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Chemistry Mock Test 10

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Q-1. Lanthanide and actinides resemble in

- (a) Electronic configuration
- (b) Oxidation state
- (c) Ionization energy
- (d) Formation of complexes.

Q-2. Mg and Li are similar in their properties due to

- (a) Same e/m ration
- (b) Same electron affinity
- (c) Same group
- (d) Same ionic potential

Q-3. How will you separate mixture of two gases?

- (a) Fraction distillation technique
- (b) Grahams law of diffusion technique
- (c) Osmosis
- (d) Chromatography

Q-4. Which of these have no unit?

- (a) Electro negativity
- (b) Electron affinity
- (c) Ionization energy
- (d) Excitation potential

Q-5. "The addition of unsymmetrical reagents to unsymmetrical alkenes occurs in such a way that the carbon atom of the double bond which carries lesser number of hydrogen atoms" a called by

- (a) Saytzeff rule
- (b) Markownikoff's rule
- (c) Kharasch effect
- (d) Anti-Saytzeff rule.

Q-6. The molecule of CO_2 has angle 180° . it can be explained on the basis of

- (a) sp^3 hybridisation
- (b) sp^2 hybridisation
- (c) sp hybridisation
- (d) $d^2 \text{sp}^3$ hybridisation

Q-7. Which of the following gas mixture is used by the divers inside the sea?

- (a) $\text{O}_2 + \text{He}$
- (b) $\text{O}_2 + \text{Xe}$
- (c) $\text{O}_2 + \text{Ar}$
- (d) $\text{O}_2 + \text{N}_2$

Q-8 Photoelectric effect is maximum in

- (a) Cs
- (b) Na
- (c) L
- (d) Li

Q-9. Which of the following cuts ultraviolet rays?

- (a) Soda glass
- (b) Crooke's glass
- (c) Pyrex
- (d) None of these

Q-10. Naphthalene is a/an

- (a) Ionic solid
- (b) Covalent solid
- (c) Metallic solid

(d) Molecular solid

Q-11. Acetone is mixed with bleaching powder to give

- (a) Chloroform
- (b) Acetaldehyde
- (c) Ethanol
- (d) Phosgene

Q-12.4. 4g of CO_2 contains how many liters of CO_2 at STP?

- (a) 2.4 liter
- (b) 2.24 liter
- (c) 44 liter
- (d) 22.4 liter

Q-13. Aniline reacts with which of these to form Schiff base?

- (a) Acetic acid
- (b) Benzaldehyde
- (c) Acetone
- (d) NH_3

Q-14 which of these do not contain – COOH group?

- (a) Aspirin
- (b) Benzoic acid
- (c) Picric acid
- (d) Salicylic acid

Q-15. EDTA has coordination number

- (a) 3
- (b) 4
- (c) 5
- (d) 6

Q-16. Write the IUPAC name of $\text{CH}_3\text{CH}_2\text{COOH}$.

- (a) Ethyl formic acid

- (b) Ethyl carboxylic acid
- (c) Ethane methanoic acid
- (d) Propanoic acid

Q-17. Octane number can be changed by

- (a) Isomerisation
- (b) Alkylation
- (c) Cyclisation
- (d) All of these

Q-18. Gasoline has composition

- (a) $C_0 - C_{12}$
- (b) $C_2 - C_5$
- (c) $C_0 - C_{11}$
- (d) None of these

Q-19. Oxygen molecule is

- (a) Diamagnetic
- (b) Paramagnetic
- (c) Ferromagnetic
- (d) Ferromagnetic

Q-20. $\Delta G = \Delta H - T \Delta S$ was given by

- (a) Faraday
- (b) Kirchhoff
- (c) Einstein
- (d) Gibbs-Helmholtz.

Q-21. Acetone reacts with Grignard reagent to form

- (a) 3° alcohol
- (b) 2° alcohol
- (c) ether
- (d) no reaction

Q-22. Wood spirit is known as

- (a) Methanol
- (b) Ethanol
- (c) Acetone
- (d) Benzene

Q-23. Solemnity is

- (a) $\text{Ca} [\text{B}_3\text{O}_4(\text{OH})_2] \cdot 2\text{H}_2\text{O}$
- (b) $\text{Ca}_2 \text{B}_6\text{O}_{11} 5\text{H}_2\text{O}$
- (c) $\text{Ca} (\text{OH})_2$
- (d) $\text{Na}_2 \text{B}_4\text{O}_7 \cdot 2\text{H}_2\text{O}$

Q-24. Which of the following can't be used in Friedan Craft's reactions?

- (a) FeCl_3
- (b) FeBr_2
- (c) AlCl_3
- (d) NaCl

Q-25. Which of the following meal has stable carbonates?

- (a) Na
- (B) Mg
- (c) Al
- (D) Si

Q-26. What is the net charge on ferrous ion?

- (a) +2
- (b) + 3
- (c) +4
- (d) +5

Q-27. Oxidation number of carbon in $\text{CH}_2 \text{Cl}_2$ is

- (a) 0
- (b) 2
- (c) 3

(d) 5

Q-28. Internal energy is

(a) Partly potential and partly kinetic

(b) Totally kinetic

(c) Totally potential

(d) none of these

Q-29. Breeding arc method cannot be used to prepare colloidal solution of which of the following?

(a) Pt

(b) Fe

(C) Ag

(d) Au

Q-30. Which of the following oxides of nitrogen is solid?

(a) NO_2

(b) N_2O

(c) N_2O_3

(d) N_2O_5

Q-31. Containers A and B have same gases. Pressure, volume and temperature of A are all twice that of B, then the ration of number of molecules of A and B are

(a) 1: 2

(b) 2

(c) 1: 4

(d) 4

Q-32 (117) . The ration of by second orbital to the first orbits.

(a) 1 : 2

(b) 1 : 16

(c) 8 : 1

(d) 16 : 1

Q-33. Among them intensive property is

- (a) Mass
- (b) Volume
- (c) Surface tension
- (d) Enthalpy

Q-34. Stainless steel is an alloy of

- (a) Copper
- (b) Nickel and chromium
- (c) Manganese
- (d) Zinc

Q-35. Orion has a unit

- (a) Vinyl cyanide
- (b) Carolina
- (c) Glycol
- (d) Isoprene

Q-36. Structure of H_2O_2 is

- (a) Planer
- (b) Non-planar
- (c) Liner
- (d) Three-dimensional

Q-37. Triple point of water is

- (a) 273 K
- (b) 373 K
- (c) 203 K
- (d) 193 K

Q-38. What is the % of acetic acid present in vinegar?

- (a) 6 - 10 %
- (b) 70 - 80 %
- (c) 7 - 8 %
- (d) 90 - 100 %

Q-39. Nitrous oxide is known as

- (a) Breathing gas
- (b) Laughing gas
- (c) Exercising gas
- (d) Laboratory gas.

Q-40. Which of the following is the buffer solution?

- (a) $\text{CH}_3\text{COOH} + \text{CH}_3\text{COONa}$
- (b) $\text{CH}_3\text{COOH} + \text{CH}_3\text{COONH}_4$
- (c) $\text{CH}_3\text{COOH} + \text{NH}_4\text{Cl}$
- (d) $\text{NaOH} + \text{NaCl}$

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