،iv)،4
4_سفارش	کلاس ورک:	سوال نمبر 2(iii، ii،i; ۶، 3، 5،
	ہوم ورک:	سوال نمبر 2،1(جزvi، v)، 4،
5_لا ہورکا جغرافیہ	کلاس ورک:	سوال نمبر1(جزi، ii ، ii ، ii) 4،3، (vi،v،iv،iii
	ہوم ورک:	سوال نمبر1(ج:5،2،(x، ix، viii،vii
6_ كمتوباتِ اقبالٌ	کلاس ورک:	سوال نمبر 2(جزi، ii ، ii ، ii) 5،
	ہوم ورک:	سوال نمبر 2،1(جزviii، vii،vi)،4،3،
7_دوستی کا کچل	کلاس ورک:	سوال نمبر1(جزا، ii ، ii ، ii) 3، (v،iv،iii ، ii
	ہوم ورک:	سوال نمبر 1 (جزviii،vii،vii،vi)، 2
8_ادرآ نا گھر میں مرغیوں کا	كلاس ورك:	سوال نمبر 2(جزiii,ii,ii,i
	ہوم ورک:	سوال نمبر 2،1(7;v،iv)3

5

www.EduWorldPK.com

(ب) حصهظم		
<i>R</i> _1	كلاس ورك:	سوال نمبر 5،4،2
	ہوم ورک:	سوال نمبر 6،3،1
2_نعت	كلاس ورك:	سوال نمبر 3،2،1
	ہوم ورک:	سوال نمبر 7،6،5،4
3_ميدانِ كربلامين صبح كامنظر	كلاس ورك:	سوال نمبر 6،3،2
	ہوم ورک:	سوال نمبر 5،4،1
4_ ہلالِ استقلال	كلاس ورك:	سوال نمبر 4،3،2
	ہوم ورک:	سوال نمبر 1،5
5_خطاب به جوانانِ اسلام	كلاس ورك:	سوال نمبر 4،2،1(الف)، 6
	ہوم ورک:	سوال نمبر 5،3(الف)
6_ پيغام	كلاس ورك:	سوال نمبر 4(ب)
	ہوم ورک:	سوال نمبر5(ب)
7_وحدانيت	كلاس ورك:	سوال نمبر 5،4،3،1
	ہوم ورک:	سوال نمبر 7،6،2

(5) حصةغزل

کلاس درک: سوال نمبر 1 (پہلی نوسطریں)، 4 (پہلی تین ترا کیب) سوال نمبر 2 (صرف پہلی غزل کے حوالے سے)، 3 (جزا، iv، iii، i)، 5

کلاس ورک: سوال نمبر 3،1 (جزi،ii)،5 (دوسری ترکیب) ہوم ورک: سوال نمبر 3 (جزiv،iii)،6،4

6

1_میر تقی میر جس سرکوغرور آج ہے، یاں تاج وری کا ہوم ورک: 2_حید علی آتش پیآرزوتھی، تجھےگل کے روبر دکرتے

www.EduWorldPK.com

قواعدوانشا

(الف) مكالمة كارى

- (i) دودوستوں کے درمیان علم کے فائدے کے موضوع پر مکالمہ صیں۔
- (ii) دودوستوں کے درمیان جہزایک ساجی برائی کے موضوع پر مکالم تحریر کریں۔
 - (iii) دوسہیلیوں کے درمیان فیشن کے موضوع پر مکالمہ تحریر کریں۔
 - (iv) دودوستوں کے درمیان انٹرنیٹ کے فوائد ونقصانات پر مکالمتحر برکریں۔
- دونو جوانوں کے درمیان ملک میں بڑھتی ہوئی بے روزگاری کے موضوع پر مکالمہ صیں۔

7

www.EduWorldPK.com

www.SEDiNFO.net

8

www.BooksPro.net

www.EduWorldPK.com

www.SEDiNFO.net

- (vii) پوسٹ ماسٹر کے نام ڈاک کی ناقص تقسیم کے بارے میں درخواست تحریر سیجیے۔
 - (viii) 🕺 چیئر مین بورڈ کے نام سند جاری کرنے کے لیے درخواست ککھیں۔
- (ix) نام خارج ہونے کے بعد، پر نیپل کے نام دوبارہ داخلے کے لیے درخواست کھیں۔ س
- (x) موٹر سائیکل چوری ہونے کی رپورٹ تھانے میں درج کرانے کے لیے درخواست لکھیں

اساتذہ کرام طلبہ کودرج ذیل کی تفہیم/مشق کروائیں اوراعادہ کے لیے ہوم ورک بھی دیں۔

- (د) عبارت کی تلخیص/عنوان
- (a) شعرى اصطلاحات (قافيه، رديف، مطلع، مقطع)
 - (و) تشبیه، کیمیح، استعاره
- (ز) جملوں کی درستی (تذکیروتانیٹ کے حوالے سے)

اسلاميات لازمى - 11

9

www.EduWorldPK.com

www.EduWorldPK.com

10

(iii) **ز**كر (صفحه 54 تا 55)

www.EduWorldPK.com

11

حديث نمبر:8،5 حدیث نمبر 5اور 8 کے متن کی درست تلفظ کے ساتھ ادائیگی، ترجمہ وتشریح کلاس ورک: ہوم ورک: ترجمہ اور تشریح نوٹ بک میں لکھنا اور یا دکرنا حديث نمبر:11،10 کلاس ورک: محدیث نمبر 10اور 11 کے متن کی درست تلفظ کے ساتھ ادائیگی، ترجمہ اورتشریخ ہوم درک: ترجمہ اورتشریخ نوٹ مگ میں لکھنا اوریا دکرنا نوٹ: جواسباق (ALP) میں برقرارر کھے گئے ہیں انھیں میں سے معروضی،انشائی طرز کا پر چیہ بنایا جائے۔

PHYSICS-11

CHAPTER 1: MEASUREMENTS

Precision and Accuracy (Pg. 10,11), Assessment of Total Uncertainty in the Final Result (Pg. 11-14), Dimensions of Physical Quantities (Pg. 16,17), Examples: 1.2, 1.3, 1.4, 1.6 (Pg. 15, 16, 17, 18, 19) Classwork: Questions: 1.4, 1.7, 1.8 (Pg. 20), Numerical Problems: 1.4, 1.5, 1.7 (Pg. 21) Homework: Questions: 1.9 (Pg. 20), Numerical Problems: 1.6, 1.9 (Pg.21) **CHAPTER 2: VECTORS AND EQUILIBRIUM** Basic Concepts of Vectors (i-ix, xii) (Pg. 22-25, 27), Vector Addition by Rectangular Components (Pg. 28-30), Product of Two Vectors (Pg. 31-36), Torque (Pg. 36,37), Examples: 2.2, 2.3, 2.5, 2.6 (Pg. 30, 31, 34, 38) Classwork: Questions: 2.2, 2.10, 2.12, 2.13, 2.15, 12.17 (Pg. 43,44), Problems: 2.1,2.6,2.9,2.11 (Pg. 45,46) Homework: Questions: 2.1, 2.9, 2.16 (Pg. 43, 44), Problems: 2.3, 2.5, 2.10, 2.14 (Pg. 45, 46) **CHAPTER 3: MOTION AND FORCE** Review of Equations of Uniformly Accelerated Motion (Pg. 54), Impulse, Law of Conservation of Momentum (Pg. 57-59), Elastic and Inelastic Collision (Pg. 60-62), Force Due to Water Flow (Pg. 63,64), Momentum and Explosive Forces (Pg. 64,65), Rocket Propulsion (Pg. 65,66), Projectile Motion (Pg. 66-69), Examples: 3.2, 3.3, 3.5, 3.6, 3.7 (Pg. 57, 59, 63, 64, 70) Classwork: Questions: 3.10, 3.11, 3.13 (Pg. 73), Problems: 3.3, 3.6, 3.7, 3.9, 3.10, 3.13, 14 (Pg. 75, 76) Homework: Questions: 3.9, 3.12 (Pg. 73), Problems: 3.8, 3.11 (Pg. 75,76)

www.BooksPro.net

12

Pakistan's Educational Network

WE PROVIDE WHAT EDUCATION REQUIRE



CHAPTER 4: WORK AND ENERGY

Work Done by a Constant Force (Pg. 77,78), Work Done by a Variable Force (Pg. 78-80), Work Done by Gravitational Field (Pg. 80-82), Power (Pg. 82,83), Energy (Pg. 83-89), Interconversion of Potential Energy and Kinetic Energy (Pg. 89,90), Conservation of Energy (Pg. 91), Examples: 4.1, 4.2, 4.3 (Pg. 80, 83, 91)

Classwork: Questions:4.1,4.4,4.5,4.9 (Pg. 97), Numerical Problems: 4.2 – 4.6(Pg.97,98) Homework: Questions: 4.2,4.7 (Pg. 97), Numerical Problems: 4.1, 4.2, 4.7,4.8(Pg.97,98) CHAPTER 5: CIRCULAR MOTION

Angular Displacement (Pg. 100,101), Angular Velocity (Pg. 101,102), Angular Acceleration (Pg. 102,103), Relation between Angular and Linear Velocities (Pg. 103,104), Centripetal Force (Pg. 105-107), Moment of Inertia (Pg. 108-110), Angular Momentum (Pg. 110-111), Law of Conservation of Angular Momentum (Pg. 112,113), Rotational Kinetic Energy (Pg. 113-115), Real and Apparent Weight (Pg. 116-118), Orbital Velocity (Pg. 119), Example: 5.1, 5.2,5.5,5.6 (Pg. 104, 105, 107, 115, 119) Classwork: Questions: 5.2, 5.7,5.9, 5.10 (Pg. 125), Numerical Problems: 5.1, 5.3, 5.5,

5.7 (Pg. 126)

Homework: Questions: 5.1, 5.3, 5.4, 5.5, 5.11 (Pg. 125), Numerical Problems: 5.2,5.6 (Pg. 126)

CHAPTER 6: FLUID DYNAMICS

Viscous Drag and Stokes' Law (Pg. 128), Terminal Velocity (Pg. 128,129), Fluid Flow (Pg. 130), Equation of Continuity (Pg. 130,131), Bernoulli's Equation (Pg. 132,134), Applications of Bernoulli's Equation (Pg. 134-136), Examples: 6.1, 6.2, 6.3 (Pg. 129, 131, 136)

Classwork: Questions: 6.3, 6.8, 6.9, 6.10 (Pg. 139), Numerical Problems: 6.2, 6.4, 6.5, 6.7 (Pg. 139,140)

Homework: Questions: 6.1, 6.2, 6.4 (Pg. 139), Numerical Problems: 6.1, 6.9 (Pg. 139,140) CHAPTER 7: OSCILLATIONS

SHM and Uniform Circular Motion (Pg. 144-147), Phase (Pg. 147-149), A Horizontal Mass Spring System (Pg. 149,150), Simple Pendulum (Pg. 150,151), Energy

Conservation in SHM (Pg. 152-154), Free and Forced Oscillations (Pg. 154,155),

Resonance (Pg. 155,156), Examples: 7.1, 7.2, 7.3 (Pg. 150-152, 154)

Classwork: Questions: 7.4, 7.5, 7.6, 7.7, 7.8 (Pg. 159), Numerical Problems: 7.1, 7.2, 7.4(Pg. 159,160)

Homework: Questions: 7.11, 7.12, 7.13 (Pg. 159), Numerical Problem: 7.5 (Pg. 160) CHAPTER 8: WAVES

Periodic Waves (Pg. 164-167), Speed of Sound in Air (Pg. 167-171), Beats (Pg. 175,176), Stationary Waves (Pg. 178,179), Stationary Waves in a Stretched String (179-181), Stationary Waves in Air Columns (Pg. 182-184), Examples: 8.1, 8.2, 8.3, 8.4 (Pg. 171, 172, 176, 182, 184)

www.EduWorldPK.com

Classwork: Questions: 8.3, 8.6, 8.7 (Pg. 190), Numerical Problems: 8.1, 8.4, 8.5, 8.7 (Pg. 191,192)

Homework: Questions: 8.10 (Pg. 190), Numerical Problems: 8.3, 8.6 (Pg. 191,192) CHAPTER 9: PHYSICAL OPTICS

Wavefronts (Pg. 194,195), Huygen's Principle (Pg. 195), Interference of Light Waves (Pg. 195,196), Young's Double Slit Experiment (Pg.196-199), Newton's Rings (Pg. 201,202), Michelson's Interferometer (Pg. 202, 203), Diffraction of Light (Pg. 203, 204), Diffraction due to a Narrow Slit

(Pg. 204,205), Diffraction Gratings (Pg. 205,206), Diffraction of X-Rays by Crystals (Pg. 206,207), Examples: 9.1, 9.2 (Pg. 200)

Classwork: Questions: 9.2, 9.4, 9.7 (Pg. 211, 212), Numerical Problems: 9.2, 9.4, 9.5, 9.7 (Pg. 213)

Homework: Questions: 9.1, 9.3, 9.5, 9.9 (Pg. 211, 212), Numerical Problems 9.3, 9.6 (Pg. 213)

CHAPTER 10: OPTICAL INSTRUMENTS

Least Distance of Distinct Vision (Pg. 214, 215), Magnifying Power and Resolving Power of Optical Instruments (Pg. 215, 216), Simple Microscope (Pg. 217, 218), Compound Microscope (Pg. 218, 219), Astronomical Telescope (Pg. 220-222),

Spectroscope (Pg. 222, 223), Speed of Light (Pg. 224, 225), Introduction to Fibre Optics (Pg. 225, 226), Fibre Optics Principles (Pg. 226-228), Examples: 101,10.2 (Pg. 220, 230) **Classwork:** Questions: 10.3, 10.4, 10.6 (Pg. 233,234), Numerical Problems: 10.1, 10.2, 10.4, 10.6, 10.9 (Pg. 234, 235)

Homework: Questions: 10.1, 10.2(Pg. 233), Numerical Problems: 10.3, 10.8 (Pg. 235) CHAPTER 11: HEAT AND THERMODYNAMICS

Kinetic Theory of Gases (Pg. 237-243), Internal Energy (Pg. 244,245), Work and Heat (Pg. 245,246), First Law of Thermodynamics (Pg. 246-249), Molar Specific Heat of a Gas (Pg. 249, 250), Reversible and Irreversible Processes (Pg. 250, 251), Second Law of Thermodynamics (Pg. 252, 253), Carnot Engine and Carnot's Theorem (Pg. 253-255), Examples: 11.1, 11.2, 11.3, 11.4 (Pg. 243, 244,247, 255,256)

Classwork: Questions: 11.2, 11.5, 11.8, 11.11 (Pg. 261, 262, 263), Numerical Problems: 11.1, 11.2, 11.3, 11.5, 11.7 (Pg. 263, 264)

Homework: Questions: 11.1, 11.6, 11.7 (Pg. 261, 262), Numerical Problems: 11.4, 11.8, 11.11 (Pg. 264)

www.EduWorldPK.com

www.BooksPro.net

CHEMISTRY-11

CHAPTER 1: BASIC CONCEPTS

TOPIC: (1.3(1.3.1, 1.3.3), 1.5, 1.6, 1.7, 1.8) Isotopes (Relative Abundance of Isotopes (Pg.3-4), Average Atomic Mass(Pg. 6-6), Concept of Mole, Stoichiometry, Limiting Reactant, Yield (Pg. 11-22) Classwork: Q.1 (i, ii, iii, v, x), 2Q.(i, ii, iii, v, vii, viii), Q.3 (i, v, vi, viii) Q.9 to Q.18, Q.20, Q.21, Q.22, Q.25 Homework: Q.5 (a, b), Q.6, Q.7, Q.8 (vi, vii, viii) **CHAPTER 2: EXPERIMENTAL TECHNIQ.UES IN CHEMISTRY** TOPIC: (2.3, 2.4, 2.5) Solvent Extraction, Chromatography (Pg. 34 to 37). Classwork: Q.1 (iii, iv, v) Q.2 (1, 4, 5) Q.3 (iv, v) Q.7 Homework: Q.6, Q.8, Q.9, Q.10 **CHAPTER 3: GASES** TOPIC: (3.2, 3.3, 3.4, 3.5, 3.7, 3.8, 3.11) Gas Laws, Dalton's Law of Partial Pressure (Pg. 41 - 57). Kinetic Molecular Theory of Gases, Kinetic Interpretation of Temperature (Pg. 60 - 65). Plasma State (Pg. 73 - 75). Classwork: Q.1 (i, ii, iii, iv, v, vi, vii, viii), Q.2 (i, ii, iii, v)Q.3(i, ii), Q.8,9, 16,17, 18, 19, 20, 22, 23 Homework: Q.4, Q.5, Q.6, Q.7, Q.10, Q.12. **CHAPTER 4: LIQIUIDS AND SOLIDS** TOPIC: (4.1, 4.3, 4.4, 4.5, 4.6) Intermolecular Forces (Pg. 81 - 88). Crystal lattice, Crystals and Their Classification (Pg. 95 - 101). **QUESTIONS ON LIQUIDS** Classwork: Q.1 (i, ii, iii, iv), Q.2 (i, ii, iii, iv, v, vi, viii), Q.3 (i, ii, iii, iv, v, vi, ix), Q.4, Q.5, Q.6, Q.7, Q.8. Homework: Q.12. QUESTIONS ON SOLIDS Classwork: Q.1 (ii, iii, iv) Q.2, Q.12(vi, vii, viii, ix, x, xi) Homework: Q.4, Q.5, Q.6. **CHAPTER NO 5: ATOMIC STRUCTURE** TOPIC: (5.1, 5.2, 5.3, 5.4, 5.5, 5.7, 5.8) Sub-Atomic Particles of Atoms, Rutherford's Model of Atom (Discovery of Nucleus), Plank's Quantum Theory, Bohr's Model of Atom, Spectrum (Pg. 118-137). Wave-Particle Nature of Matter (Dual Nature of Matter), Heisenberg's Uncertainty Prince, (Pg. 138-146). Classwork: Q.1 (i, ii, iii, iv, v, vii, vii, viii, ix,), Q.2 (i to viii), Q.3, Q.4, Q.17, Q.19,

www.EduWorldPK.com

15

Q.23, Q.24, Q.25

Homework: Q.5, Q.6, Q.7, Q.8, Q.9, Q.10, Q.11, Q.14, Q.15, Q.16.

CHAPTER NO 6: CHEMICAL BONDING

TOPIC: (6.1, 6.2, 6.3, 6.4)

Chemical Bond, Atomic Sizes, Ionization Energy, Electron Affinity and Electronegativity, Types of Bonds (Pg. 155 -182).

Classwork: Q.1 (i, ii, iii, v, vi), Q.2 (i, ii, iii, iv, v), Q.3 (i, ii, iii, iv, v, vii, viii, ix, x, xi, xii), Q.6, Q.10, Q.18 (ii, vi).

Homework: Q.4, Q.5, Q.7, Q.8, Q.9, Q.11, Q.12.

CHAPTER NO: 7 THERMOCHEMISTRY

TOPIC: (7.2,7.3, 7.4, 7.5)

System, Surrounding And State function, Internal Energy and First Law of Thermodynamics, Enthalpy, Hess's Law of Constant Heat Summation (197-209).

Classwork: Q.1, Q.2 (i, ii, iii, v), Q.3(ii, iii, iv, v), Q.13, Q.14, Q.15, Q.16, Q.17, Q.18, Q.19, Q.20, Q.21.

Homework: Q.4, Q.5, Q.7, Q.8, Q.9, Q.10, Q.11, Q.12.

CHAPTER NO: 8 CHEMICAL EQIUILIBRIUM

TOPIC: (8.1, 8.2, 8.3, 8.4, 8.5, 8.7, 8.8)

Reversible and Irreversible Reactions, Application of Chemical Equilibrium In Industry, Ionic Product of water, Ionization Constants of Acids (Ka), Ionization Constant of Bases (Kb). (Pg. 214-235). Common Ion Effect, Buffer Solutions (Pg. 236-242).

Classwork: Q.1 (i, ii, iii, v), Q.2, Q.3 (i, ii, iii, iv), Q.10(a, b), Q.11, Q.19, Q.20, Q.21, Q.22, Q.23.

Homework: Q.6, Q.7, Q.8, Q.17.

CHAPTER NO: 9 SOLUTION

TOPIC: (9.3, 9.5, 9.6, 9.7)

Ideal and Non- Ideal Solutions (Pg. 260-262). Solubility and Solubility Curves,

Colligative Properties of Solutions, Energetics of Solution (265-277).

Classwork: Q.1(ii, v, vi, vii, viii, ix, x), Q.2 (ii, iii, iv, v, vi, vii, viii, ix, x), Q.3(iii, iv, v,

vi, vii, viii), Q.4, Q.5, Q.12, Q.12, Q.21, Q.22, Q.23.

Homework: Q.7, Q.8, Q.9, Q.10, Q.11, Q.13, Q.14, Q.15, Q.16.

CHAPTER NO: 10 ELECTROCHEMISTRY

TOPIC: (10.1(10.1.1, 10.1.2), 10.2, 10.3, 10.4)

Definition of Electrochemistry, Oxidation State and Balancing of Redox Equations (Oxidation Number or State, Finding Oxidation Number of an Element in a compound or a Radical) (Pg. 284-285), Electrolytic Conduction, Electrode Potential, Electrochemical Series (Pg. 289-300).

Classwork: Q.1, Q.2(i, ii, iii, iv, vi), Q.3 (i, ii, iii, iv, v, vi, vii, viii), Q.4, Q.15, Q.16 (b, d, e, g, h). **Homework:** Q.7, Q.8, Q.9, Q.10, Q.11, Q.12, Q.13, Q.14 (a, b).

www.EduWorldPK.com

CHAPTER NO: 11 REACTION KINETICS

TOPIC: 11.1, 11.3, 11.4, 11.5(11.5.6). Rate of Reaction (308-313), Energy of Activation, Finding of Order of Reaction. (Pg. 316-319). Arrhenius Equation (Pg. 322-324). **Classwork:** Q.1, 2, Q.3(i, ii, iv, v), Q.8, Q.19, Q.20, Q.21, Q.22. **Homework:** Q.4, Q.5, Q.6, Q.7 (i, iii, iv), Q.9, Q.15.

LIST OF EXPERIMENTS (CHEMISTRY) PART- I

- 1 Crystallization of benzoic acid from water.
- 2 To separate a mixture of various inks by paper chromatography.
- 3 Separation and Identification of lead and cadmium ions in a mixture solution by paper chromatography.
- 4 Determination of heat of neutralization of NaOH and HCl.
- 5 Preparation of standard solution of alkalies and acids e.g., NaOH, KOH, Oxalic acid, succinic acids.
- 6 Preparation of solution of H_2SO_4 of approximate strength and then determination of its exact strength with the help of standard Na₂CO₃ solution.
- 7 To prepare a standard solution of oxalic acid and standardize a solution of NaOH.
- 8 To determine the solubility of oxalic acid at room temperature .You are provided with 0.1 M NaOH.
- 9 Determination of acetic acid in vinegar.
- 10 The given solution contains 15 g of mixture of NaOH and Na_2SO_4 per dm³. Calculate the amount of NaOH in 45 grams of the mixture. 0.1 M HCl is given.
- 11 Determination of free alkali in soap.
- 12 Determination of Na_2CO_3 in washing soda.
- 13 Determination of percentage of purity of Na₂CO₃ in the given solution containing
- 14 10 g. of impure Na_2CO_3 sample/dm³. You are provide with 0.1 M HCl solution.
- 15 28.6 grams of washing soda (Na₂CO₃. xH₂O) have been dissolved/dm³. Calculate the number of water molecules of crystallization. You are provide with 0.1 M HCl solution.
- 16 Determination of $NaHCO_3$ in the given sample of baking soda. 0.1M HCl soln. is provided.
- 17 8.4 gram M HCO₃ are dissolved per dm³ of solution. Find out At. Wt. of M. 0.05 M H_2SO_4 is given.
- 18 You are given the solution of $KMnO_4$. Calculate its volume required to prepare 1.0 dm³ of 0.002M KMnO₄ solution.
- 19 The given soln. 'A' contains 10 grams of a mixture of H_2SO_4 and oxalic acid dissolved/dm³. Determine the percentage of H_2SO_4 in the mixture. 0.02M KMnO₄ is given.

www.EduWorldPK.com

- 20 Determine the no of molecules of water of crystallization in a given sample of oxalic acid by permanganate titration. The amount of oxalic acid dissolved per dm³ is 6.3 g.
- 21 Determination of solubility of oxalic acid at room temperature.
- 22 To determine the strength of ferrous sulphate solution by titrating it against 0.02M KMnO₄.
- 23 The given solution contains 30 gram of partially oxidized $FeSO_4.7H_2O$ dissolved per dm³. Determine the %age of oxidation of the given sample.
- 24 To determine the strength of given ferrous ammonium sulphate (Mohr's salt) by titrating it against standard potassium permanganate solution.
- 25 The given solution contains 40g. of $FeSO_4(NH_4)_2SO_4.xH_2O$ dissolved per dm³. Determine the value of x.
- 26 Determine the solubility of given sample of Mohr's salt at room temperature. You are provided with 0.02M KMnO₄.
- 27 Prepare a standard (M/10) 250 cm³. Solution of iodine. 0.1 M $Na_2S_2O_3$ is provided.
- 28 24.8 grams of a sample of alkali thiosulphate $(M_2S_2O_3)$ are dissolved in 1 dm³ of the given solution. Calculate the atomic weight of the metal by a volumetric method. Given M/10 iodine solution.

18

29 20 gram of $Na_2S_2O_3$ are dissolved in one dm³ solution. Find out the %age of sulphur. You are provided with 0.05M iodine solution.

www.EduWorldPK.com

MATHEMATICS-11 (ALGEBRA AND TRIGONOMETRY)

CHAPTER 1: NUMBER SYSTEMS

Classwork: Example 6: (pg.10), Exercise 1.1: Q.1(iii), Q.2(i,vi,x), Q.4(i), Example 1:(pg.15), Exercise 1.2: Q.4(iv), Q.5(i), Q.9,12, Q.14(ii), Q.15(ii), Q.16(i), Example 1: (i)(pg.20), Theorems(iii,iv,vi) (pg.21), Example 2: (pg.24), Example 3: (pg.24 & 25), Exercise 1.3: Q.2(iii), Q.4, Q.5(iii), Q.6(ii), Q.7(i) Homework: Exercise 1.1: Q.1(iv), Q.2(vii,ix,xi,xii), Q.4(ii), Q.5, Exercise 1.2: Q.4(i,iii), Q.5(iii), Q.8,11, Q.14(i), Q.15(i,iii), Q.16(ii), Example 5: (i)(pg.27), Exercise 1.3: Q.2(ii,iv), Q.5 (ii,iv), Q.6(i) **CHAPTER 2: SETS, FUNCTIONS AND GROUPS** Classwork: Example 4: (pg.33), Exercise 2.1: Q.1(iii), Q.2(i,v), Q.4(viii), Q.8(vi), Q.9(ii), Q.10(i), Exercise 2.2: Q.1(iii), Q.2(i), Q.4(iii,vi), Q.5(ii), Q.6(i), Exercise 2.3: Q.1(i), Q.3, Q.6(ii) Q.7(i), Example 4: (pg.53), Exercise 2.4: Q.1(i), Q.2(iii), Q.3(i,ii), Q.7(i) Q.9(i), Exercise 2.5: Q.1, Exercise 2.6: Q.1(iii) Q.4(ii), Example 5: (pg.65),Example 6: (pg.66), Exercise 2.7: Q.3, Example 2: (pg.71), Solution of Linear Equations(pg.76), Reversal Law of Inverses(pg.77), Exercise 2.8: Q.5 Homework: Exercise 2.1: Q.1(xi), Q.2(vi,ix,xii,xvi), Q.4(i,ii), Q.8(ii), Q.9(iv), Q.10(vi,vii), Exercise 2.2: Q.1(iv,v), Q.2(ii), Q.4(ii,vii), Q.5(iii.iv), Q.6(ii), Exercise 2.3: Q.6(iii), Q.8, Q.7(ii), Exercise 2.4: Q.1(iii), Q.2(ii), Q.3(iv), Q.4(ii,iii), Exercise 2.5: Q.4, Exercise 2.6: Q.1(ii,iv), Q.4(iv,v), Exercise 2.7: Q.4, Example 7: (pg.72), Exercise 2.8: Q.6 **CHAPTER 3: MATRICES AND DETERMINANTS**

Classwork: Adjoint of a 2×2 Matrix(pg.90), Example 4: (pg.92), Example 5: (pg.94), Exercise 3.1: Q.2, Q.3(i), Q.5,8, Q.12(ii), Exercise 3.2: Q.3(ii), Q.5(i), Q.6(iii), Q.8(ii), Example 2: (pg.104), Example 7: (pg.110), Exercise 3.3: Q.2(iii), Q.3(iii,xi), Q.5(v), Q.8,11, Example 3: (pg.125), Exercise 3.4: Q.6(i), Q.8, Q.10(iii), Example 3: (pg.137), Exercise 3.5: Q.1(i), Q.3(ii)

Homework: Exercise 3.1: Q.3(ii), Q.9, Q.12(i), Exercise 3.2: Q.2(ii), Q.4(iv), Q.7(i), Q.9(ii), Exercise 3.3: Q.1(i), Q.2(i,ii), Q.3(ii,iv), Q.4(ii), Q.5(i,iii), Q.6(i,iii), Q.14(i), Q.16, Exercise 3.4: Q.2(ii), Q.5, Q.10(ii), Q.8,11, Exercise 3.5: Q.1(iii), Q.2(ii), Q.4(ii), Q.5(ii), Q.6

CHAPTER 4: QUADRATIC EQUATIONS

Classwork: Exercise 4.1: Q.3,8,9,19, Example 1: (pg.143), Exercise 4.2: Q.1,5,10,19, Exercise 4.3: Q.2,5,11, Three Cube Roots of Unity(pg.151), Properties of Cube Roots of Unity(ii)(pg.152), Four Fourth Roots of Unity (pg.154), Exercise 4.4: Q.2(iii), Q.3(i), Q.5, Example 2: (pg.157), Example 4: (pg.158), Exercise 4.5: Q.1,7,11, Exercise 4.6: Q.1(vi), Q.3(iv), Q.6, Q.7(v), Example 1: (ii)(pg.165),

www.EduWorldPK.com

Exercise 4.7: Q.1(iv), Q.2(i), Exercise 4.8: Q.1,6,9, Exercise 4.9: Q.2,8, Exercise 4.10: Q.2,5 **Homework:** Exercise 4.1: Q.2,5,6,10,12,15,17,18, Exercise 4.2: Q.4,11,14,17,18,22,24, Exercise 4.3: Q.4,6,10, Exercise 4.4: Q.2(i,v), Q.4,6,7, Q.8(i,iii),

Exercise 4.5: Q.10,12,14,15,16, Exercise 4.6: Q.1(i,ii), Q.2, Q.3(i), Q.7(i,vi), Q.8,

Exercise 4.7: Q.1(ii,iii), Q.3(i), Q.5,7, Exercise 4.8: Q.4,7,10, Exercise 4.9: Q.3,5,10, Exercise 4.10: Q.4,6

CHAPTER 5: PARTIAL FRACTIONS

Classwork: Example 1: (pg.180), Exercise 5.1: Q.5, Example 1: (pg.184), Example 2: (pg.184), Exercise 5.2: Q.4,9, Example 1: (pg.186), Exercise 5.3: Q.1,10, Example 1: (pg.188)

Homework: Exercise 5.1: Q. 4,7,10, Exercise 5.2: Q.6,11, Exercise 5.3: Q.3,6,8 CHAPTER 6: SEQUENCES AND SERIES

Classwork: Example 2: (pg.190), Exercise 6.1: Q.1(iii,viii), Q.2(v), Example 3: (pg.193), Example 4: (pg.194), Exercise 6.2: Q.2,6,13, Example 1: (pg.195), Exercise 6.3: Q.1(ii), Q.6, Exercise 6.4: Q.2(ii), Q.6, Exercise 6.6: Q.2, Q.7(ii), Q.8,12, Exercise 6.7: Q.1(ii), Q.2(i), Example 3-6: (pg.213 & 214), Exercise 6.8: Q.1, Q.5(iii), Q.6(ii), Q.13, Example 1: (pg.219), Relations Between Arithmetic, Geometric and Harmonic Means(pg.222), Exercise 6.10: Q.1(ii), Q.6(9,16) Homework: Exercise 6.1: Q.1(ii,v,vi,vii), Q.2(i), Q.3(ii,iv), Exercise 6.2: Q.4,7,8,9,12, Exercise 6.3: Q.3,4,7, Exercise 6.4: Q.2(iii,v), Q.3(i), Q.4(ii), Q.11,14,15,16,

Exercise 6.6: Q.1,3,9,14, Exercise 6.7: Q.1(i), Q.2(ii), Q.3(i), Q.4,6, Exercise 6.8: Q.4, Q.5(ii), Q.6(i,iv,) Q.8,9 Q.12(i), Q.14, Exercise 6.10: Q.1(i), Q.2(ii), Q.7,8,12,13, Q.14(i), Q.15(i), Q.17

CHAPTER 7: PERMUTATION, COMBINATION AND PROBABILITY

Classwork: Example 2 & 3: (pg.230), Exercise 7.1: Q.1(vii,x), Q.2(vi,ix), Exercise 7.2: Q.1(v), Q.2(ii), Q.7, Example 3: (pg.238), Exercise 7.3: Q.1(ii), Q.4,12, Complemmentary Combination (pg.240), Example 1-3: (pg.241), Exercise 7.4: Q.1(ii), Q.2(i), Q.9(i), Example 1 & 2: (pg.244 & 245), Exercise 7.5: Q.3(ii), Q.5(i), Q.10(i), Exercise 7.7: Q.3,6, Exercise 7.8: Q.3,8

Homework: Exercise 7.1: Q.1(vi,ix), Q.2(v,viii,x), Exercise 7.2: Q.1(i,iii), Q.2(i,iii), Q.3,4,6,10,11, Exercise 7.3: Q.1(iii), Q.3,11, Exercise 7.4: Q.1(i,iii), Q.2(ii,iii), Q.3(i), Q.4,10, Exercise 7.5: Q.3(i), Q.5(ii), Q.10(ii), Exercise 7.7: Q.2,5, Exercise 7.8: Q.4,9 CHAPTER 8: MATHEMATICAL INDUCTION AND BINOMIAL THEOREM Classwork: Example 6: (pg.262), Exercise 8.1: Q.2,4,13,20, Example 2: (pg.269), Example 5: (pg.272), Exercise 8.2: Q.1(i), Q.2(ii), Q.7(i), Example 2: (pg.269), Example 4: (pg.278), Exercise 8.3: Q.1(ii,vi,viii), Q.2(vi.ix), Q.4(iv,vi), Q.9 Homework: Exercise 8.1: Q.1,3,5,7,14,24, Exercise 8.2: Q.1(ii,vi), Q.2(i,iii), Q.6(i), Q.9(i), Q.10(i,ii), Exercise 8.3: Q.1(i,ii,iv,v), Q.2(i,iii), Q.4(i,ii), Q.5,7,11,12,13 CHAPTER 9: FUNDAMENTALS OF TRIGONOMETRY

Classwork: Example 4 & 5: (pg.290), Exercise 9.1: Q.1(vi,xvi), Q.2(viii), Q.5(i), Q.13,

www.EduWorldPK.com

Fundamentals Identities (pg.297), Exercise 9.2: Q.3(iv,v), Q.4(ii), Q.8, Exercise 9.3: Q.1(ii,iii), Q.2(ii), Q.3(iii), Example 1-4: (pg.3,10&11), Exercise 9.4: 0.2,4,8,11,14,21 Homework: Exercise 9.1: Q.1(ix,xii,xiii), Q.2(ii,vi,x,xii,xv), Q.3, Q.4(i), Q.5(ii), Q.6(i), Q.7,11,15, Exercise 9.2: Q.3(i,vi), Q.4(i,v), Q.5,6, Exercise 9.3: Q.1(i,iv), Q.2(i), Q.3(i,ii), Q.4, Q.5(iv,vii), Q.6(v,ix), Exercise 9.4: Q.5,6,7,9,10,12, 13,15,20 **CHAPTER 10: TRIGONOMETRIC IDENTITIES** Classwork: Example 2: (pg.320), Exercise 10.1: Q.1(ii), Q.2(v), Q.3(iii), Q.4(i), Exercise 10.2: Q.1(iii,vi), Q.3(ii), Q.7(ii), Q.11, Example 1: (pg.330), Exercise 10.3: Q.1(ii), Q.3,13, Example 2: (pg.334), Example 3 & 5: (pg.335), Exercise 10.4: Q.1(ii,viii), Q.2(ii), Q.3(iii) Homework: Exercise 10.1: Q.1(v,vi), Q.2(iii,ix), Q.3(i,ii,iv), Q.5(i,iii,iv), Exercise 10.2: Q.1(i,vii), Q.2(iv,v), Q.4(i,iii,v), Q.5, Q.7(i), Q.10(i), Exercise 10.3: Q.1(i), Q.2,6,8,9,11, Exercise 10.4: Q.1(i,iii,iv,v), Q.2(v,vi), Q.3(ii), Q.4 **CHAPTER 11: FUNDAMENTALS OF TRIGONOMETRY** Classwork: Exercise 11.1: Q.2,7,9 Homework: Exercise 11.1: Q.3,5,7,10,15 **CHAPTER 12: APPLICATION OF TRIGONOMETRY** Classwork: Exercise 12.1: Q.1(i,ix), Q.2(ii), Exercise 12.2: Q.2,5, Exercise 12.3: Q.1,5, Exercise 12.4: Q.1, Exercise 12.5: Q.1,5,8, Exercise 12.6: Q.1,8, Exercise 12.7: Q.1(ii), Q.2(ii), Q.3(iii), Q.5, Proof (pg.379), Example 1: (pg.381), Example 3: (pg.383), Exercise 12.8: Q.1(ii), Q.3(ii), Q.5(ii), Q.6(ii), Q.7(ii), Q.11 Homework: Exercise 12.1: Q.1(iii,v), Q.2(i,vi), Exercise 12.2: Q.3,4, Exercise 12.3: Q.3,6,9, Exercise 12.4: Q.3,5, Exercise 12.5: Q.3,4,7,10, Exercise 12.6: Q.2,6,7,10, Exercise 12.7: Q.1(i), Q.2(i), Q.3(i), Q.4, Exercise 12.8: Q.1(i), Q.3(iii), Q.5(iv), Q.6(i), Q.7(i), Q.12 **CHAPTER 13: INVERSE TRIGONOMETRIC FUNCTIONS** Classwork: Example 2: (pg.390), Example 4: (pg.396), Exercise 13.1: Q.1(iii,ix), Q.2(ii), Q.3(i,v,ix), Exercise 13.2: Q.3,11,14,19 Homework: Exercise 13.1: Q.1(iv,v,vi), Q.2(i,iii), Q.3(iii,iv,vii), Exercise 13.2: Q.1,2,6,12,17,18 **CHAPTER 14: SOLUTIONS OF TRIGONOMETRIC EQUATIONS** Classwork: Example 1-3: (pg.401&402), Example 1,2,4,5: (pg.403,405 & 406), Q.14, O.1(i,iii), O.2(ii,iv), O.4.6 Homework: Exercise 14: Q.1(ii,iv), Q.2(i,iii), Q.3,5

21

www.EduWorldPK.com

www.BooksPro.net

BIOLOGY-11

Chapter No./ Name / Topics / Exercise Q(s)/ Textbook Pages (s)

CHAPTER 1: INTRODUCTION

Biology and some major fields of specialization, Biological method, Biology and the service of mankind (excluding the subtopics "Disease Control", "Preventive measures", "Vaccination and Immunization", and "Drug Treatment/ Gene therapy") (Pg. 1-13) Practicals: No practical

Questions:

Classwork: Fill in the blanks(i-iii, ix),True and false(No), Multiple choice questions (i,iv) **Homework:** Short questions (i-iv), Extensive questions (i, iv, v)

CHAPTER 2: BIOLOGICAL MOLECULES

Introduction to biochemistry, Importance of water, Carbohydrates (excluding the subtopics "monosaccharides", "oligosaccharides", "polysaccharides"), Lipids (excluding the subtopics "acylglycerols", "waxes", "phospholipids", "terpenoids"), Proteins, Structure of proteins, Nucleic acids (excluding the subtopics "DNA" and "RNA") (Pg. 17-31)

Practicals

- 1. Identification of biochemical from biological materials.
- 2. Iodine test for starch
- 3. Benedict's test for reducing sugars
- 4. Millon's test for Proteins/Biuret test for proteins
- 5. Sudan III test for fats and oils and emulsion test

Questions:

Classwork: Fill in the blanks (i, ii), True and false (i), Multiple choice questions (iv) **Homework:** Short questions (ii, iv and v), Extensive questions (i, iii)

CHAPTER 3: ENZYMES

Introduction, Characteristics of enzymes, Mechanism of enzyme action (catalysis), Inhibitors

Irreversible inhibitors, Reversible inhibitors (competitive & non-competitive inhibitors) (Pg. 37-43)

Practicals:

1. Study of starch break down in germinating gram seeds.

Questions:

Classwork: Fill in the blanks (i-v), True and false (i-v), Multiple choice questions (No) **Homework:** Short questions (i, iii-v), Extensive questions;(1, 3, 4)

CHAPTER 4: THE CELL

Structure of a generalized cell, Plasma membrane, Cell wall, Cytoplasm, Endoplasmic

www.EduWorldPK.com

www.BooksPro.net

reticulum, Ribosomes, Golgi apparatus, Lysosomes, Vacuoles, Cytoskeleton, Centriole, Mitochondria, Plastids (Chloroplasts, Chromoplasts, Leucoplasts), Nucleus (complete topic) Prokaryotic and eukaryotic cell (Pg. 48-64)

Practicals:

1. Study of animal cells (frog's epithelium cell, frog's buccal cavity cells) and plant cells (mesophyll cells, leaf epidermis cells, onion epidermis cells) by staining with safranin, acid fuchsin, methylene blue, eosine

Questions:

Classwork: Fill in the blanks (i-v), True and false (i-v), Multiple choice questions (i-vi) **Homework:** Short questions (i-xi), Extensive questions (i, v)

CHAPTER 5: VARIETY OF LIFE

Introduction, Nomenclature, Two to five kingdom classification systems, Viruses (excluding the introductory paragraphs), Characteristics, Structure, Life cycle of bacteriophages, Some viral diseases: small pox, herpes, influenza, mumps and measles, polio, AIDS, Hepatitis (Pg. 67-80)

Practicals: No practical

Questions:

Classwork: Fill in the blanks (i-x), Multiple choice questions (i-xiv)

Homework: No Short question, No extensive question

CHAPTER 6: KINGDOM PROKARYOTAE (MONERA)

Structure of bacteria, Size, Shape of bacteria, Bacterial cell structure (complete topic – page 86 to 89), Nutrition of bacteria, Respiration in bacteria, Growth and Reproduction, Control of bacteria (Physical methods, Chemical methods), Use and misuse of antibiotics, Characteristics of Cyanobacteria (Pg.84-94)

Practicals:

1. Laboratory safety techniques and use of microscope and measurement of microscopic objects by micrometry.

2. Investigation of bacterial content of fresh and stale milk.

3. Study of Nostoc from fresh material and prepared slides.

Questions:

Classwork: Fill in the blanks (i-vi, vii), Multiple choice questions (i-vi)

Homework: Short questions (i a, b, ii-ix), Extensive questions (i-iii, v)

CHAPTER 7: THE KINGDOM PROTISTA (OR PROTOCTISTA)

Introduction, Major groups of Protista, Protozoa: Animal-like protists, Amoebae, Zooflagellates

Ciliates, Algae: Plant-like protists, Euglenoids, Brown algae, Red algae, Green algae, Importance of algae, Fungus-like protists, Slime molds, Water molds (Pg. 99-111) **Practicals**:

1. Identification of Chlorella, Paramecium, Amoeba, Entamoeba, Plasmodium (malarial parasite) Euglena, Volvox, Ulothrix and Ulva from fresh materials or prepared slides.

www.EduWorldPK.com

Questions:

Classwork: Fill in the blanks (i, ii, v-viii)

Homework: Short questions (i, iv, v), Extensive questions (i-ix)

CHAPTER 8: FUNGI

Introduction. The body of fungus, Nutrition in fungi, Reproduction, Asexual reproduction, Sexual reproduction, Classification of fungi, Zygomycota, Ascomycota, Basidiomycota, Deuteromycota, Importance of fungi, Ecological importance, Commercial importance, Economic gains due to fungi, Economic losses due to fungi

(Pg. 113-128)

Practicals:

1. Study of yeast, Ustilago tritici and Pencillium from fresh materials and slides. **Questions:**

Classwork: Multiple choice questions (i-viii)

Homework: Short Questions (i-x), Extensive questions (i-viii)

CHAPTER 9: KINGDOM PLANTAE

Classification of Plantae, Division Bryophyta, Adaptation to land habitat, Division Tracheophyta, Evolution of leaf, Evolution of seed habit, Class Gymnospermae (excluding the subtopic "Pinus – life cycle"), Class Angiospermae, Life cycle of an angiospermic plant, Seed formation, double fertilization, Classification of angiosperms (excluding the topic and subtopics of "Angiospermic families") (Pg. 131-153) **Practicals:**

1. Examination of Marchantia and Funaria (external morphology) from fresh material and of sex organs from prepared slides.

2. Study of Pinus: male and female cones from fresh or preserved materials. **Questions:**

Classwork: Fill in the blanks (i-ix), Multiple Choice Questions (i-iv) **Homework:** Short Questions (ii b, iv, vii), Extensive questions (ii-vi)

CHAPTER 10: KINGDOM ANIMALIA

Introduction, Grade Radiata, Grade Bilateria, Diploblastic and triploblastic organization, Acoelomates, pseudocoelomates, coelomates , Series proterostomia & Series dueterostomia, Phylum Porifera, Phylum Coelenterata (excluding the subtopic "Polymorphism"), Phylum Platyhelminthes (excluding the subtopics "infestation" and "disinfestation"), Adaptation for parasitic mode of life, Aschelminthes (Phylum Nematoda), Phylum Annelida (excluding the subtopics of classes "Polychaeta", "Oligochaeta", and "Hirudinea"), Phylum Arthropoda (excluding the subtopics of classes "Crustacea", "Insecta", "Arachnida", and "Myriapoda"), Metamorphosis, Economic importance of arthropods, Phylum Mollusca (excluding the subtopics of classes "Gastropoda", "Bivalvia" and "Cephalopoda"), Economic importance of Mollusca, Phylum Echinodermata; Echinodermata / Affinities, Phylum Chordata, Sub-phylum Vertebrata , Class Chondrichthyes, Class Osteichthyes (excluding the subtopic "adaptations for aquatic life, Class Amphibia, Class Reptilia, Class Aves; Characters of Birds, Class Mammalia, Sub-class Prototheria, Sub-class Metatheria, Sub-class Eutheria (Pg. 167-203)

Practicals:

1. Exposure of respiratory system of frog.

Questions:

Classwork: Fill in the blanks (i-x), Multiple choice questions (i, ii, iv, v, vi, vii)

Homework: Extensive questions (i, ii, vii, viii)

CHAPTER 11: BIOENERGETICS

Introduction, Photosynthesis, Photosynthetic reactants and products, Water and photosynthesis, Photosynthetic pigments (Chlorophyll, Carotenoids), Reactions of photosynthesis, Light dependent reactions, Non-cyclic phosphorylation, Cyclic phosphorylation, Chemiosmosis, Light independent (or dark) reactions, Respiration, Anaerobic and aerobic respiration, Anaerobic Respiration (alcoholic fermentation, lactic acid fermentation), Cellular Respiration, Glycolysis, Pyruvic acid oxidation, Krebs cycle, Respiratory chain (Pg. 206-228)

Practicals:

1. Extraction and chromatography of leaf chloroplast pigments.

Questions:

Classwork: Fill in the blanks (i-v), Multiple choice questions (i-iii)

Homework: Extensive questions (i-iii, vii-x, xii-xiii)

CHAPTER 12: NUTRITION

Methods of plant nutrition (saprophytic nutrition, parasitic nutrition, symbiotic nutrition, nutrition in insectivorous plants), Digestion and absorption, Digestion in Man, Digestion in oral cavity, Digestion in stomach, Digestion in small intestine, Absorption of food, Large intestine, Some common diseases related to nutrition (Dyspepsia, Food poisoning, Obesity, Ulcer) (Pg. 235- 256)

Practicals:

1. Study of T.S of liver, stomach, small intestine and large intestine of man prepared slides. **Questions:**

Classwork: Fill in the blanks (i-viii), True and false (i-iii), Multiple choice questions (i-iii, vi-vii, ix)

Homework: Short questions (i, iii, iv), Extensive questions (i-iv, ix-xii, xvi-xv) **CHAPTER 13: GASEOUS EXCHANGE**

Advantages and disadvantages of gas exchange in air and water, Gaseous exchange in plants, Properties of respiratory surfaces, Respiration in man, Air passage ways, Inspiration, Expiration, Transport of respiratory gases, Transport of oxygen, Transport of carbon dioxide, Carbon dioxide concentration in arterial and venous blood, Respiratory disorders (Cancer, Tuberculosis, Asthma), Role of respiratory pigments, Lung capacities (Pg. 259-275)

www.EduWorldPK.com

Practicals: No practical

Questions:

Classwork: Fill in the blanks (ii-v), True and false (i-ii, v), Multiple choice questions (i, iii-v)

Homework: Short questions (i-v), Extensive questions (i, v-vii)

CHAPTER 14: TRANSPORT

Transport in plants - Uptake and transport of minerals and water, Mineral absorption by roots, Processes involved in absorption by roots, Uptake of water by roots, Apoplast pathway, Symplast pathway, Vacuolar pathway, Ascent of sap, Cohesion tension theory, Mechanism of transpiration pull in cohesion and tension theory, Root pressure, Imbibition, Bleeding, Opening and closing of stomata, Mechanism of phloem translocation/transport, Diffusion, Pressure flow theory, Circulatory system, Characteristics of circulatory system, Open and closed circulatory system, Comparison of open and closed circulatory system, Transport in man, The circulatory fluid - the blood, Functions of blood, Disorders (blood cancer, thalassaemia), Pumping organ - The heart, Structure and action, The cardiac cycle, Mechanism of heart Excitation and Contraction Electrocardiogram, Artificial pace-maker, Blue babies, Blood vessels, Arteries, Capillaries, Veins, Blood pressure and rate blood flow, Hypertension, Thrombus formation and hypertension, Heart attack, Stroke, Hemorrhage, Lymphatic system, Immunity, Types of immunity (Pg. 278-327)

Practicals:

- 1. Demonstration of osmosis in living plant cells, (manifested by plasmolysis and deplasmolysis) of onion cells or spirogyra.
- 2. Study from prepared slides of internal structure of monocot. and dicot. root, stem and leaf.
- 3. Investigation of stomatal distribution (using clear nail varnish or epidermis peel)
- 4. Study of prepared, stained slide of human blood including identification of phagocytes and lymphocytes and preparation of slide of blood smear of frog.
- 5. Study of structure of artery, vein, capillary from their T.S. (Prepared Slides).
- 6. Study of effect of acetylcholine and adrenaline on the heartbeat of frog.
- 7. Exposure of blood circulatory system of frog (heart and main blood vessels).
- 8. Measurement of blood pressure during rest and alter exercise with B.P apparatus.

Questions:

Classwork: Fill in the blanks (i-vi), Multiple choice questions (i-ix), True and false (i-v) **Homework:** Extensive questions (i-v, vii, ix)

www.BooksPro.net

COMPUTER SCIENCE-11

UNIT 1: BASICS OF INFORMATION TECHNOLOGY

Overview (Pg.1,2), Hardware and Software (Pg. 2-4), System Software VS Application Software (Pg. 15-16), Basic Units of Data Storage (Pg. 16-17), Word (Pg. 17-18), System Development (Pg. 18-22)

Classwork: Q.1 (i, ii, iii, vii) (Pg.22), Q.4, 13 (Pg.24)

Homework: Q.5, 15 (Pg. 24)

UNIT 2: INFORMATION NETWORKS

Overview (Pg. 25), Workgroup Computing (Pg. 25-26), Internet (Pg.27-29), Components of network (Pg. 29-31), LAN vs WAN (Pg. 32-33), Network Standards (Pg. 35), Network Topologies (Pg. 35- 38), Open System Interconnection (OSI) Model (Pg. 37-38)

Classwork: Q.1 (i, iii- x), Q.2(i- viii) (Pg. 39), Q.3(ii-vi, viii-x) (Pg. 40), Q.4,5,8 (Pg.40) **Homework:** Q.6, 11 (Pg. 40)

UNIT 3: DATA COMMUNICATIONS

Overview (Pg. 41), Components of Data Communication (Pg.42), Signals (Pg.42-43), Types of Data (Pg. 43), Types of Data Transmission (Pg. 46 -53)

Classwork: Q.1 (i- iv, vii, xi-x) (Pg. 56), Q.2(i, ii, v) (Pg. 55-56), Q.3(iii, v-vii) (Pg. 56), Q.4, 6, 9 (Pg. 56)

Homework: Q.7, 10 (Pg. 56)

UNIT 4: APPLICATIONS AND USES OF COMPUTER

Overview (Pg. 57), Uses of Computers in different Fields (Business, E-Commerce, Computer Added Design, Simulations only) (Pg. 57-67)

Class Work: Q.5, 6 (Pg. 70)

Home Work: Q.10 (Pg. 70)

UNIT 5: COMPUTER ARCHITECTURE

Overview (Pg.71-76), Bus Interconnection (Pg.76-78), The I/O Unit (Pg.78-81), Instruction Format (Pg. 82-84), Operating Systems (Pg. 85-86), The Translators and Their Functions (Pg. 87)

Classwork: Q.1, 2, 3(Pg. 88-89), Q.4, 5, 7, 10, 11 (Pg. 90)

Homework: Q.6, 8, 9, 14 (Pg. 90)

UNIT 6: SECURITY, COPYRIGHT AND LAW

Overview (Pg.91), Virus and Antivirus issues (Pg. 91-94), Data Security (Pg. 94-97) Classwork: Q.1 (i- vi) (Pg. 100), Q.2 (Pg. 100-101), Q.3(i- iv, vi- viii) (Pg. 101-102), Q.4, 5, 6 (Pg.102)

Homework: Q.9, 10, 11 (Pg. 102)

UNIT 7: WINDOWS OPERATING SYSTEM

Overview (Pg.103), Types of Operating System (Pg. 103-105), Starting to use Windows Operating System (Objects of Windows Operating system, Features of Windows only)

www.EduWorldPK.com

(Pg. 105-107, 108-109), Disk Management (Pg.109-110) Classwork: Q.1(i-vi, viii, x) (Pg.113), Q.2(Pg.113), Q.3(i, ii, v, viii -x) (Pg.114), Q.4,6,8(Pg.114) **Homework:** Q.5, 9, 10 (Pg. 114) **UNIT 8: WORD PROCESSING** Overview (Pg. 115), What is Word Processor? (Pg. 115-116), A Simple Word Processor (Pg. 116), Full Featured Word Processor (Pg.116-118) Classwork: Q.2(i, ii,) (Pg. 131), Q.5 (Pg. 132) Homework: Q.6 (Pg. 132) **UNIT 9: SPREADSHEET SOFTWARE** Overview (Pg. 133), Features of Spreadsheet Software (Pg. 133), Basics of Worksheet (Pg.135-137), Working with Formulas (Pg. 137-138), Functions (Pg.138-139), Introducing Charts (Pg. 142-143) Classwork: Q.1 (i- vi, viii-x) (Pg. 144-145), Q.2(Pg. 145), Q.3(i- iv, vi-x) (Pg. 145), Q.4, 5 (Pg.146) Homework: Q.8, 9 (Pg. 146) **UNIT 10: FUNDAMENTAL OF THE INTERNET** Overview (Pg.147), Addressing Schemes (Pg.148-149), Web Browsing (URL (Uniform Resource Locator) only) (Pg. 149,150), Email (Email Address only) (Pg. 152), Newsgroups (Pg. 152) Class Work: Q.1 (iii, viii, ix) (Pg. 153), Q. 2 (Pg. 153), Q.3(i, iii, vi, vii, ix, x) (Pg. 154) Home Work: Q.6 (Pg. 154) Note: Objective and subjective type papers should be given from the retained topics and exercise questions.

28

www.EduWorldPK.com

Pakistan's Educational Network

WE PROVIDE WHAT EDUCATION REQUIRE

