

Chemistry Model Question Paper - 13

Question 1 :

Which one of the following statements is true'?

- (A) Drying of oil involves hydrolysis
- (B) Saponification of oil yields a diol.
- (C) Refining of oil involves hydrogenation
- (D) Addition of antioxidant to oil minimizes rancidity

Answer: (D)

Question 2 :

IUPAC name of $(\text{CH}_3)_3\text{CCl}$

- (A) 2 chloro 2 methyl propane
- (B) t-butyl chloride
- (C) n-butyl chloride
- (D) 3-chloro butane

Answer: (A)

Question 3 :

Which one of the following statements is not true regarding (+) Lactose?

(A) (+) Lactose, $C_{12}H_{22}O_{11}$ contains 8-OH groups

(B) On hydrolysis (+) Lactose gives equal amount of D(+) glucose and D(+) galactose

(C) (+) Lactose is a β -glycoside formed by the union of a molecule of D(+) glucose and a molecule of D(+)

galactose

(D) (+) Lactose is reducing sugar and does not exhibit mutarotation

Answer: (D)

Question 4 :

In electrophilic aromatic substitution reaction, the nitro group is meta directing because it

(A) increases electron density at meta position

(B) increases electron density at ortho and para positions

(C) decreases electron density at ortho and para positions

(D) decreases electron density at meta position

Answer: (C)

Question 5 :

In the electrolysis of acidulated water, it is desired to obtain 1.12 cc of Hydrogen per second under S.T.P. condition. The current to be passed is

(A) 19.3 Amp

(B) 0.965 Amp

(C) 1.93 Amp

(D) 9.65 Amp

Answer: (D)

Question 6 :

Lucas test is associated with

(A) Carboxylic acid

(B) Alcohols

(C) Aldehydes

(D) Phenols

Answer: (B)

Question 7 :

Malleability and ductility of metals can be accounted due to

(A) the presence of electrostatic force

(B) the crystalline structure in metal

(C) the capacity of layers of metal ions to slide over the other

(D) the interaction of electrons with metal ions in the lattice

Answer: (C)

Question 8 :

Mass of 0.1 mole of Methane is

(A) 1 g

(B) 16 g

(C) 1.6 g

(D) 0.1 g

Answer: (C)

Question 9 :

Maximum number of molecules of CH_3I that can react with a molecule of CH_3NH_2 are

(A) 1

(B) 2

(C) 4

(D) 3

Answer: (D)

Question 10 :

Mercury is a liquid metal because

(A) it has a completely filled s-orbital

(B) it has a small atomic size

(C) it has a completely filled d-orbital that prevents d-d overlapping of orbitals

(D) it has a completely filled d-orbital that causes d-d overlapping

Answer: (C)