

**MODEL PAPER**

**PAKISTAN STEEL CADET COLLEGE  
ENTRANCE EXAMINATION FOR CLASS-XI**

Time : 45 minutes

PAPER : BIOLOGY-XI

Total : 50

**SECTION "A" (MCQs— Marks:20)**

Q.1. Select the best suitable option among the following.

- |       |   |                   |                      |                 |
|-------|---|-------------------|----------------------|-----------------|
| i.    | Respiratory surface must be:                                      |                   |                      |                 |
|       | * Thin  | * Wet             | * Permeable          | * All of these  |
| ii.   | Double fertilization occurred in;                                 |                   |                      |                 |
|       | * Angiosperm  | * Gymnosperm      | * Bryophytes         | * All of these  |
| iii.  | Exchange of CO <sub>2</sub> and O <sub>2</sub> occurred in:       |                   |                      |                 |
|       | * Trachea   | * Bronchi         | * Larynx             | * Alveoli.      |
| iv.   | The progressive and permanent destruction of alveoli occurred in: |                   |                      |                 |
|       | * Emphysema   | * Pneumonia       | * Bronchitis         | * TB            |
| v.    | The internal environment of fresh water animals is:               |                   |                      |                 |
|       | * Hypotonic   | * Hypertonic      | * Isotonic           | * None of these |
| vi.   | Excretory organ found in planaria is:                             |                   |                      |                 |
|       | * Kidney  | * Flame cells     | * Malpighian tubules | * All of these. |
| vii.  | Human excretory system consist of:                                |                   |                      |                 |
|       | * Pair of kidney  | * Pair of ureters | * Urinary bladder    | * All of these  |
| viii. | Kidney is protected by:   |                   |                      |                 |
|       | * Pericardium   | * Peritoneum      | * Perichondrium      | * Periosteum.   |
| ix.   | The hole through which light enter the eye is:                    |                   |                      |                 |
|       | * Iris  | * Ciliary bodies. | * Pupil              | * Cornea        |
| x.    | The shortest path of reflex action consist of:                    |                   |                      |                 |
|       | * 1Nueron   | * 2Neurons        | * 3Neurons           | * 4Neurons      |

**SECTION "B" (Short Question— Marks:30 )**

**(Attempt any THREE questions)**

Q.2 Differentiate between Respiration and Photosynthesis.

Q.3 Differentiate between Skeletal, Smooth and Cardiac muscles.

Q.4 What are Hydrophytes and write the adaptation of Hydrophytes.

Q.5 Define Pollination and explain Self and Cross Pollination.

Q.6 Define Variation and explain Continuous and Discontinuous variation with example.

Q.7 Write a note Incomplete dominance.

**Notice**

*This is the prescribed paper pattern. However, questions may be asked from the complete Matric-level syllabus. Therefore, all candidates are advised to prepare the entire syllabus thoroughly.*

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**ENTRANCE EXAMINATION FOR CLASS-XI**

Time: 45 Minutes

CHEMISTRY- XI

Max.Marks.50

**SECTION –A(M.C.Qs--- Marks-20)**

**Q.1 Choose the correct answer for each from the given options:**

- i. Natural gas mainly consist of:  
\* Methane    \* Ethane    \* Propane    \* Butane
- ii. The unit of KC for reaction  $N_2 + O_2 \rightleftharpoons 2NO$  :  
\*mol.dm<sup>-3</sup>    \*mol<sup>-2</sup>.dm<sup>6</sup>    \*mol<sup>-1</sup>dm<sup>3</sup>    \*No unit
- iii. If PH value is greater than 7, the solution is:  
\* Acidic    \* Basic    \* amphoteric    \* Neutral
- iv. The Reaction of acid and base to form salt and water is called:  
\* Hydration    \* Neutralization    \*Hydrolysis    \*Both Hydration and Hydrolysis
- v. Glucose is:  
\* Vitamin    \* Protein    \*Lipid    \* Carbohydrate
- vi. Cotton contain \_\_\_\_\_ cellulose  
\*30%    \*65%    \*85%    \*95%
- vii. Which one is not part of greenhouse gases  
\*N<sub>2</sub>    \*O<sub>2</sub>    \*CO<sub>2</sub>    \*He
- viii. Which of the following water borne disease is of viral origin.  
\*typhoid fever    \*polio    \*dysentery    \* diarrhea
- ix. How much fresh water is present on earth  
\*0.3%    \*3%    \*0.2%    \*2%
- x. How much percentage (%) of the earth surface is covered with water ?  
\*70%    \*60%    \*90%    \*75%

**SECTION-B(Short Answer Questions) Marks : 30**

**Answer any 03 parts from this section.**

- i. Outline the characteristics of reversible reaction.
- ii. Describe the properties of acid and base.
- iii. Calculate the PH of 0.5M solution of NaOH
- iv. Define vital force theory.
- v. Differentiate b/w fats & oils.
- vi. What is the causes of acid rain?
- vii. Describe composition of water
- viii. Define saponifications process.

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**Time: 45 minutes**

**ENGLISH-XI**

**Max.Marks.50**

**SECTION-A(MCQs)**

**Q1. Choose the correct option from the given options. (20)**

- i. Which of the following poem is written by Louis-I-Newman?  
\*Little things            \*Speak Gently            \*The voice of God            \* N.O.T.
- ii. Identity the correct synonym for the word "brave".  
\* Coward            \* Fearless            \* Lazy            \* Sad
- iii. Choose the correct form of verb: She\_\_\_\_\_a letter now.  
\* writes            \*writing            \*is writing            \*has written
- iv. What is the plural of 'Child'?  
\* childs            \*children            \* childrens            \* Childes
- v. Choose the correct spelling:  
\*Succesful            \* Successful            \* Sucsesful            \* Successful
- vi. Identify the adjective: "The tall boy is my friend"  
\*boy            \*tall            \*friend            \* The
- vii. Pick out the correct preposition: "She is fond\_\_\_\_\_music.  
\* of            \*at            \* over            \* on
- viii. Shrine of Lal Shahbaz Qalandar is located in:  
\* Dadu            \*Moro            \* Sehwan            \* Hyderabad
- ix. Developed countries \_\_\_\_\_the dignity of work.  
\* Explain            \*Progress            \* Understand            \* N.O.T
- x. Who worked in the garden of jew:  
\*Hazrat Ali            \*Hazrat Fatima            \*Holy Prophet PBUH            \* A.O.T

**SECTION-B(Short Question Answer) (30 Marks)**

**Q2: Change the following sentences into indirect speech ( 10)**

- i. He said, "I am busy now"
- ii. Ali asked, "Do you write a letter?"
- iii. The coach instructed "Run faster and don't giveup!"
- iv. He said, "Sun rises in the east"
- v. She said, "Are you coming to the party tonight?"

**Q3: Indicate the kind of part of speech of the underlined words: (05)**

- i. He himself drive a car now.
- ii. I found myself.
- iii. A team of players won the match.
- iv. Kindness is virtue.
- v. Who is knocking at the door?

**Q4: Change the voice of the followings. ( 05)**

- i. They will be building a new bridge across the river.
- ii. Open the door.
- iii. Does she play cricket?
- iv. Are we learning English Language?
- v. Don't pluck the flowers.

**Q5: Write an essay on any one of the followings : (10)**

- (i) A cricket match            (ii) Problems of Karachi            (iii) Benefits of Technology

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PHYSICS-XI

Max.Marks.50

**SECTION –A(MCQs----Marks-20)**

**Q.1 Choose the correct answer for each from the given options.**

- i. Oscillations are damped due to the presence of \_\_\_\_\_  
\* linear motion      \* restoring force      \* frictional force      \* mechanical force
- ii. Which type of wave cannot travel through a vacuum \_\_\_\_\_.  
\* sound waves      \* micro waves      \* infra –red radiation      \* X-rays
- iii. The color that is least deviated by a prism \_\_\_\_\_  
\* violet ray      \* green ray      \* red ray      \* yellow ray
- iv. When a light ray enters from a denser medium to a rare medium it bends \_\_\_\_\_  
\* perpendicular to normal      \* parallel to normal  
\* towards normal      \* away from normal
- v. The capacitance of capacitors increases when they connected in \_\_\_\_\_  
\* parallel      \* series      \* both series & parallel      \* none of them
- vi. Resistance of a conductor does not depend on \_\_\_\_\_  
\* length of the conductor      \* area of cross-section      \* density      \* resistivity
- vii. The direction of induced emf in a circuit is in accordance with conservation of \_\_\_\_\_  
\* mass      \* charge      \* momentum      \* energy
- viii. The process of emission of electrons from the hot metal surfaces is called \_\_\_\_\_  
\* plastic emission      \* thermionic emission      \* static emission      \* current emission
- ix. The number of neutron in protium is \_\_\_\_\_  
\* zero      \* one      \* two      \* three
- x. The type of radiation that travels in a straight line across an electric field is an \_\_\_\_\_  
\* proton      \* electron      \* alpha particle      \* gamma ray

**SECTION–B(Short Answer Question) Marks-30**

**Q.2 Define the following terms.**

- i. Wave length      ii. Circuit      iii. Magnifying power  
iv. Fluorescent      v. Electromagnetic induction

**Q.3 Write down the five differences between transverse & longitudinal waves**

OR

Mechanical wave and electromagnetic wave.

**Q.4 The potential difference between two points is 100v. If unknown charge is moved**

between these points, the amount of work done is 500g. Find the amount of charge.

**Q.5 100 g of heat is produced in each second in a  $4\Omega$  resistance. Find the potential difference across the resistor.**

**Q.6 A sound wave has a frequency of 6 KHz and wave length 25 cm. How long will it take to travel 1.5 km?**

**Q.7 A coil surrounding a long solenoid, the current in the solenoid is changing at a rate of**

$150 \text{ As}^{-1}$  and the mutual induction of the two coils is  $5.5 \times 10^{-5} \text{ H}$ . Determine the emf induced in the secondary coil.

<<< Best of Luck >>>

# پاکستان اسٹیل کیڈٹ کالج

ماڈل پیپر برائے داخلہ امتحان جماعت گیارہویں

کل نمبر: ۵۰

پرچہ: اردو

وقت: ۴۵ منٹ

## حصہ الف ..... کل نمبر ۲۰

### سوال نمبر ۱ معروضی سوالات

1- حضرت خدیجہ الکبریٰ آپ صلی اللہ علیہ والہ وسلم کی خدمت زوجیت میں رہی تھیں -  
الف 15 برس ب 20 برس ج 25 برس د 30 برس

2- "لتو ہونا" قواعد کی رو سے ہے۔  
الف ضرب المثل ب محاورہ ج فعل د مفعول

3- بچے کی پرورش ممکن نہیں اگر محبت نہ ہو۔  
الف بہن بھائی کو ب دوستوں کو ج ماں باپ کو د پڑوسیوں کو

4- پہلی جنگ عظیم ہوئی۔  
الف 1910 ب 1911 ج 1912 د 1913

5- نظریہ پاکستان کا مقصد ہے۔  
الف اسلامی اصولوں کی ترویج ج اسلامی و فلاحی مملکت بنانا  
ب سیاست کرنا د اسلامی اصولوں کا یاد کرنا

6- آنکھ سب کچھ دیکھتی ہے۔  
الف انسان کی ب پتھر کی ج حیوان کی د فرشتے کی

7- مرزا غالب کا تخلص تھا۔  
الف مرزا ب غالب ج اسد د ان میں سے کوئی نہیں

8- شعر میں ہم آواز الفاظ کہلاتے ہیں۔  
الف قافیہ ب تخلص ج ردیف د مطلع

9- نظم "گرمی کی شدت" کے شاعر ہیں۔  
الف الطاف حسین حالی ج میر انیس  
ب علامہ محمد اقبال د اسمعیل میرٹھی

10- لفظ جھرمٹ کا مترادف ہے۔  
الف گروہ ب جنگل ج شہر د پرندہ

## حصہ ب ..... کل نمبر ۳۰

۱۵

### سوال نمبر ۲ ذیل میں سے کوئی بھی تین سوال حل کریں۔ (مختصر سوالات)

- i- نظریہ پاکستان کا مفہوم بیان کریں۔
- ii- سبق نام دیو مالی کے مصنف کا تعارف لکھیں۔
- iii- نظم گرمی کی شدت کا مرکزی خیال تحریر کریں۔
- iv- درج ذیل شعر کا مفہوم بیان کریں۔  
فقیرانہ آئے صدا کر چلے  
میاں خوش رہو ہم دعا کر چلے
- v- مسلمانوں میں اتحاد کیوں ضروری ہے۔

سوال نمبر ۳ دینے گئے مضامین میں سے کسی ایک عنوان پر دو صفحات پر مشتمل مضمون تحریر کریں۔  
۱۵ علامہ محمد اقبال ورزش کے فوائد