

### X-BIOLOGY SUPPLY PREPARATION PAPER

Subject: Biology

Date: \_\_\_\_\_

Duration: \_\_\_\_\_

Total Marks: \_\_\_\_\_

#### SECTION A

1.

##### Diagrams & Functions

Draw structure of monocot/dicot seed OR L.S of flower OR L.S of Human Skin

Write three main functions/characteristics of chemical cycle OR kidney

2.

##### Definitions (Any Three)

Food chain, Food web, Oxygen debt, Guttation, Triceps, Transgenic Cell, Lung capacity, Osteoblast, Tissue culture technique, Artificial ventilator, Goiter, Stimuli, Osteoclast, Osteocyte, Biceps muscle, Triceps muscle, Binary fission, Budding, Grafting, Apomixes, Zygote, Fertilization, Producer, Consumer, Decomposer, Lung Cancer, Bronchitis, Asthma, Ecology, Biosphere, Remodeling of bone

3.

##### Differences (Any One Set)

- Photosynthesis & Respiration
- Vegetative & Artificial propagation
- Internal & External Fertilization
- Exoskeleton & Endoskeleton
- Inspiration & Expiration
- Chemical & Nervous Coordination
- Tendon & Ligament
- Transpiration & Guttation

OR

Properties of respiratory surface + Composition of inspired & expired air

4.

**Health & Reflex Action**

Why smoking is dangerous? Relation with respiratory disorders + Effects of smoking

OR

What is reflex action & reflex arc? How it works? Define receptors and effectors

5.

**Respiration & Conservation**

Role of lungs to maintain carbon dioxide concentration

OR

Meaning of conservation of nature + Names of endangered mammals of Pakistan

6.

**Eye & Pollination**

Layers of eye + Description of colour blindness, myopia and hyperopia

OR

What is pollination? Types + Adaptive characters of insect & animal pollinated plants

7.

**Joints & Diagrams**

Draw labeled diagram of hinge joint OR ball & socket joint OR T.S of pollen grain

OR

What is joint? Define moveable joints with examples + Locate immovable joints in body

8.

**Respiration & Neurons**

Five animals using body surface for gas exchange

OR

Draw and describe structure of neuron

9.

**Skin & Muscles**

How skin works as thermoregulatory organ?

OR

What is antagonism? Describe antagonistic muscles with examples

10.

**Movement & Skeleton**

Differentiate movement & locomotion + Types of movement based on stimuli and response

OR

Define human skeleton + Describe two types + Two functions of skeleton or joints

**11.**

**Control Mechanisms**

Define feedback control mechanism and natural selection OR homeostasis

**OR**

What is diabetes mellitus? Explain management ways

**12.**

**Homeostasis & Bones**

Define homeostasis + Excretory organs & products of Planaria, Earthworm, Cockroach and Human

**OR**

Names & number of bones in hind limb + Location of cartilages in different organs

**13.**

**Diagrams & Endocrine System**

Draw labeled diagram of stages of fruit formation OR life cycle of angiospermic plant

**OR**

Define endocrine gland + Describe pancreas or adrenal glands + Role of Islets of Langerhans cells + Why adrenaline called emergency hormone?

**14.**

**Cycles & Reproduction**

Describe nitrogen cycle as biogeochemical cycle in detail + Draw nitrogen cycle diagram

**OR**

Describe types of asexual reproduction in animals

**15.**

**Reproduction & Biotechnology**

What is gametogenesis? Explain spermatogenesis OR oogenesis in Rabbit + Draw and describe male/female reproductive system of Rabbit + List male reproductive organs with glands

**OR**

What is industrial biotechnology? Describe types of fermentation + How fermentation works + Advantages/disadvantages of fermentation + Three uses of fermentation

**16.**

**Osmoregulation & Ecosystem**

What is Osmoregulation? Classify plants based on Osmoregulation

**OR**

What is Ecosystem? Describe its types + Explain Abiotic Components + Effect of light on ecosystem

**17.**

**Systems & Germination**

With labeled diagram, describe: Human Brain OR Urinary System OR Human Respiratory System

**OR**

What is germination? Necessary conditions + Types of germination + Difference between hypogeal and epigeal germination

**18.**

**Ecology & Genetic Engineering**

Define ecological pyramid + Name types + Define pyramid of number

**OR**

Describe genetic engineering tools and achievements + Four recombinant DNA products + Three uses of genetic engineering

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**KARACHI EDU****X-CHEMISTRY SUPPLY PREPARATION PAPER**

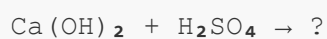
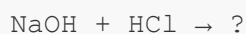
Date: \_\_\_\_\_

Duration: 3 Hours

Total Marks: 100

**SECTION A****1. Neutralization Reactions**

What is neutralization reaction? Complete and balance:

*OR*

Distinguish between any one of the following pairs:

- Classical & Instrument Methods
- DNA & RNA
- Reversible & Irreversible Reactions
- Monosaccharides & Oligosaccharides
- Acid & Base

**2. Analytical Chemistry**

Distinguish Qualitative & Quantitative Analysis.

Write names of physical & chemical methods.

*OR*

Define nomenclature + Write names and formulas for given compounds.

**3. Acid-Base Theories**

State and explain acid and bases based on:

- Lewis concept

- Bronsted-Lowry theory

Give limitations of the theory.

-----  
*OR*

Define any three of the following terms:

- Analytical chemistry
- Industrial chemistry
- Organic chemistry
- Titration
- Indicator
- Homologous series
- Glycosidic linkage
- Fractional distillation
- Alkanes
- Alkenes
- Alkynes
- Catenation
- Alkyl Radicals
- Enzymes
- Retention time
- Biochemistry
- Active mass
- Mobile phase
- Aldose
- Saccharides
- Ketose
- Stationary phase
- Vital force theory
- Isomerism
- Environmental chemistry
- Conjugate Acid-Base pair
- Potentiometry
- Nucleotides
- Biuret's Reagent
- Saponification

#### 4. Functional Groups & Justifications

What is functional group? Identify functional groups in given compounds (any 2).

OR

Justify (any 2) of the following statements:

- Why silicon compounds are lesser than carbon compounds?
- Why alkenes & alkynes called unsaturated hydrocarbons?
- Why Arrhenius theory only applicable on aqueous solutions?
- Why alkanes are saturated hydrocarbons?
- Why chemical equilibrium is dynamic?
- Why pure water is considered weak electrolyte?

### 5. Salts & Water Ionization

Give uses of salt + Classify salts into acidic, basic & neutral:  $\text{Na}_2\text{CO}_3$ ,  $\text{KCl}$ ,  $\text{NH}_4\text{Cl}$ ,  $\text{CH}_3\text{COONa}$ .

OR

Elaborate ionization equation of water + How water ionization related with pH?

### 6. Chemical Equilibrium

State law of mass action.

For reaction:  $\text{N}_2\text{O}_4(\text{g}) \rightleftharpoons 2\text{NO}_2(\text{g})$  with  $K_c = 0.21$  at 373K

Concentrations:  $[\text{N}_2\text{O}_4] = 0.125 \text{ mol/dm}^3$ ,  $[\text{NO}_2] = 0.5 \text{ mol/dm}^3$

Predict direction of reaction.

### 7. Organic Formulas & Classification

Write condensed and structural formulae of pentane, hexene and octane.

OR

Write 3 uses/biological importance of any one of the following:

- Enzymes
- Carbohydrates
- Nucleic Acid
- Protein

OR

Draw classification chart of organic compounds + Define any two:

- Aromatic compounds

- Homocyclic compounds
- Heterocyclic compounds
- Alicyclic compounds

## 8. Organic Chemistry Concepts

Write short note on any one of the following:

- pH dependent food
- Stomach acidity
- Buffer
- Spectroscopy

OR

Compound with 5 carbon atoms - give structure & formula as alkane, alkene, alkyne.

## 9. Organic Diversity & Isomers

What is meant by diversity and magnitude of organic compounds?

OR

Draw isomers of n-pentane.

OR

Write points about society, technology and science.

## 10. Structures & Bonds

Draw structures of: acetone, acetic acid, diethyl ether, formic acid, acetaldehyde, n-propyl alcohol.

OR

What is peptide bond? Name types + Elaborate amino acids as monomers of protein.

## 11. pH & Carbohydrates

Define pH & pOH + Calculate pH when  $[H^+] = 1 \times 10^{-3} \text{ mol/dm}^3$ .

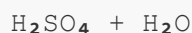
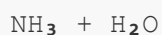
OR

What are polysaccharides? How monosaccharides formed from polysaccharides?

## 12. Conjugate Acids-Bases & Pharmaceuticals



What is conjugate acid & base? Write conjugate acid-base pairs for:



OR

Describe 3 beneficial impacts of Pharmaceutical industry + Role of pharmaceutical chemist.

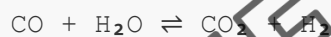
### 13. Chemical Equilibrium

Describe dynamic equilibrium with two examples.

Three characteristics of equilibrium constant.

How direction/extent of reaction determined by  $K_c$ ?

Write  $K_c$  expressions for:



OR

Describe water pollutants in industries + Explain water borne diseases in detail.

### 14. Electrochemical Methods

Define electrochemical method in analytical chemistry.

Explain construction & working.

Justify dependence on electrochemical cells.

Give applications of Conductometry.

OR

Define petroleum + Describe fractions in detail.

Justify petroleum as "Black

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## X-COMPUTER SUPPLY PREPARATION PAPER

Exam Name: Computer Science

Duration: \_\_\_\_\_

Student Name: \_\_\_\_\_

Total Marks: \_\_\_\_\_

### SECTION A

1.

#### Algorithms & Operators

Three advantages of algorithm OR flowchart + Characteristics of good algorithm

OR

Define assignment and logical operators + Describe types of assignment/logical operators

2.

#### Programming Tools

Function/use of inverter OR Boolean Algebra OR Scratch Editor

OR

Three key benefits of integrated development environments (IDEs)

3.

#### C++ & Data Structures

Short note on: Strings in C, Switch statement, Push & Pop, Cursor tools

OR

Three data types in C++ + Memory required by each

4.

### Programming Concepts

Why we make block of statements using braces?

*OR*

What is graph? Define directed graph and undirected graph

5.

### Differences & Jump Statements

Differentiate: NAND & NOR gates OR \n & \t OR Basic & Universal logic gates OR Source Code & Object Code OR Tree & Graph OR Queue & Stack OR Table & View OR Operators in Scratch OR Constant & Variable

*OR*

Purpose of Jump statement + Examples

6.

### Error Correction & Queue Operations

Remove errors from:

```
cin < < abc;  
  
if(c<10];  
  
cout<<1 read in class X
```

*OR*

Define Enqueue, Dequeue and Overflow with sketch

7.

### Scratch & Boolean Algebra

Describe script area in scratch editor

*OR*

Describe any 6 rules of Boolean Algebra

8.

### **Programming Syntax**

Purpose of "default" OR increment operator (++) + Two ways of its usage

*OR*

Why statement terminator is used?

9.

### **Variable Concepts**

Two basic concepts of scratch environment

*OR*

Difference between declaring and initializing a variable in C++

10.

### **Functions & Syntax Errors**

Purpose and syntax of any 2: if, getch(), cout, if-else, return, exit(), continue, do-while, switch, break, puts(), gets(), getchar

*OR*

What is syntax error? Name 3 frequent syntax errors

11.

### **Programming Basics**

Need of loops in programming

*OR*

Define any 3: Computer, Return value in C program, Stage, Backdrop, Scripts, Reserved word, Inverter

12.

### **Naming Rules & Escape Sequences**

Rules for naming variables/functions

*OR*

What is escape sequence? Uses of any three: \t, \n, \r, \b, \a

13.

### **Data Structures & IDE**

What is data structure? Name types

Describe linear data OR non-linear structure and its types

*OR*

Describe main components of IDE in detail + Three advantages of IDE

14.

### **Control Statements & Logic Gates**

Define control statement + Explain iteration/loop structures (for, while, do-while)

*OR*

Define universal gates & basic logic gates + Explain types + Give symbol, Boolean expression + Draw truth table

15.

### **Translators & Loops**

What is translator? Describe types + Why need language translator?

Enlist 5 common high-level languages + Define any one

Difference between high & low-level language

*OR*

Define loop + Explain types + Define nested loop

16.

### **Errors & Problem Solving**

Define error in programming + Explain different types of errors with examples

*OR*

Define problem + How problem can be solved?

Define "Flowchart" + Draw symbols with names and descriptions

Differentiate algorithm & flowchart

17.

### **Operators & Scratch**

What are operators? Describe types of operators in C++ with examples

Write C++ program using Arithmetic Assignment Operators

Differentiate Arithmetic & Relational Operators

*OR*

Explain components of scratch editor + Use of any 6 codes of scratch editor

18.

### Truth Tables & Boolean Algebra

Define truth table + Purpose of truth table

Construct truth tables for:

- $(A+B)(A+C)=A+BC$
- $Z=(A+B)(A+B)$
- $Y=A.B.C$
- $Y=A+B+C$

*OR*

Simplify Boolean Expressions + Draw logic circuits (any 2):

- $Z=(A.B)+(A+B)$
- $Z=(A+B)+(A+B)$
- $X=AB(C+D)$
- $Y=ABC(A+D)$

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## X-ENGLISH SUPPLY PREPARATION PAPER

Date: \_\_\_\_\_

Duration: \_\_\_\_\_

Max. Marks: \_\_\_\_\_

### SECTION A

1. Answer any FIVE questions (2-3 sentences each)

i. Literature & Social Media

Why is Gorakh Hills a good place for holiday? + Two saints mentioned

OR

How is social media affecting people's relationships?

ii. Historical Figures & Stories

What was Caliph Haroon-ur-Rashid known for? + How he decided the case?

OR

How did the spider finally reach its cobweb?

iii. Poetry & Real Life

Message of poems: King Bruce & the Spider / Little Things / The Man Who Wins

OR

Why did U.S government official deliver newspaper when son was ill?

iv. Family Stories

Why did Asif and family sleep in tent? + What Asif appreciated about parents?

OR

Why was Uncle Inayat liked by children?

v. Safety & Adventures

Two important safety measures saving lives + Why helmet important?



OR

Why everyone excited about trip? + Why villagers told them to leave house?

vi. Personal Experiences

Why poet asked to go down again? + Why author climbed steeple?

vii. Modern Issues & Values

How social media revolutionized communication?

OR

Why China having rapid progress? + Lesson from "Dignity of Work"

OR

Why we should speak gently to aged/children/others?

2. Grammar Exercises

i. Articles

- i. \_\_\_\_\_ pupil should obey his teacher
- ii. This is \_\_\_\_\_ most important question

ii. Prepositions

- i. The books were distributed \_\_\_\_\_ the students
- ii. The shop does not have the toy I was looking \_\_\_\_\_

iii. Voice Change

- i. He hit the ball out of the park
- ii. The girl lost her ring somewhere in the garden
- iii. Where did they spend all the money?

iv. Sentence Formation

- i. She inspires one and all with her performance (Interrogative)
- ii. Do you go to school everyday? (Assertive)
- iii. now it is my turn (Punctuate)
- iv. They have applied for this post (Future continuous)
- v. Has it been drizzling since noon? (Past perfect continuous)
- vi. He told me that he had done the work (Negative)

v. Narration Change

- i. "Call the first witness", said the judge to the peon
- ii. I ordered him not to interfere
- iii. They exclaimed that those mangoes were very sweet
- iv. He said to them, "You are doing your work"

vi. Word Formation

- i. Prefix to: Able
- ii. Suffix to: Beauty
- iii. Homophone of: Chair

3. Parts of Speech

Identify kind of noun for underlined words:

- 4. Honesty is the best policy
- 5. The teacher entered the class
- 6. Girl takes more interest in studies
- 7. You need to add sugar in this tea cup
- 8. Pakistan is an agriculture country

9. Translation

Translate paragraph about social media into Urdu/Sindhi

10. Contextual Fill-ups

Fill blanks using: Abide, Helmet Laws, Family, Suffering

[\_\_\_\_\_ are constituted to save lives of motorbike riders. Those who \_\_\_\_\_ by the laws, not only save their own lives but also protect their \_\_\_\_\_ from unnecessary \_\_\_\_\_. Although this \_\_\_\_\_ is challenging to wear, but for protection, it is important.]

11. Essay Writing (120-150 words)

- 12. Causes of inflation in Pakistan
- 13. Problems of Karachi city
- 14. Role of media in our society
- 15. A picnic at seaside
- 16. Benefits of reading books

17. Energy crisis in Pakistan
18. Importance of health education/sports/technical education
19. An exciting cricket match
20. Pros and Cons of Internet/Social Media/Mobile Phone
21. Personality of your own choice

22. *OR*

Steps to improve Pakistan Cricket Team performance

23. Letter Writing

24. Letter to cousin inviting for summer vacation

25. *OR*

Letter to editor complaining about reckless driving and road conditions

26. Comprehension

Read passage about co-education and answer:

*[Passage text would be inserted here if provided]*

i. Short Answers

- i. Why some parents not in favor of co-education?
- ii. Why socializing skills important?

ii. Vocabulary

Find words meaning:

- i. Traditional
- ii. Paying attention
- iii. Vital
- iv. Unfairness

iii. Summary Writing

Write summary of the passage

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## X-MATHS SUPPLY PREPARATION PAPER

Date: \_\_\_\_\_

Duration: \_\_\_\_\_

Total Marks: \_\_\_\_\_

### SECTION A

#### 1. Sets & Functions

If  $P = \{a, b, c\}$  and  $Q = \{x, y, z\}$ , find:

- (i) A function "f" from P into Q
- (ii) A function "f" from P onto Q

OR

If  $U = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10\}$ ,  $A = \{1, 3, 5, 7, 9\}$ ,  $B = \{2, 4, 6, 8\}$

Show that:  $(A \cup B)' = A' \cap B'$

#### 2. Ratios & Equations

If  $a:b = c:d = e:f$ , show that:

$$\frac{a^2b + c^2d + ef}{ab^2 + cd^2 + ef^2} = \frac{a+c+e}{b+d+f}$$

OR

Solve using componendo-dividendo:

$$\frac{\sqrt{x+1} + \sqrt{x-1}}{\sqrt{x+1} - \sqrt{x-1}} = \frac{1}{2}$$

### 3. Cube Roots & Complex Numbers

Find cube roots of:

(a) 729

(b) -27

OR

Show that:

$$(1+\omega)(1+\omega^2)(1+\omega^3)(1+\omega^4) = (\omega+\omega^2)^2$$

### 4. Equations & Roots

Solve system of equations:

$$4x + y = 2$$

$$4x + 3y = 25$$

OR

If  $\alpha, \beta$  are roots of  $6x^2 - 3x + 1 = 0$ , form equation with roots:

$$1/\alpha \text{ and } 1/\beta$$

### 5. Trigonometry & Matrices

Find remaining trigonometric ratios if  $\tan\theta = -1/2$  and  $\theta$  in second quadrant

OR

Solve using matrix inversion and Cramer's rule:

$$2x+5y=12$$

$$3x-2y=1$$

## 6. Trigonometric Identities (Prove Any 1)

$$\frac{1+\sec\theta}{1-\sec\theta} = \frac{\sin\theta+\tan\theta}{\sin\theta-\tan\theta}$$

$$\frac{1+\cos\theta}{1-\cos\theta} = \frac{\sin\theta}{1-\cos\theta}$$

$$\frac{\cos\theta+\cos\phi}{\sin\theta+\sin\phi} = \frac{\cos\theta}{\sin\theta+\sin\phi}$$

## 7. Circle Theorems

*Prove: If two arcs of circle are congruent, then corresponding chords are equal*

OR

*Prove: Equal chords subtend equal angles at center*

OR

*Prove: If angles subtended by chords at center are equal, then chords are equal*

## 8. Statistics

Find range, variance, mean deviation, standard deviation for:

10, 20, 30, 40, 50, 60

OR

Calculate for: 148, 145, 160, 157, 156, 160

## 9. Functions & Relations

Define function and relation

Types of functions with examples

Domain and range concepts

Composite functions

## **10. Algebra & Equations**

Quadratic equations and their solutions

Nature of roots

Relation between roots and coefficients

System of linear equations

## **11. Trigonometry**

Trigonometric identities and proofs

Graphs of trigonometric functions

Applications of trigonometry

Inverse trigonometric functions

## **12. Geometry & Circles**

Circle theorems and proofs

Properties of chords and arcs

Cyclic quadrilaterals

Tangents and secants

## **13. Statistics & Probability**

Measures of central tendency

Measures of dispersion

Probability concepts

Data representation

## **14. Matrices & Determinants**

Matrix operations

Determinants and properties

Solution of equations using matrices

Applications of matrices

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## X-PHYSICS SUPPLY PREPARATION PAPER

Institution:

\_\_\_\_\_

Exam:

Physics Supply Paper

Duration:

\_\_\_\_\_

Name:

\_\_\_\_\_

Date:

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Max. Marks:

\_\_\_\_\_

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## SECTION A

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### 1. Wave Differences

- Mechanical vs Electromagnetic Waves
- Transverse vs Longitudinal Waves
- Sound vs Noise
- Real vs Virtual Image
- Convex vs Concave Mirror/Lens
- A.C. vs D.C.
- $\alpha$ -rays vs  $\beta$ -rays

### 2. Wave Concepts

What is wave front? Describe two types.

Derive wave speed formula:  $v = f\lambda$

OR

Three uses/characteristics of: electromagnetic waves/ultra sound/musical sound/radio waves/X-rays.

### 3. Laws & Definitions

- Fleming's left-hand rule
- Snell's law
- 1st and 2nd laws of reflection

OR

Define any three: Background radiation, Damped oscillation, Dispersion of light, Diffraction, Echo, Critical Angle, Power of lens, Magnification power, Electromotive force, Logic gates, Radioactivity, Cosmic radiations, Ultrasonic waves, Infrasonic waves, Internet, Isobars, Isotones, Electric Field Intensity, Magnetic Field.

### 4. Devices & Phenomena

Construction and working of: SONAR/Ripple Tank/A.C Generator/Electroscope.

OR

Total internal reflection with diagram + Conditions + Uses.

## 5. Optical Fibers & Nuclear Physics

- Working principle of optical fibers
- Applications in medical studies & telecommunication
- How light signals sent through optical fibers?

*OR*

Define nucleon number and isotopes + Find protons and neutrons + Why proton has positive charge?

## 6. Electricity & Magnetism

Advantages and disadvantages of parallel and series combination of resistance.

*OR*

Path and effect of magnetic/electric field on electron beam.

## 7. Numerical Problems

Voltage drop across  $50\text{k}\Omega$  resistance with  $300\text{A}$  current.

*OR*

Force on  $5\mu\text{C}$  charge with electric field intensity  $5\text{N/C}$ .

## 8. Force & Charge Calculations

Coulomb force between two protons  $10\text{cm}$  apart ( $Q=1.6\times 10^{-19}\text{C}$ ,  $K=9\times 10^9\text{Nm}^2/\text{C}^2$ ).

*OR*

Charge flow when current is  $0.0001\text{A}$  for 1 minute.

## 9. Distance & Work

Distance in kilometers in one light year.

*OR*

Initial distance between points A & B if work done is  $9\times 10^{-4}\text{J}$  to move  $+9\mu\text{C}$  charge.

## 10. Circuits & Pendulum

Equivalent capacitance of  $10\mu\text{F}$ ,  $20\mu\text{F}$  capacitors in series.

*OR*

Length of pendulum for period  $1\text{s}$  ( $g=9.8\text{m/s}^2$ ).

## 11. Optics & Transformers

Object distance for image in mirror with focal length  $13.5\text{cm}$ .

*OR*

Secondary coil turns if primary has 2200 turns and voltage ratio given.

## 12. Sound & Refraction

Position of sound source given conditions.

*OR*

Angle of refraction when incidence angle  $40^\circ$  in water ( $n=1.33$ ).

## 13. Optical Instruments

Construction & working of: Magnifying glass/Compound Microscope/Projector.

*OR*

Defects of vision and their correction with ray diagrams.

## 14. Capacitance & Experiments

- Capacitance definition + Formula + Unit
- Two factors affecting capacitance + Uses
- Derive equivalent capacitance for series/parallel combination

*OR*

Geiger-Marsden  $\alpha$ -scattering experiment and results.

## 15. Electromagnetism

- Magnetic force on charged particle in magnetic field
- Experiment showing current generates magnetic field

*OR*

Force on current-carrying conductor perpendicular to magnetic field.

## 16. SHM & Electrostatics

- Define SHM + Necessary conditions
- Three important wave terms
- SHM in ball & bowl system/simple pendulum with diagram

*OR*

Electric charge definition + Coulomb's law + Derive  $F = kq_1q_2/r^2$ .

## 17. Nuclear Physics & Electricity

- Nuclear fission reaction with example
- Chain reaction concept
- Control in nuclear reactors

*OR*

Joule's law + Electric power definition + Derive  $P = V^2/R$ .

## 18. Technology & Transformers

- Information technology definition
- Components of CBIS (Computer Based Information System)

*OR*

- Transformer working principle
  - Step-up vs step-down transformers
  - Three daily life applications
  - Can transformer work on DC? Justify
- 

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## X-PST SUPPLY PREPARATION PAPER

Institution: \_\_\_\_\_

Exam: \_\_\_\_\_

Date: \_\_\_\_\_

Duration: \_\_\_\_\_

Max.

Marks: \_\_\_\_\_

### SECTION A

#### 1. Democracy & Constitution

Principles of democracy in Islam

OR Meaning of democratic government

OR Five duties of a student

OR Salient features of 1973 Constitution

#### 2. Ideology & Leadership

Role of ideology in national character construction

OR Five points about Quaid-e-Azam

OR Five former presidents of Pakistan

OR Five sentences on Two Nation Theory

#### 3. International & Cultural Affairs

Five sentences on UDHR (Universal Declaration of Human Rights)

OR Define culture + Five characteristics

OR Five dams of Pakistan

OR Five highways of Pakistan

#### **4. Treaties & Leadership**

Five sentences about Indus Basin Treaty

*OR* Five characteristics of Quaid-e-Azam

---

#### **5. Sufism & Environment**

Five Sufis of Pakistan + Their belonging places

*OR* Five benefits of forests

---

#### **6. Quotations & Geography**

Statement of Quaid-e-Azam *OR* Allama Iqbal on Pakistan ideology

*OR* Famous ports of Pakistan

---

#### **7. Life Principles & History**

Five sentences on moderation in life

*OR* Five reasons for separation of East Pakistan

---

#### **8. Ideology & Resolution**

Explain ideology of Pakistan in five sentences

*OR* Important points of Objective Resolution

---

#### **9. Geography & History**

Neighboring countries of Pakistan

*OR* Five sentences on 3rd June Plan

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#### **10. Governance & Agriculture**

Importance of legitimacy

*OR* Agricultural problems of Pakistan

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#### **11. State & Citizenship**

Meaning of state + Role of individual in welfare state

*OR* Role Pakistanis should play for country's prosperity

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## 12. Ideology & Education

Meaning of ideology + Importance of Pakistan ideology with Quaid/Iqbal statements

*OR* National goals of Pakistan

*OR* Importance of education in country's development

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## 13. History & Geography

Role of Sindh in independence struggle

*OR* Effects of climate on human life

*OR* Role of Muslim League in independence struggle + Its establishment

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## 14. Development & Constitution

Importance of industry in national development

*OR* Salient features of 1973 Constitution

*OR* Importance of Pakistan's location in South Asia

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## 15. Governance & Movements

Role of ombudsman in handling public complaints

*OR* Note on any one:

Importance of National Language

Energy Resources

Role of Welfare State

Objective Resolution 1949

*OR* Services of any one movement:

Aligarh Movement

Shah Wali Ullah

Syed Ahmed Shaheed Brailvi

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## KARACHI EDU

## X-SINDHI SUPPLY PREPARATION PAPER

تاریخ: \_\_\_\_\_

مدت: \_\_\_\_\_

کل نمبر: \_\_\_\_\_

## حصو "ب" (مختصر جواب جا سوال)

سوال 2: هيٺين مان ڪن به پنجن سوالن جا جواب ڏيو.

1. بلعم زالن، بارن، يتيمين ۽ مسڪينن واسطي ڪهڙيون نصيحتون فرمايون؟
2. اسلامي برادري بابت گهرو ارشاد فرمايو؟ يا اسلام جي ڪلمي لاءِ ڪهڙي دعا ٿو گهري؟
3. حال احوال ابو آهي ان کي ڇا چئبو آهي؟
4. ميرن جي دريا جو ستو ڪهڙي قسم جو هو؟
5. من مهري آهي؟
6. حضرت امام جعفر صادق جا گهرا مشهور شاگرد ڪيئن گذريا آهن؟
7. اتحاد مان ڪهڙا فائدا آهن ۽ اتحاد نه هجڻ ڪري قوم کي ڪهڙا نقصان ٿيندا؟
8. حضرت سلمان فارسي رضي الله عنه حق و سچ جي ڪوڙ لاءِ ڪهڙيون ڪوششون ڪيون؟
9. مالي ختون جو دور ڪهڙو آهي؟
10. ڪلهوڙن جي دور کي سنڌي ادب جو سونهري دور چيو ٿو سڏيو وڃي؟
11. مولانا ولائي جا ڪهڙا علمي يادگار موجود آهن؟
12. حضرت سچل سرمست جي شاعري ۾ سنڌ جي ثقافت جي اهم سوکڙي ڪهڙي آهي؟
13. بلندي حاصل ڪرڻ لاءِ شاعر ڪهڙي صلاح ٿو ڏئي؟
14. سرڪاري ملازمن کي قائداعظم ڪهڙي هدايت ڪئي آهي؟

سوال 3: هيٺين مان ڪن به چئن لفظن جا جملا ٺاهيو.

نامير، داستان، چهچتو، سوکڙي، گشتي، در، انج، چمار، احترام، خيص، پيسار، احمود، مستحق

سوال 4: لفظن جا قسم



a. ضد لفظ:

- بهاري/سردي
- درهبر/ڪمزور
- اعليٰ/ادنيٰ
- سمي/غير سمي
- مٿيون/شام
- جمهوريت/بادشاهت
- تقرار/منسوخي
- جيتي/هار
- خادم/آقا
- خراب/صحيح

b. واحد/جمع:

- شهر/شهر
- عوام/فرد
- مرند/مرندڻ

c. مذڪر/مونث:

- زال/مڙس
- مگهينو/مگهيني
- جوگي/جوڳڻ
- مڪان/مقام
- مهرم/مهرمه
- شهزادي/شهزادو
- عورت/مرد
- ڪنڊ/ڪنڊ
- ڊاڪٽر/ڊاڪٽرھ
- مڄلجي/مڄلڄڻ
- بانو/بانوءَ
- گهڙت/گهڙ
- والده/والد

هڪ جي تعريف: (فعل، ضمير، حرف، حرف نداء، صفت، اسم، ظرف، حرف جملو)

سوال 5: اصطلاحن جي سنڌي معنيٰ لکو.

a. پيرن هيٺان - مشڪل وقت

- b. نازن بچائڻو - پالپوء ڪرڻ
- c. شين گوھ - خوبصورت ڪوڏ
- d. ڪلي وڃڻ - گهڻو ڪم ڪرڻ
- e. ميان ملهائڻ - وچ ۾ اچڻ
- f. ساهه صحت - تندرستي
- g. شن رنگ لڳائڻي - عادي ٿيڻ
- h. نقش قدم تي هلڻ - پيروي ڪرڻ
- i. نالو ڪيڻ - مشهور ٿيڻ
- j. سرصد فو ڪرڻ - پورو ٿيان ڏيڻ
- k. پيرن هيٺيان - سفر ڪرڻ
- l. لتاڙڻ - تازگي
- m. سوالِي خالي نه موٽائين - خالي هٿ نه موٽڻ
- n. اکين تي هجڻ - محنت ڪرڻ
- o. لذت بدن - جسماني لذت

سوال 5: پيراگراف پڙهي جواب ڏيو.

چورو هلندو هلندو همت رڻو پهتو. تي ان جا هٿ پيل تنائين هو، به اوزار نه هئا پر هنر آزمائڻ لڳو. انهن هٿن مان هن يان ديد چور ٺاهيا. اهي جانور هر م بدي وري الي هليو.

- a. چورو هلندي هلندي ڪيڏانهن پهتو؟
- b. ان جي تنقين؟
- c. انهن هٿن مان هن ڇا ٺاهيو؟
- d. اهي جانور ڇا بدي وري الي هليو؟

حصو "ج" (بياني جواب جا سوال)

سوال 6: هيٺين مان ڪنهن هڪ موضوع تي مضمون لکو.

- a. پسنديدھ شخصيت
- b. پسنديدھ شاعر
- c. قومي هيرو
- d. علم جي اهميت
- e. تندرستي هزار نعمت آهي
- f. وطن جي حب

- g. استاد جي اهميت
- h. سائنس جا ڪارناما
- i. بهار جي موسم
- j. يوم پاڪستان
- k. محنت جي عظمت

سوال 7: هيٺين مان ڪنهن هڪ عنوان تي خط لکو.

- a. هيڊ ماستر/هيڊ ماستريائي کي چئي لاءِ معافي گهريل
- b. عيد ميلاد النبي ملهائڻ بابت
- c. شاهه عبداللطيف ڀٽائي جي ورسِي ملهائڻ بابت
- d. وڃت جي اجازت لاءِ
- e. سنڌ جي ثقافت جي ڏهاڙي ملهائڻ لاءِ درخواست
- f. ساهيري کي ڪراچي گهمڻ جي دعوت
- g. عام چونڊن جي اهميت بابت دوست کي خط
- h. امتحان ۾ ڪاميابي تي مبارڪباد
- i. سيلاب زدگان جي مدد لاءِ
- j. آدم شماري جي اهميت بابت خط

سوال 8: هيٺين شعرن مان ڪنهن هڪ جي تشريح ڪريو.

- a. نظم "دعا" جي تشريح
- b. نظم "بڻايون سُڪ جو ڪو سنسار" جي تشريح
- c. نظم "پيارا وطن" جي تشريح
- d. نظم "آهيون الف اسري محمد محيوسون" جي تشريح

سوال 9: خلاصو ۽ ترجمو.

a. سبق جو خلاصو/مرڪزي خيال

- ماني کير
- ميرن جي دربار
- ڪينجهر ڍنڍ
- حضرت امام جعفر صادق رضي الله عنه

b. نظم جو مرڪزي خيال

- دعا
- بڻايون سُڪ جو ڪو سنسار
- پيارا وطن

- آهيون الف اسري محمد محيوسون

c. اردو ترجمو:

هي اهو زمانو هو جڏهن پهرين مهاڀاري لڙائي هلندڙ هئي، ان ڪري دنيا جو هر هڪ ماڻهو حيران و پريشان هو، سنڌ "جي حالت به ڪا چڱي ڪانه هئي."

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