

KARNAL SHER KHAN CADET COLLEGE SWABI
ENTRY TEST FOR CLASS – XI (2021)

Marks: 50

PAPER: CHEMISTRY

Time: 01 hr

Note: Attempt all questions in the “Answer Book” provided separately.**Q–1: Fill in the blanks by using correct answer. (8)**

- i) Sulphur is present in ___ group in the periodic table.
- ii) 0.5 mole of water contain _____ molecules.
- iii) Complete and balance the reaction $\text{Pb}(\text{OH})_2 + \text{HCl}$ _____
- iv) The chemical formula of potash Alum is _____.
- v) The functional group of Aldehyde is _____.
- vi) Vitamin – D is also known as _____.
- vii) The rain having PH less than _____ is called Acid rain.
- viii) The blister copper is refined by process _____.

Q-2: State the law of mass action. Write Kc expression for the following reactions. (7)**Q-3: Define mole. Calculate the number of moles in 60gm of water. (7)****Q-4: What is ionization energy? Place the following elements in order of increasing ionization energy.**

Na, S, Mg, Ar (7)

Q-5: Define functional group. Write the functional group and general formula for the followings:

a. Alcohol b. Ketone c. Carboxylic acid d. Aldehyde (7)

Q-6: Define the following: (7)a. Alkali elements b. Representative elements c. Transition elements
d. Lanthanide series e. Actinide series**Q-7: When the value of Kc is small how you can predict the direction of reaction. (7)**

KARNAL SHER KHAN CADET COLLEGE SWABI**ENTRY TEST FOR CLASS – XI (2021)****PAPER: PHYSICS**

Marks: 50

Time: 01 hr

Note: Attempt all questions.**Q-1: Fill in the blanks by using correct answer.****(8)**

- i) One micro is equal to _____.
- ii) The unit of magnetic induction is _____.
- iii) Boolean expression for NAND Gate is _____.
- iv) Work done will be maximum when the angle between force and displacement is _____.
- v) One atmospheric pressure is equal to _____.
- vi) If the speed of a car decreases by half then the kinetic energy change by a factor _____.
- vii) The period of a second pendulum is _____.
- viii) The intensity level of faintest audible sound is given by _____.

Q-2: When a tree is shaken, its fruits and leaves fall down why? (7)

Q-3: Why the moon is not falling on earth? (7)

Q-4: Show that $T=2\pi\sqrt{\frac{l}{g}}$? (7)

Q-5: The refractive index of diamond is 2.42. Find critical angle for diamond and glass? (7)

Q-6: How far apart must the charges of $+5\mu\text{c}$ and $-4\mu\text{c}$ to be in order that the charges attract each other with a force of 2.2N? (7)

Q-7: Write at least five properties of Alpha and Beta rays. (7)

KARNAL SHER KHAN CADET COLLEGE SWABI
ENTRY TEST FOR CLASS – XI (2021)

PAPER : MATHS

Marks: 50

Time: 01 hr

Note: Attempt all questions. Each question carries five marks.

Q-1: Fill in the blanks with suitable answer.

(8)

- i) Base of natural log is _____.
- ii) $\sqrt{2x + 1} - 5 = 4$ is a _____ equation.
- iii) If $A \subseteq B$ then $A - B =$ _____.
- iv) Two sets A and B are _____ if $A \cap B = \emptyset$
- v) Two or more line segments are congruent if and only if they have _____.
- vi) Side opposite to right angle in a triangle is _____.
- vii) The internal angle at each vertex of a regular hexagon is _____.
- viii) The standard unit for the measurement of an angle is _____.

Q-2: Solve the following for real x and y; (7)

$$(3 - 2i)(x + yi) = 2(x - 2yi) + 2i - 1$$

Q-3: What should be added to $4x^3 - 10x^2 + 12x + 6$ so that it becomes exactly divisible by $2x + 1$ (7)

Q-4: If two angles of a triangle are congruent, then the sides opposite to the are also congruent. (7)

Q-5: Solve the equation $x^2 + \frac{7}{8}x + \frac{3}{32} = 0$ by completing square method. (7)

Q-6: Solve and check for extraneous roots, if any $\sqrt[3]{2x + 3} = \sqrt[3]{x - 2}$ (7)

Q-7: If $\sin \theta = \frac{1}{2}$ and θ lie in the second quadrant. Find remaining trigonometric ratios. (7)

KARNAL SHER KHAN CADET COLLEGE SWABI
ENTRY TEST FOR CLASS – XI (2021)

PAPER: BIOLOGY

Marks: 50

Time: 01 hr

Note: Attempt all questions.

Q-1: Fill in the blanks.

(8)

- i) The optimum temperature for enzyme activity in humans is _____.
- ii) Light reaction of photosynthesis occurs in _____ of chloroplast.
- iii) Synthesis of new DNA molecules takes place in _____ phase of interphase.
- iv) Re-absorption of solutes and water begins in the _____.
- v) Short sighted person cannot see _____ objects clearly.
- vi) Vascular layer of an eye is called _____.
- vii) The process of liberation of ovum (egg) from the follicle of ovary is known as _____.
- viii) The process of transcription takes place in _____.

Q-2: How does deforestation leads to desertification? (7)

Q-3: Briefly explain metabolism and its types? (7)

Q-4: What is reflex action? Explain with example? (7)

Q-5: Differentiate between cloning and apomixes? (7)

Q-6: Describe Mendel's law of segregation? (7)

Q-7: What is fermenter? Explain with example. (7)

KARNAL SHER KHAN CADET COLLEGE SWABI**ENTRY TEST FOR CLASS – XI (2021)****Max Marks: 50****PAPER: ENGLISH****Time: 01 Hrs****Note: Attempt all questions in the “Answer Book” provided separately.****Q–1: Change the following statements in Passive Voice. (5)**

- (i) He is cutting the trees. (ii) The Principal has addressed the Assembly.
 (iii) Let them solve their problems. (iv) Had she not taking tea?
 v) The footballer kicked the ball into the goal.

Q–2: Change the Narration. (5)

- i) He said to me, “Akbar will arrive tomorrow”.
 ii) Mother said to her son, “Work hard so that you get good marks”.
 iii) Ali said to Aslam, “which book did you buy in the market”.
 iv) I said to him, “Please, help me, I am in trouble”.
 v) Aisha said to us, “Alas! My brother could not get good position in the exam”.

Q–3: Translate the following paragraph into English. (10)

علی ہر روز گھر کے باہر بیٹھا کرتا تھا۔ اور راستے پر آتے جاتے لوگوں کو تنگ کرتا تھا۔ اچانک ایک دن اُس کی ایک لڑکے کے ساتھ منہ ماری ہو گئی اور بات اس حد تک پہنچ گئی کہ بڑے درمیان میں کھود پڑے۔ دونوں اطراف نے خوب ایک دوسرے پر ہاتھ صاف کیئے۔ آخر کار معاملہ گاؤں کے بڑوں کے پاس گیا۔ تفتیش کے بعد معلوم ہوا کہ یہ سب کچھ علی کی ایک خراب عادت سے شروع ہوا تھا۔ اگر وہ گھر کے باہر راستے میں لوگوں کو تنگ نہ کرتا تو ایسا کبھی نہ ہوتا۔ لہذا گاؤں کے بڑوں نے علی کو خوب ڈانٹ پلائی۔ اور دونوں گروپوں میں صلح کرادی۔

Q–4: Read the following paragraphs and answer the questions in your English, given in the End. (10)

“Money, like knowledge, is power, giving its possessor the command of the services of others. It is desired to same extent by all, and necessary, under the present system of exchange, to the maintenance of life. If a man has money, he can provide himself with the necessaries, and it may be, with the luxuries of life; if he has no money, he can obtain neither. Money may also be regarded as a talent like other talents, possessed by some in greater degree than by others, and also, like other talents, carrying with it its peculiar responsibilities, as being capable of great good, and liable also to a great abuse. Even the poor, who have little money to spend, often put that little to a wrong use, while the rich have almost boundless opportunities of doing good, which are but too frequently neglected. Both rich and poor should formulate for themselves and follow certain rules to guide them in the expenditure of money”.

QUESTIONS: (i) Why does the writer call money a power?

- (ii) What welfare can you do for the society, if you are a rich man?
 (iii) In what bad and good ways the poor and rich can use the money?
 (iv) What rules should we formulate for the use of money in a society?
 (v) Why does the writer call money a talent?

Q–5: Write your own Autobiography within 200 to 300 words. (10)**Q–6: Write a story having the moral, “As you sow, so shall you reap”. (10)**

