کامیابی کا تعویذ

CHEMISTRY

★ ★ ★ ★ ★ ★ FOR CLASS F.SC PART -I ★ ★ ★ ★ ★ ★

کم وقت میں بہترین تیاری

New Conceptual & Analytical Based | ANNUAL 2024

- پیپر سیٹر کے ذہن کو مد نظر رکھ کر تیار کیے گئے سوالات
- معروضی سوالات حل شدہ۔ مختصر وانشائیہ سوالات غیر حل شدہ

اب فیل ہونا بھول جائیں

صرف 30 دن تیاری کر کے پڑھائی میں کمزور طلبہ وطالبات بھی A^+ گریڈ میں کامیابی حاصل کر سکتے ہیں

☆ یاد رکھیں اب وقت انتہائی کم رہ گیا ہے ☆ پیپر سیٹر کے ذہن کو مد نظر رکھ کر تیار کئے گئے سوالات

القدیر جناح سائنس اکیڈمی 03024741124

(OBJECTIVE PART)

1. The number of atoms present in 0.1 mole of oxygen gas is:
(a) 6.02×10^{22} (b) 3.101×10^{23} **(c)** $2\times6.02\times10^{22}$ (d) 9.03×10^{22}

2. The number of Isotopes of cadmium is:
(a) 3 (b) 4 (c) 5 **(d)** 9

3. Nickel has isotopes:
(a) 3 **(b)** 5 (c) 7 (d) 2

4. The total number of fundamental particles in an atom of Carbon - 14 is:
(a) 6 **(b)** 8 (c) 14 (d) 20

5. Hemoglobin is a Macro Molecule and consists of approximately atoms:
(a) 5,000 **(b)** 10,000 (c) 68,000 (d) 15,000

6. The number of atoms in 1.79 g of gold and _____g of sodium are equal:
(a) 0.23 (b) 23 (c) 230 (d) 2300

7. The largest number of molecules are present:
(a) 3.6 g of H_2O
(b) 4.8 g of C_2H_5OH
(c) 2.8 g of CO
(d) 5.4 g of N_2O_5

8. In Al2O3, the ratio between the ions is:
(a) 1:2 (b) 2:1 **(c)** 2:3 (d) 3:2

9. Which is not a molecular Ion?
(a) He^+ (b) CH_4^+ (c) NH_4^+ (d) CO^+

10. Tin has isotopes:
(a) 9 (b) 10 **(c)** 11 (d) 12

(a) One **(b)** Eleven (c) Fifteen (d) Eighteen

11. A pair of elements having single isotope are:
(a) $_9F^{19}$, $_{79}Au^{197}$
(b) $_{53}I^{127}$, $_{35}Br^{81}$
(c) $_8O^{16}$, $_7N^{14}$
(d) $_{33}As^{75}$, $_7N^{14}$

12. Average Atomic Mass of Neon is:
(a) 20.00 **(b)** 20.18 (c) 20.20 (d) 20.0

13. Number of isotopes of oxygen is:
(a) Two **(b)** Three (c) Four (d) Five

14. Isotopes differ in:
(a) Properties which depend upon mass
(b) Arrangement of electrons in orbitals
(c) Chemical properties
(d) The extent to which they may be affected in electromagnetic field

15. One mole of SO_2 contains:
(a) 6.02×10^{23} atoms of oxygen
(b) 18.1×10^{23} molecules of SO_2
(c) 6.02×10^{23} atoms of sulphur
(d) 4g of atoms of SO_2

16. During combustion analysis, CO_2 Produced is absorbed in:
(a) $Mg(ClO_4)_2$ **(b)** 50% KOH (c) $CaCl_2$ (d) P_2O_5

17. Ascorbic acid is vitamin:
(a) A (b) B **(c)** C (d) D

18. 1 model of CH_3OH and C_2H_5OH have:
(a) Equal number of molecules
(b) Equal number of atoms
(c) Equal number of ions
(d) Equal number of protons

19. I gram formula of NaCl is equal to:
(a) 58.5 g (b) 23.5 (c) 35.5 g (d) 12 g

152. If a strip of Cu metal is placed in a solution of FeSO4:
(a) Cu will be precipitated down (b) Fe is precipitated out
(c) Cu and Fe both dissolve (d) No reaction takes place.

153. The unit of rate constant is the same as that of the rate of reaction is:
(a) First order reaction (b) Second order reaction
(c) Zero-order reaction (d) Third order reaction

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(a) First order reaction (b) Second order reaction
(c) Zero-order reaction (d) Third order reaction

155. In zero order reaction, the rate is independent of:
(a)Temperature of reaction (b) Concentration of reactants
(c) Concentration of products (d) None of these

156. If the rate equation of a reaction 2A+B→ products is, rate = K[A]2 [B], and A is present in large excess, then order of reaction is:
(a) 1 (b) 2 (c) 3 (d) none of these

157. The rate of reaction _____as the reaction proceeds.
(a) Increases (b) Decreases
(c) Remains the same (d) May decrease

158. With increase in 10○C temperature, the rate of reaction doubles. This increase in rate of reaction is due to:
(a) Decrease in activation energy of reaction
(b) Decrease in the number of collisions between reactant molecules.
(c) Increase in activation energy of reactants
(d) increase in number of effective collisions.

159. Unit of rate constant is the same as that of the rate of reaction in:
(a) Zero order reaction (b) 1^{st} order Reaction
(c) 2^{nd} order Reaction (d) 3^{rd} order reaction.

160. Glucose can be converted into ethanol by an enzyme:
(a) Lipase (b) Zymase (c) Sucrose (d) Urease

(SUBJECTIVE PART)

68/68 Marks Challenge

SECTION-I

SHORT QUESTIONS (SQs)

1. Define molecular ion, write its uses.
2. Why we use the term relative atomic mass?
3. Calculate the percentage of Nitrogen in urea.
4. What are isotopes? Why they have same chemical but different physical properties?
5. Define isotopes why they have same chemical properties?
6. Explain mathematical relationship of m/e of an ion in mass spectrometry.
7. How does no individual neon atom in the sample of the element has mass 20.18 amu?
8. Write functions of Mg $(ClO_4)_2$ and KOH in combustion analysis.

- ✓ Define dipole moment. Give its units. How is it used to determine the geometry of molecule? Give an example.
- ✓ Define ionization energy. Write factors affecting. Define factors affecting it and trends in the periodic table.
- ✓ What is standard hydrogen electrode (SHE)? How it is used to measure the electrode potential of Zinc.
- ✓ Describe the electrolysis of molten sodium chloride and a concentrated aqueous solution of sodium chloride.

LONG QUESTION NO. 9

- ✓ Define Solubility curves. Explain continuous and discontinuous solubility curves. 2021,2022
- ✓ Give graphical explanation of boiling point elevation of solution.
- ✓ What are Colligative properties of solutions? Explain elevation of boiling point.
- ✓ State and explain Raoult's law in three forms.
- ✓ State different forms of Raoult's law. How can this law help us to understand the ideality of a solution?
- ✓ What are ideal solutions? Explain the fractional distillation of ideal mixture of two liquids.
- ✓ Differentiate between ideal and non-ideal solutions.
- ✓ Explain the energy of activation.
- ✓ How does Arrhenius equation help us to calculate the energy of activation of a reaction?
- ✓ Define half life period. Describe half life method for the determination of order of reaction.
- ✓ Define order of reaction and explain 2nd order and zero order reactions.
- ✓ Define Order of reaction. Describe it with three examples.
- ✓ Write a brief note on the following:
- ✓ Homogeneous catalysis
- ✓ Heterogeneous catalysis
- ✓ What are enzymes? Write any four characteristics of enzyme catalysis.