



CHEMISTRY

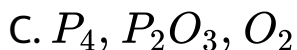
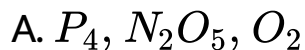
BOOKS - NTA MOCK TESTS

NEET MOCK TEST 13

Mcqs Chemistry

1. A tetra-atomic molecule (A) on reaction with nitrogen (I) oxide, produces two substances (B) and (C). (B) is a dehydrating agent while substance (C) is a

diatomic gas which shows almost inert behaviour. The substances (A),(B) and (C) are



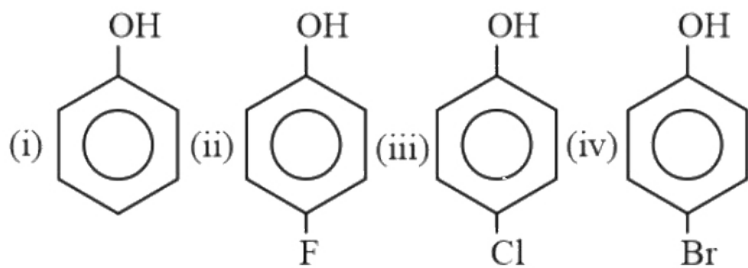
Answer: D

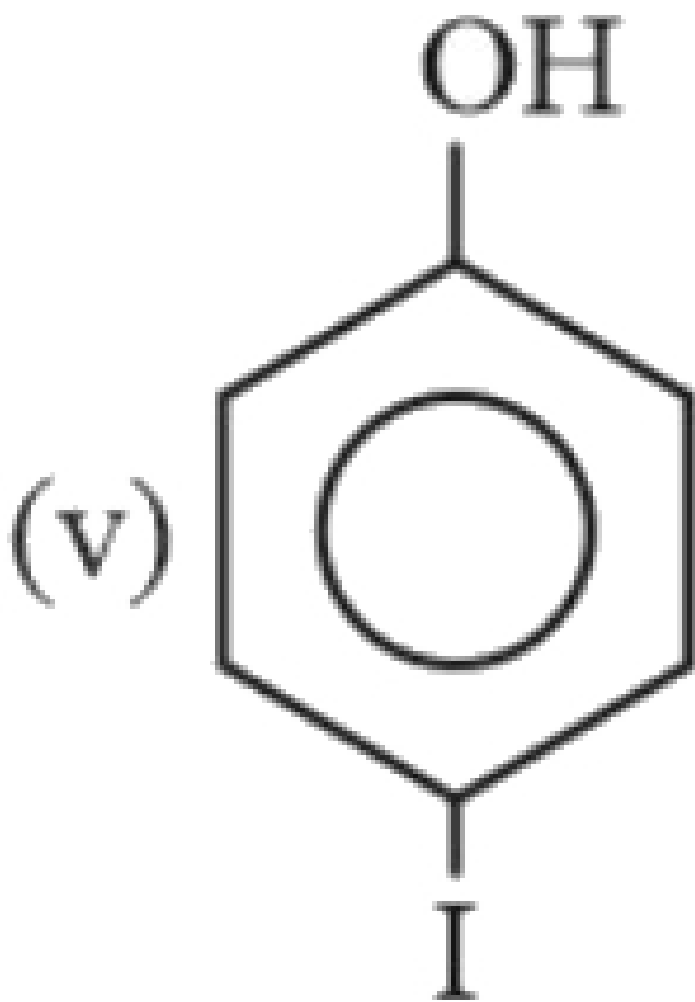


Watch Video Solution

2. Arrange the following structure according to their increasing order order of acidic behaviour in polar

solvent.





A. $i < iv < v < ii < iii$

B. $i < v < iv < iii < ii$

C. $i < v < iv < ii < iii$

D. $ii < v < iv < iii < i$

Answer: C



Watch Video Solution

3. A 0.016 M of an acid solution in benzene is dropped on a water surface, the benzene evaporates and the acid forms a monomolecular film of solid type. What volume of the above solution would be required to

cover a 500 surface area of water with monomolecular layer of acid? Area covered by single acid molecule is 0.2

A. $24.94 \times 10^{-3} ml$

B. $25.94 \times 10^{-3} ml$

C. $3.67 \times 10^{-3} ml$

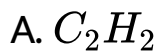
D. $20.78 \times 10^6 ml$

Answer: B



Watch Video Solution

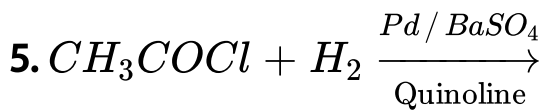
4. Marsh gas mainly contains:



Answer: B



Watch Video Solution



A. Acetaldehyde

B. Propionaldehyde

C. acetone

D. acetic anhydride

Answer: A



Watch Video Solution

6. For the gaseous reaction,



carried in a closed vessel, the equilibrium concentration of the C_2H_6 can definitely be increased by

A. increasing temperature and decreasing pressure

B. decreasing temperature and increasing pressure

C. increasing temperature and pressure both

D. Decreasing temperature and pressure both

Answer: B



Watch Video Solution

7. Amoxillin is semi-synthetic modification of :

A. penicillin

B. streptomycin

C. tetracycline

D. chloramphenicol

Answer: A



Watch Video Solution

8. In how many of the following molecules, all atoms are in same plane?

ClF_3	H_2O	PCl_3	BF_3
SF_4	H_2S	OCl_2	SO_3
XeF_6	NH_3	C_6H_6	XeF_2
XeF_4	PCl_5	I_2Cl_6	PH_3

A. 12

B. 0

C. 10

D. 11

Answer: C



Watch Video Solution

9. The properties of the elements are the periodic function of their atomic number. The statement is given by-

A. N. Bohr

B. J.W. Dobereiner

C. D.I. Mendeleev

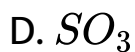
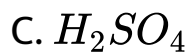
D. H.G.J. Moseley

Answer: D



Watch Video Solution

10. In the estimation of sulphur organic compound on treating with conc. HNO_3 is converted to



Answer: C



Watch Video Solution

11. Calculate the number of atoms in each of the following (i) 52 moles of Ar (ii) 52 u of He (iii) 52 g of He.

A. 3.130×10^{23} , 12, 6.8284×10^{20}

B. 3.138×10^{22} , 12, 6.7854×10^{28}

C. 3.131×10^{25} , 13, 7.8286×10^{24}

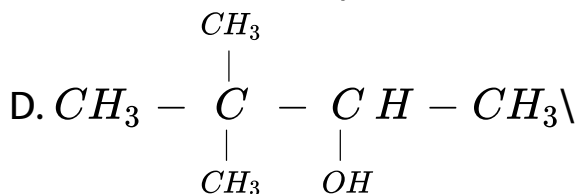
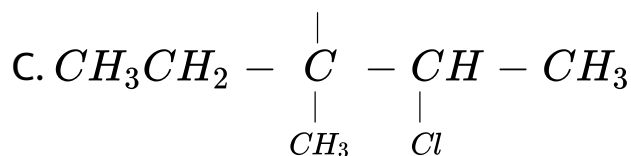
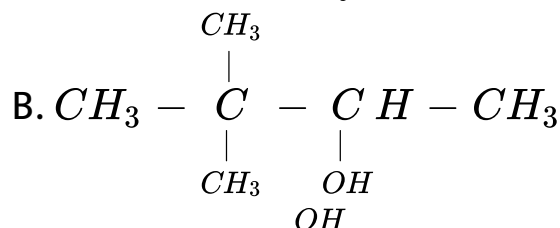
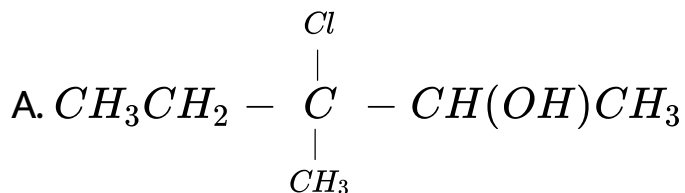
D. 3.135×10^{28} , 15, 6.7288×10^{20}

Answer: C



Watch Video Solution

12. The predominant product formed when 3-methyl-2-pentene reacts with $HOCl$ is

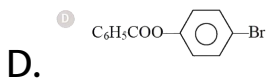
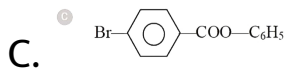
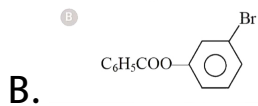
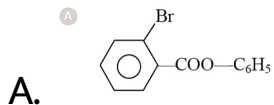


Answer: C



Watch Video Solution

13. The major product formed on monobromination of phenylbenzoate is :

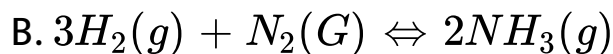
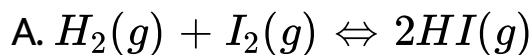


Answer: D



Watch Video Solution

14. By adding inert gas at a constant volume, which of the following equilibrium will not be affected?



D. All of above

Answer: D

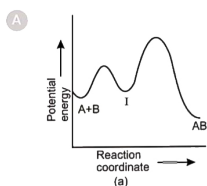


Watch Video Solution

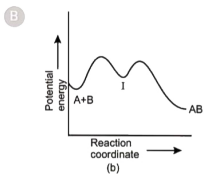
15. For an exothermic chemical process occurring in two steps as follows



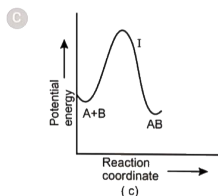
The progress of reaction can be best described by :



A.

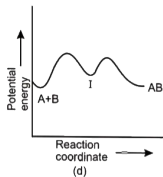


B.



C.

D



D.

Answer: B[Watch Video Solution](#)

16. The gas evolved on heating CH_3MgBr in methanol is :

A. Methane

B. Ethane

C. Propane

D. HBr

Answer: A



Watch Video Solution

17. Acetonitrile on reduction gives

A. Propanamine

B. Methanamine

C. Ethanamine

D. Propane nitrile

Answer: C



Watch Video Solution

18. For the closest packing of atoms A (radius, r_A), the maximum radius of atom B that can be fitted into octahedral void is

A. $0.155 r_A$

B. $0.125 r_A$

C. $0.414 r_A$

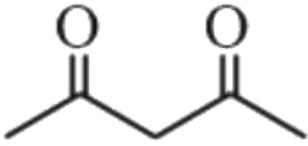
D. $0.732 r_A$

Answer: D

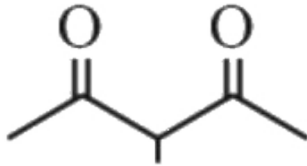


Watch Video Solution

19. Arrange in the order of stability of enol form of the compounds:



i.



ii.



iii.

A. $iii > ii > i$

B. $i > ii > iii$

C. $ii > i > iii$

D. $ii > iii > i$

Answer: B



Watch Video Solution

20. Among the following sets of bases, which set of bases is present both in DNA and RNA?

A. Adenine, uracil, thymine

B. Adenine, guanine, cytosine

C. Adenine, guanine, uracil

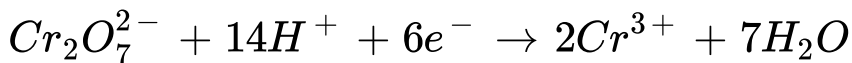
D. Adenine, guanine, thymine

Answer: B



Watch Video Solution

21. Consider the reaction :



What is the quantity of electricity in coulombs needed to reduce 1 mole of $Cr_2O_7^{2-}$ ions ?

A. 5.79×10^5

B. 5.69×10^5

C. 5.59×10^5

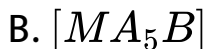
D. 5.49×10^5

Answer: A



Watch Video Solution

22. Which of the following octahedral complex does not show geometrical isomerism (A and B are monodentate ligands) ?



Answer: B



Watch Video Solution

23. Identify the correct statement about borazene, $B_3N_3B_6$.

(i) Borazene is aromatic

(ii) There are four isomers of bi substituted molecule of borazene molecules, $(B_3N_3H_4X_2)$.

(iii) Borazene is more reactive towards addition reactions than benzene.

A. only (i)

B. (i) and (ii)

C. (i) and (iii)

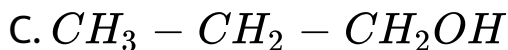
D. (i),(ii) and (iii)

Answer: D



Watch Video Solution

24. When $CH_2 = CH - COOH$ is reduced with $LiAlH_4$ the compound obtained will be





Answer: B



Watch Video Solution

25. The starting material used in Solvay's process are

A. Sodium sulphate

B. Brine solution

C. Carnallite

D. All of these

Answer: B



Watch Video Solution

26. Compound (P) forms a precipitate with $AgNO_3$.

The precipitate dissolves in excess reagent (P). (P)

cannot be:

A. KOH

B. KCN

C. $Na_2S_2O_3$

D. NH_3

Answer: A



Watch Video Solution

27. Addition of sodium hydroxide solution to a weak acid (HA) results in a buffer of pH 6. If ionization constant of HA is 10^{-5} , the ratio of salt to acid concentration in the buffer solution will be:

A. 10:1

B. 4:5

C. 5:4

D. 1:10

Answer: A



Watch Video Solution

28. The wave character of moving electron was experimentally verified by :

A. de Broglie

B. Davisson and Germer

C. N. Bohr

D. Schrodinger

Answer: B



Watch Video Solution

29. The ability of ion to bring about coagulation of a given colloidal solution depends upon

A. its size

B. the magnitude of its charge only

C. the sign of its charge

D. both the magnitude and the sign of its charge

Answer: D



Watch Video Solution

30. δU is equal to

- A. Isobaric work
- B. Adiabatic work
- C. Isothermal work
- D. Isochoric work

Answer: B



Watch Video Solution

31. Sodium extract is heated with con. HNO_3 before testing for halogens because

A. Ag_2S and $AgCN$ are soluble in acidic medium.

B. Silver halides are totally insoluble in nitric acid.

C. S^{2-} and CN^- , if present, are decomposed by

conc. HNO_3 and hence do not interfere in the

test.

D. Ag reacts faster with halides in acidic medium

Answer: C



Watch Video Solution

32. What amount of bromine will be required to convert 2g of phenol into 2, 4, 6 – tribromphenol

A. 4.00

B. 6.00

C. 10.22

D. 20.44

Answer: C



Watch Video Solution

33. For the decomposition of HI at $1000K(2HI \rightarrow H_2 + I_2)$, following data were obtained:

$[HI] (M)$	Rate of decomposition of HI ($molL^{-1}s^{-1}$)
0.1	2.75×10^{-8}
0.2	11×10^{-8}
0.3	24.75×10^{-8}

The order of reaction is

A. 1

B. 2

C. 0

D. 1.5

Answer: B



Watch Video Solution

34. Molecular weight of oxalic acid is 126. the weight of oxalic acid required to neutralise 100cc of normal solution of NaOH is

A. 6.3 gm

B. 126 gm

C. 530 gm

D. 63 gm

Answer: A



Watch Video Solution

35. The energy of second Bohr orbit of the hydrogen atom is -328 kJ mol^{-1} , hence the energy of fourth Bohr orbit would be.

A. -41 kJ mol^{-1}

B. $-1312 \text{ kJ mol}^{-1}$

C. -164 kJ mol^{-1}

D. -82 kJ mol^{-1}

Answer: D



Watch Video Solution

36. The resistance of $1N$ solution of acetic acid is 250ohm , when measured in a cell of cell constant 1.15cm^{-1} . The equivalent conductance (in $\text{ohm}^{-1}\text{cm}^2\text{eq}^{-1}$) of $1N$ acetic acid is

A. 18.4

B. 9.2

C. 4.6

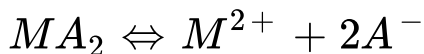
D. 2.3

Answer: C



Watch Video Solution

37. A salt MA_2 ionises as



It was found that a given solution of the salt had the same freezing point as solution of glucose of twice the molality. The apparent degree of ionization of the salt is

A. 0.25

B. 0.33

C. 0.5

D. 0.67

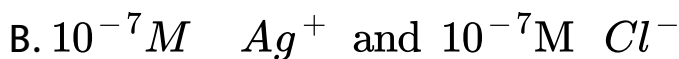
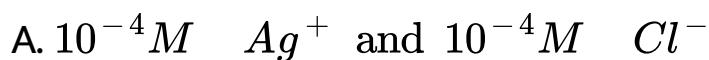
Answer: C



Watch Video Solution

38. The solubility product of AgCl is 1.8×10^{-10} .

Precipitation of AgCl will occur only when equal volumes of solutions of :



Answer: A



Watch Video Solution

39. The important step in the extraction of metal from carbonate ore is

- A. Calcination
- B. Roasting
- C. Electro-reduction
- D. Cupellation

Answer: A



Watch Video Solution

40. Which substance would give a solution with a boiling point below that of pure water rather than above?

A. Sodium chloride (solid)

B. Ethyl alcohol (liquid, b.p. $61^{\circ}C$)

C. sulphuric acid (liquid, b.p. $>300^{\circ}C$)

D. sucrose sugar (solid)

Answer: B



Watch Video Solution

41. In van der Waals equation of state for a non-ideal gas, the term that accounts for intermolecular forces is

A. $V_m - b$

B. $P + \frac{a}{V_m^2}$

C. RT

D. $1/RT$

Answer: B



Watch Video Solution

42. Which of the following properties don't help in differentiating, different hydrated isomers of $CrCl_3 \cdot 6H_2O$?

A. Conductivity measurement

B. Precipitation by $AgNO_3$

C. Dipole moment

D. Magnetic moment

Answer: D



Watch Video Solution

43. If 200mL of He at 0.66 atm and 400 mL of O_2 at 0.52 atm pressure are raised in 400 mL vessel at $20^\circ C$ then find the partial pressures of He and O_2 ?

A. 0.33 and 0.55

B. 0.33 and 0.52

C. 0.38 and 0.52

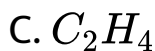
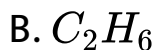
D. 0.25 and 0.45

Answer: B



Watch Video Solution

44. A metallic carbide on treatment with water gives a colourless gas which burns readily in air and gives a precipitate with ammonical silver nitrate. The gas is



Answer: D



Watch Video Solution

45. The natural rubber is the polymer of

A. 1,3-butadiene

B. Polyamide

C. Isoprene

D. None of these.

Answer: C



Watch Video Solution