# General Science Model Test Questions 34 With Answers [Chemistry - 12]

1. The metal having negative Thomson effect is

(A) Ag **(B) Hg** (C) Sn (D) Sb

2. $_{92}U^{235} + _{0}n^{1} \rightarrow _{56}Ba^{141} + _{36}Kr^{92} + _{30}n^{1} + 200Mev$

The above said reaction is a

**(A) Nuclear fission reaction** (B) Nuclear fusion reaction

(C) Spallation reaction (D) Equilibrium reaction

3. Which one of the following is used in making ointment for skin diseases?

(A) $AgNO_3$ (B) AgBr **(C) $ZnCO_3$** (D) AgCl

4. Which is the bond length of $Br_2$ molecule?

(A) 1.54 **(B) 2.28** (C) 0.74 (D) 1.44

5. The order of ionization energy

(A) s < p < d < f **(B) s > p > d > f** (C) s > d > p > f (D) s < d < p < f

6. The intramolecular hydrogen bonding is present in

**(A) Salicylic acid** (B) Water

(C) M-nitrophenol (D) P-nitrophenol

7. Among the following which will produce oxocations

(A) Lanthanides **(B) Actinides** (C) Noble gases (D) Halogens

8. How do you observe the respiration by Ganong's respiroscope?

(A) $CO_2$ released (B) Raise of water

**(C) Raise of KOH Level** (D) $O_2$ released

9. The mole ratio of $SO_2$ and $O_2$ in contact process

(A) 1 : 2 **(B) 2 : 1** (C) 3 : 1 (D) 1 : 3

10. Which of the following statements are FALSE?

I) Nuclear reactor is based on the principle of uncontrolled fission reaction

II) Atom bomb is based on the principle of uncontrolled fusion reaction

III) Hydrogen bomb is an example for nuclear fusion reaction.

**(A) I and II** (B) II and III (C) I and III (D) I, II and III

11. In $\alpha$-decay the change that occurs in the daughter element is

(A) Atomic number decreased by one

(B) mass number increases by four

(C) Proton number remains the same

**(D) Neutron number decreases by two**

12. The compounds sodium benzoate and potassium metabisulphate are used as

(A) Artificial sweetening agent **(B) Food preservative**

(C) Antibiotic (D) Dyes

13. What is the name of the solution containing equal molecules of D(+) glucose and C(-) glucose?

(A) Grape sugar (B) Cane sugar

**(C) Invert sugar** (D) Non-reducing sugar

14. What product is formed after 2 moles of aniline treated with carbondisulphide?

**(A) S – diphenyl thio urea** (B) S – phenyl thio urea

(C) S – triphyhyl thio urea (D) S – diphenyl urea

15. Which one of the following compound react with Grignard reagent to form carboxylic acid?

(A) Formaldehyde (B) Acetaldehyde (C) Acetone **(D) Carbon dioxide**

16. Which one of the following compound is in wintergreen oil?

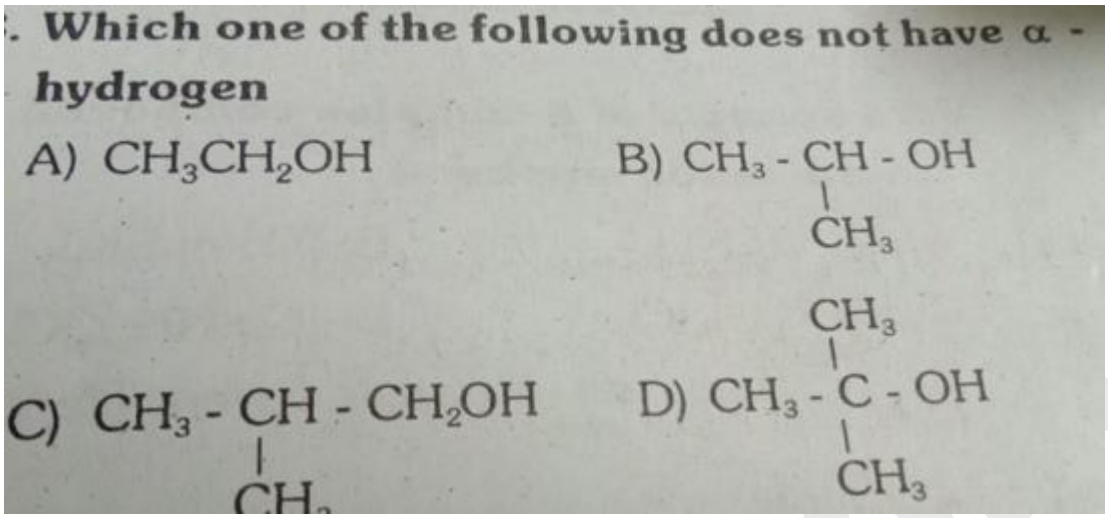
(A) Methyl acetate (B) Methyl formate

**(C) Methyl salicylate** (D) Acetyl salicylic acid

17. Phenol reacts with formaldehyde gives

**(A) Bakelite** (B) Malechite green

(C) Malonic acid (D) Tincture benzoin




Ans: (D)

19. Oxidation of glycerol with bismuth nitrate which gives

(A) Glyceric acid (B) Glyceraldehyde

**(C) Mesoxalic acid** (D) Oxalic acid

20. Which one of the following reaction is not feasible?

(A) $Zn + H_2SO_4 \rightarrow ZnCO_4 + H_2$ (B) $Cu^{2+} + H_2 \rightarrow Cu + 2H^+$

**(C) $Cu + H_2SO_4 \rightarrow CuSO_4 + H_2$** (D) $Zn + CuSO_4 \rightarrow ZnSO_4 + Cu$

21. Ionic product of water at 298 K is

(A) $K_W = 1 \times 10^7$ mol$^2$ dm$^{-6}$ (B) $K_W = 1 \times 10^{-7}$ mol$^2$ dm$^{-6}$

(C) $K_W = 1 \times 10^{14}$ mol$^2$ dm$^{-6}$ **(D) $K_W = 1 \times 10^{-14}$ mol$^2$ dm$^{-6}$**

22. Tyndall effect is ---------- kind property of colloids.

(A) Kinetic property (B) Electrical property

(C) Chemical property **(D) Optical property**

23. Unit of rate constant of a reaction can be calculated using the formula

(A) Mol$^{(1-n)}$ lit$^{(n-1)}$ Sec$^{-2}$ (B) Lit$^{(1-n)}$ Mol$^{(n-1)}$ Sec$^{-1}$

(C) Mol$^{(1-n)}$ lit$^{(n-1)}$ Sec$^{2}$ **(D) Lit$^{(n-1)}$ Mol$^{(1-n)}$ Sec$^{-1}$**

24. An example of a complex compound having coordination number 4

(A) $K_4[Fe(CN)_6]$ (B) $[Co(en)_3]Cl_3$ (C) $[Fe(H_2O)_6]Cl_3$ **(D) $[Cu(NH_3)_4]Cl_2$**

25. Which of the following statement is correct with respect to Central metal atom?

(A) Accepts electron **(B) Accepts the pair of electron**

(C) Donate electron (D) Donate pair of electron

26. Pick out the complex used as anti-tumour drug.

**(A) cis - $[Pt(NH_3)_2Cl_2]$**

(B) trans - $[Pt(NH_3)_2Cl_2]$

(C) cis - $[Pd(NH_3)_2(NO_2)_2]$

(D) trans - $[Pd(NH_3)_2(NO_2)_2]$

27. Which one of the following is an example of metal deficiency detect?

(A) NaCl (B) AgCl (C) CsCl **(D) FeS**

28. What is General electronic configuration of the transition elements?

(A) $(n-1)d^{0-10}ns^{1-2}$ **(B) $(n-1)d^{1-10}ns^{1-2}$** (C) $(n-1)d^{1-5}ns^2$ (D) $(n-1)d^0ns^1$

29. Choose the wrong statement regarding $K_2Cr_2O_7$

(A) It is a powerful oxidizing agent (B) It is used in tanning industry

(C) It is soluble in water **(D) It reduces ferric sulphate to ferrous sulphate**

30. Match the following:

| **Alloy** | **Composition** |
|---|---|
| (a) Bronze | 1. Cu=87, Sn=10, Zn=3 |
| (b) Brass | 2. Cu=75-90, Sn=10-25 |
| (c) Nichrome | 3. Cu=60-80, Zn=20-40 |
| (d) Gun metal | 4. Cr=15, Ni=60, Fe=25 |

Codes:

| | a | b | c | d |
|---|---|---|---|---|
| **(A)** | **2** | **3** | **4** | **1** |
| (B) | 3 | 1 | 4 | 2 |
| (C) | 4 | 2 | 1 | 3 |
| (D) | 1 | 2 | 3 | 4 |

31. The shape of $PCl_5$ is

(A) Pyramidal **(B) Trigonal bipyramidal**

(C) Linear (D) Tetrahedral

32. What is the shape of p-orbitals?

(A) Spherical (B) Clover leaf shape

**(C) Dumb – bell** (D) (B) or (C)

33. Assertion (A): Inter molecular hydrogen bonding is formed between the two molecules of the same or different compounds.

Reason (R): Hydrogen bonding is possible when a six or five membered rings can be formed.

(A) Both (A) and (R) are true, and (R) is the correct explanation of (A)

(B) Both (A) and (R) are true, but (R) is not the correct explanation of (A)

**(C) (A) is true, but (R) is false**

(D) (A) is false, but (R) is true

34. What chemical is used in solar cells?

(A) Calcium **(B) Cadmium** (C) Potassium (D) Sodium

35. Nitrous oxide traps how many times more heat than carbondioxide?

(A) 20 times **(B) 300 times** (D) 500 times (D) 50 times

36. Heat of combustion of hydrogen per unit weight is how many times more than that of hydrocarbon fuel?

**(A) 2.5 times** (B) 3.5 times (C) 4.5 times (D) 1.5 times

37. Chemical name of Teflon is

(A) Poly propylene (B) Poly Acetylene

**(C) Poly tetra fluro ethylene** (D) Poly Vinyl alcohol

38. The compounds which have back bonding are

(A) Metal nitrates (B) Metal carbonates

**(C) Metal carbonyls** (D) Metal oxides

39. The ozone layer forms naturally by

(A) Interaction of CFC with oxygen

**(B) Interaction o UV radiation with oxygen**

(C) Interaction of IR radiation with oxygen

(D) Interaction of oxygen and water vapour

40. Inter molecular hydrogen bonding is present in

(A) O-nitrophenol **(B) Water**

(C) Salicylic acid (D) Salicylaldehyde

41. Fog is a colloidal solution of

(A) Gas in Liquid **(B) Liquid in gas**

(C) Gas in solid (D) Solid in gas

42. The compound formed when aniline is heated with Fuming sulphuric acid at 353K is

**(A) p-amino benzene sulphonic acid**

(B) o- amino benzene sulphonic acid

(C) m- amino benzene sulphonic acid

(D) p- nitro benzene sulphonic acid

43. Find the incorrect statement:

I) Ozone depletion will affect crop yield.

II) Ozone depletion will not cause damage to fish larvae.

III) Ozone depletion will cause skin cancer in man.

**(A) II only** (B) I only (C) III only (D) I, II and III are incorrect

44. Which salt is used in Test Tube funnel experiment?

(A) Potassium chloride **(B) Sodium bi carbonate**

(C) Sodium carbonate (D) Sodium chloride

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