PR IX (A-II-B1) 25

ENGLISH (New)

9th (Fresh/Reappear)

Note: Time allowed for Section – B and Section – C is 2 Hours and 40 minutes.

Section – B

Marks: 36

Answer any SIX questions from Question No.1 to Question No.8 of section B. The rest of questions in the paper are compulsory.

Q.1 What did Hazrat Muhammad ﷺ instruct Hazrat Umar (RA) to do when Rabbi Zaid demanded repayment? (2+1)

Q.2 What message does Allama Iqbal give to the youth in his address? (2+1)

Q.3 What leadership qualities did Quaid-e-Azam demonstrate during the freedom movement? (2+1)

Q.4 Why did Hazrat Muhammad ﷺ abolish the tribal distinction in Medina? (2+1)

Q.5 Why is Nasiruddin considered wise despite being humorous? (2+1)

Q.6 What lesson do we learn from the life of Zarin Gul in The Fantastic Shoemaker? (2+1)

Q.7 Change into plural: (a) knife, (b) child, (c) ox (1+1+1)

Q.8 Do as directed: (1+1+1)

(i) She goes to school. (Change into interrogative) (ii) Ali is reading a book. (Change into past continuous)

(iii) They played football yesterday. (Change into present perfect)

Q.9 **Paraphrase ONE of the following stanzas.** (2+2+1)

a. "Hope" is the thing with feathers —
That perches in the soul —
And sings the tune without the words —
And never stops — at all —

b. The angel wrote, and vanished. The next night
It came again with a great wakening light,
And showed the names whom love of God had blest,
And lo! Ben Adhem's name led all the rest.

Q.10 **Read the stanza carefully and answer the questions given at the end.** (8)

I wandered lonely as a cloud
That floats on high o'er vales and hills,
When all at once I saw a crowd,
A host, of golden daffodils;
Beside the lake, beneath the trees,
Fluttering and dancing in the breeze.

Questions

i. To what does the poet compare himself? (2)

ii. Where did the poet see the daffodils? (2)

iii. Which words in the stanza show the movement of daffodils? (2)

iv. What was the poet doing when he saw the daffodils? (2)

Q.11 **Read the passage carefully and answer the questions given at the end.** (5)

The media has the power of educating people, the good and the bad. Since it affects the eyes, the ears and the minds simultaneously, nothing can overcome the influence of the media. The media should perform a noble mission of enlightening people and discourage sectarian, communal and divisive trends.

Questions:

i. What power does the media has? (1)

ii. Why is the influence of media so strong? (1)

iii. What is the meaning of the underlined word? (1)

iv. What harmful things should the media discourage? (1)

v. What is the main idea of the passage? (1)

Section – C

Marks: 24

Q.12 **Translate the following into Urdu.** (3+3)

a. My name is Ali, and I study in class nine. Every morning, I get ready for school, take my bag, and walk with my friends. After school, we play in the park and do our homework together. (1+1+1)

b. i. The bell rings at eight. (1)

ii. My mother is very kind. (1)

iii. I drink pure water daily. (1)

Q.13 Write an application to your school principal / head master / head mistress requesting permission for two days' leave in order to look after a sick family member. (2+2+2)

OR

Write a letter to your younger brother advising him to take part in sports and other healthy activities. (2+2+2)

Q.14 Develop a story with the help of the following outlines. (6)

A hungry fox .....searched for food.....found a bunch of grapes.....hanging high.....tried again and again .....could not reach.....finally walked away.....said grapes are sour.

Moral:.....

Q.15 Translate the following sentences into English. (6)

(۱) میرا دوست لندن سے واپس آ چکا ہے۔ (۲) وہ کل لاہور نہیں گیا۔

(۳) آنکھ اوجھل پہاڑ اوجھل۔ (۴) آج موسم بہت خراب ہے۔

(۵) کیا آپ باقاعدگی سے ورزش کرتے ہیں؟ (۶) میں اپنا کمرہ صاف کروں گی۔

PR IX (A-II-A1) 25

PHYSICS (New Course)

9th (Fresh/Reappear)

Note: Time allowed for Section – B and Section – C is 2 Hours and 45 minutes.

Section – B

Marks: 32

Answer any EIGHT parts. Each part carries FOUR marks.

Q.1 Differentiate between base and derived physical quantities by giving two examples. 1+1+1+1=4

Q.2 Identify scalar and vector quantities in the following list: 1+1+1+1=4
mass, speed, force, charge, momentum, velocity, power, acceleration.

Q.3 State Newton's 3rd law of motion. Why action-reaction cannot neutralize each other? 2+2=4

Q.4 Define centripetal force, centripetal acceleration, friction and linear momentum. 1+1+1+1=4

Q.5 What is equilibrium? Differentiate between static and dynamic equilibrium with an example? 2+2=4

Q.6 Define torque and write its unit. How applied force and moment arm affect torque? 1+1+1+1=4

Q.7 State Newton's law of universal gravitation. Write its mathematical form. 2+2=4

Q.8 Define potential energy. Prove that $E_{G.P.E} = mgh$ 2+2=4

Q.9 Why the gravitational force exerted by earth on moon does not work? Explain with reference to the relevant formula. 2+2=4

Q.10 Differentiate between solids and liquids on the basis of kinetic molecular model of matter. 2+2=4

Q.11 What is conduction of heat? Briefly explain the mechanism of heat conduction through solids. 2+2=4

Section – C

Marks: 21

Note: Attempt any THREE questions. All questions carry equal marks.

Q-12 (a) Derive the given equation using velocity-time graph. $S = vit + \frac{1}{2}at^2$ 4

(b) A rock which dropped from the top of a tower strikes the ground in 4 s. Find the velocity of the rock just before it strikes the ground. (take g=10 ms^{-2}). 3

Q-13 (a) Using law of gravitation, calculate the mass of earth. 2+2=4

(b) The mass of venus is 4.87×10^{24}kg and its radius is 6.050×10^{6}m. Find the acceleration due to gravity on its surface. 2+1=3

Q-14 (a) State Hook's law. Express it mathematically. What does the negative sign in Hook's law show? 2+1+1=4

(b) A write of length 3m and cross-sectional area of $0.02m^2$ is stretched 0.2m by a force of 500 N. 1+1+1=3
Calculate: (i) Stress (ii) Strain, (iii) Young's modulus of wire.

Q-15 (a) What is the difference between Linear and Volume thermal expansion? 3

(b) Derive the formula for coefficient of volume thermal expansion. 4

PR IX (A-II-B4) 25

CHEMISTRY

9th (Fresh/Reappear)

Note: Time allowed for Section – B and Section – C is 2 Hours and 45 minutes.

Marks: 32

Section – B

Answer any EIGHT parts. Each part carries FOUR marks.

Q.1 Define symbol. Write symbols of the following: 1+1+1+1=4

a. Antimony b. Gold c. Mercury

Q.2 Write electronic configuration of $_5B$, $_{15}P$ 2+2=4

Q.3 Which atom of the following sets has smallest atomic radii and why? 2+2=4

a. F, Cl, Br b. B, C, N

Q.4 Predict the Group I-A elements in the following pairs: 1+1+1+1=4

a. Li, Mg b. Na, Ca c. K, Cl d. Rb, Se

Q.5 Differentiate between single and double covalent bonds with examples. 2+2=4

Q.6 Draw the Lewis structure for H_2 and PH_3. 2+2=4

Q.7 Define vapour pressure. Why is the vapour pressure of ethyl alcohol higher than that of water? 2+2=4

Q.8 Calculate the molarity of 12.6 cm^3 of solution containing 0.850 g of $MgCl_2$. 1+1+1+1=4

Q.9 What is meant by the term "like dissolve like"? Explain it by giving two examples. 2+2=4

Q.10 Differentiate between strong and weak electrolytes with one example each. 2+2=4

Q.11 Write four uses of Platinum. 1+1+1+1=4

Section – C

Marks: 21

Note: Attempt any THREE questions. All questions carry equal marks.

Q.12 (a) Compare Carbon-13 and Carbon-14 with the help of a diagram. 2+2=4

(b) How many moles of Sulphur are there in 9.8×10^{23} Sulphur atoms? 1+1+1=3

Q.13 (a) Define Ionic and covalent bonds with one example each. 2+2=4

(b) Explain shielding effect on the electro negativity in groups. 3

Q.14 (a) Predict phases of Sol and Gel by giving two examples. 1+1+1+1=4

(b) Explain the graphical representation of Charles's law. 1.5+1.5=3

Q.15 (a) Determine the oxidation number of "P" in PBr_3. 1+1+2=4

(b) Predict the position of Calcium in the periodic table. 3

PR X (A-I-B4) 25

ENGLISH (New)

10th (Fresh/Reappear)

Note: **Time allowed for Section – B and Section – C is 2 Hours and 40 minutes.**

Section – B

Marks: 36

Read the following passage carefully and answer any 6 from question No.1 to Question No.7. **(18)**
The rest of questions in the paper are compulsory.

After the fall of the Muslim in Spain, the Masjid was converted into a cathedral in 1246 A.D. and a giant nave was built in the center of the Masjid. Upon completion of the cathedral, King Charles the Fifth visited the area for the first time and remarked, "We have built what other might have built elsewhere; but we have destroyed something that was unique to the world"

Iqbal was so moved by the magnificence of the Masjid that he saw the traces of the Ishq of those who built it. Ishq, according Iqbal, is the burning desire to do one's utmost to achieve one's ideal of perfection and self-realization through the moral teachings of Islam. It was this uplifted passion that made Muslims of that era extend their dominance to far off lands.

Q.1 Which unique thing was destroyed to built a cathedral? **(03)**

Q.2 What did the king say about the Masjid? **(03)**

Q.3 What was the effect of the fall of Muslim on Masjid? **(03)**

Q.4 According to the passage, what was the cause of Muslims' dominance in the past? **(03)**

Q.5 What did Iqbal see in the magnificence of the Masjid? **(03)**

Q.6 Change the given nouns into verbs: completion, realization, teachers **(03)**

Q.7 Give a suitable title to the passage. **(03)**

Q.8 **Paraphrase the following lines.** **(05)**

Figure it out for yourself, my lad,
You've all that the greatest of men have had,
Two arms, two hands, two legs, two eyes,
And a brain to use if you would be wise.

Q.9 **Read the following stanza carefully and answer the questions given at the end.** **(08)**

Though guns may roar and cannon boom,
Roses are born and gardens bloom;
My spirit still may light its flame
At that same torch whence, Poppies came.

i. What image is created by roaring guns and booming cannon?
ii. Write rhyming words used in the stanza.
iii. Which figure of speech is used in the last line?
iv. What are the different natural objects discussed in the stanza?

Q.10 **Change the narration.** **(02)**

i. He said, " I love wild animals".
ii. My father advised me to work hard.

Q.11 **Do as directed:** **(03)**

i. It has been raining since morning. (Change into interrogative)
ii. He goes to the mall. (Change into negative)
iii. They do not come to the ground. (Change into simple future tense)

Section – C

Marks: 24

Q.12 **Translate the following into Urdu.** **(4+4)**

a. My city is very beautiful. It has gigantic buildings. These buildings look very attractive at night. The government is planning to make them environment friendly.

b. i. Will your father visit us?
ii. Were you using his mobile phone?
iii. I cannot help you in this matter.
iv. We take rest after work.

Q.13 **Write an essay of 250 words on any one of the following topics.** **(10)**

i. My Ideal Teacher. ii. Sports

Q.14 Write a dialogue of at least 12 lines between two friends about the internet. **(06)**

OR

Translate the following sentences into English.

(۱) کیا وقت ہوا ہے؟ (۲) ہم ورزش کے بعد نہاتے ہیں۔
(۳) اس نے کل چوہا مارا۔ (۴) وہ سکول نہیں گئے۔
(۵) کیا تم اپنا وقت ضائع کرتے ہو؟ (۶) صبح سے بارش ہو رہی ہے۔

PR X (A-I-B4) 25

PHYSICS (New Course)

10th (Fresh/Reappear)

Note: Time allowed for Section – B and Section – C is 2 Hours and 45 minutes.

Section – B

Marks: 32

Answer any EIGHT parts. Each part carries FOUR marks.

Q.1 What is the difference between echo and reverberation?

Q.2 Find the speed of sound in air at 15°C.

Q.3 What are the symptoms and causes of long-sightedness and how can it be corrected by using lenses?

Q.4 Explain the law proposed by Coulomb about electric force between stationary point charges.

Q.5 Explain electrical power and derive three equations for it using Ohm's law.

Q.6 A current of 6 A is used to boil a kettle in 15 minutes using 4.32×10^5 J of energy. Find the potential difference across the kettle.

Q.7 What is induced EMF and identify three factors that influence its magnitude?

Q.8 Define logic gates and describe the operation of NOR gate by drawing its symbol and truth table.

Q.9 Define information storage devices and describe the use of CD and DVD.

Q.10 Write the nuclear reaction for the alpha decay of $^{263}_{106}X$ and $^{218}_{84}X$. (X represents parent and Y represents daughter nuclei).

Q.11 What are radioisotopes? Describe any two medical uses of radioisotopes.

Section – C

Marks: 21

Note: Attempt any THREE questions. All questions carry equal marks.

Q-12 (a) What is Simple Pendulum? Show that time period of Simple Pendulum is independent of its mass and amplitude.

(b) Find the time period of a pendulum with a length of 0.6 m, that swings on Mercury where gravitational field strength is 3.73 m/s^2.

Q-13 (a) How does total internal reflection occur, what is the method to calculate the critical angle, and what conditions are necessary for it to occur?

(b) An optical fiber made of flint glass (refractive index 1.66) is surrounded by crown glass (refractive index 1.52), find the critical angle.

Q-14 (a) What is meant by capacitance? Derive the formula for the effective capacitance when capacitors are connected in parallel.

(b) Two capacitors of 6 μF and 8 μF are connected in parallel through a voltage source of 100 V. Calculate the total capacitance and charge on each capacitor.

Q-15 (a) How does AC generator work? Explain its construction and working principle.

(b) If the current through the primary coil changes from –63 A to +7 A in 0.02 s, such that the induced emf is 1.4 V. Find the mutual inductance.

PR X (A-I-B3) 25

CHEMISTRY

10th (Fresh/Reappear)

Note: Time allowed for Section – B and Section – C is 2 Hours and 45 minutes.

Section – B

Marks: 32

Answer any EIGHT parts. Each part carries FOUR marks.

Q.1 Find the value of K_c for the given reaction if the concentration of H_2 is 0.50 M, I_2 is 1.50 M and HI is 0.75 M. $H_{2(g)} + I_{2(g)} \rightleftharpoons 2HI_{(g)}$

Q.2 Discuss Bronsted-Lowary concept of acid and bases with reference to formation of NH_4^+ ion and H_3O^+ ion.

Q.3 Define mutation, its effect and causes. How they can be repaired?

Q.4 What is the role of arrangement of atoms and strength of covalent bond in diversity of organic compounds with examples?

Q.5 Write the reaction involves in the formation of Hexyl and Heptyl formed. Also write the name of alkanes from which they are formed.

Q.6 Differentiate between the C_4H_{10} (Butane) and C_4H_8 (Butene) molecule with the help of electron dot structure.

Q.7 Explain uses of lipids with reference to Integral part of cellular structure, solvent, manufacturing and hormones.

Q.8 What are the primary function of Vitamin A, Vitamin B, Vitamin K and Vitamin E?

Q.9 What is the effect of oxides of carbon, nitrogen and sulphur on fishes and wild life?

Q.10 What are the effects of hard water when used in boilers and for drinking?

Q.11 What is slag? What chemical changes occur in cuprous sulphide in blast furnace?

Section – C

Marks: 21

Note: Attempt any THREE questions. All questions carry equal marks.

Q.12 (a) What are forward reaction explain with the help of example. (3)

(b) Give structural and condensed formulae of Butane and Butene. (4)

Q.13 (a) Write dissociation reactions of the following compounds. (3)

(i) HCl (ii) H_2SO_4 (iii) HNO_3

(b) Classify the following organic compounds into Ali-cyclic or aromatic organic compounds. (4)

(i) Cyclopentane (ii) Benzene

(iii) Napthalene (iv) Cyclobutane

Q.14 (a) Write dehydrohalogination reaction of adjacent dihalides. (3)

(b) Differentiate between ozone layer depletion and ozone hole. (4)

Q.15 (a) What are poly saccharides? Give example of poly saccharides present in plants and animal (one of each). (3)

(b) Mention the name of diseases that are caused by using polluted water containing arsenic and fluoride minerals? (4)