

Examples of JAMB repeated questions and Answers on Chemistry

(1) An organic compound contains 60% carbon, 13.3% hydrogen and 26.7% oxygen. Calculate the empirical formula.

(A) C₆H₁₃O₂

(B) C₄H₉O

(C) C₅H₁₂O

(D) C₃H₈O

[C = 12, H = 1, O = 16]

Answer – D

(2) The reaction between ammonia and ethyl ethanoate produces

(A) ethanol and propanamide

(B) ethanol and ethanamide

(C) propanol and ethanamide

(D) propanol and propanamide.

Answer – B

(3) 2-methylbutan-2-ol is an example of a

(A) secondary alkanol

(B) tertiary alkanol

(C) dihydric alkanol

(D) primary alkanol

Answer – B

(4) Chlorophyll obtained from green leaves of plant can be composed of more than one coloured component by the technique of

(A) crystallization

(B) hydrolysis

(C) chromatography

(D) sublimation

Answer – C

(5) The colour of the fountain water is

A. blue B. orange C. red D. yellow.

Answer – C

(6) Permanent hardness of water can be removed by

(A) filtration

(B) adding slaked lime

(C) adding caustic soda

(D) boiling.

Answer – B

(7) A solution which on treatment with hydrochloric acid produces a colourless, odourless gas which turns lime water milky is most likely to be a

(A) trioxocarbonate(IV)

(B) trioxonitrate(V)

(C) hydroxide

(D) chloride

Answer – A

(8) If chlorine is bubbled into water and the resulting yellowish-green solution is exposed to bright sunlight for a while, the solution will decompose giving out

(A) oxygen, thereby producing hypochlorous

(B) chlorine and oxygen

(C) oxygen and leaving behind aqueous hydrochloric acid

(D) oxygen, hydrogen and chlorine

Answer – C

(9) $\text{H}_3\text{PO}_4(\text{aq}) + \text{H}_2\text{O}(\text{l}) \rightarrow \text{H}_2\text{PO}_4^-(\text{aq}) + \text{H}_3\text{O}^+(\text{aq})$

$\Delta H = -13\text{kJ at } 298\text{K}$

In the reaction above, an increase in temperature would

(A) have no effect on the reaction

(B) slow down the reverse reaction

(C) favour the forward reaction

(D) favour the reverse reaction

Answer – D

(10) Sulphur (IV) oxide bleaches by

(A) hydration (B) reduction (C) absorption (D) oxidation

Answer – B

(11) Which of the following gases can be collected by the method of downward delivery?

(A) Oxygen (B) Hydrogen (C) Chlorine (D) Ammonia.

Answer – C

(12) Milikan's contribution to the development of atomic theory is the determination of

(A) charge on electron (B) positive rays (C) charge to mass ratio (D) cathode rays

Answer – A

(13) What current in amperes will deposit 2.7g of aluminium in 2 hours? (A) 32 (B) 8 (C) 4 (D) 16

Answer – C

(14) Ethanoic acid is

(A) tribasic (B) unionizeable (C) monobasic (D) dibasic

Answer – C