

FAISALABAD BOARD

GRADE 10

CHEMISTRY

2018 GROUP 1

Lesson 1 of 32

Section-A (MCQs)

i) Crude oil is heated in the furnace up to: (Mark 1)

- A. 400 °C
- B. 450 °C
- C. 500 °C
- D. 525 °C

Answer:

- A. 400 °C

ii) Specific heat capacity of water is: (Mark 1)

- A. 4.2 KJg⁻¹K⁻¹
- B. 4.2 Jg⁻¹K⁻¹
- C. 2.4 KJg⁻¹K⁻¹
- D. 2.4 Jg⁻¹K⁻¹

Answer:

- B. 4.2 Jg⁻¹K⁻¹

iii) A disease that cause bone and tooth damage is: (Mark 1)

- A. Hepatitis
- B. Cholera
- C. Fluorosis
- D. Jaundice

Answer:

- C. Fluorosis

iv) Rain water is weakly acidic because of: (Mark 1)

- A. SO₃
- B. CO₂
- C. SO₂

D. NO_2

Answer:

B. CO_2

v) Which is fat soluble vitamin?

(Mark 1)

A. Vitamin A

B. Vitamin E

C. Vitamin K

D. All these

Answer:

D. All these

vi) Which is triglyceride?

(Mark 1)

A. Carbohydrates

B. Proteins

C. Lipids

D. Vitamins

Answer:

C. Lipids

vii) The end product of oxidation of acetylene is:

(Mark 1)

A. oxalic acid

B. glycol

C. glyoxal

D. ethane glycol

Answer:

A. oxalic acid

viii) Coal having 90% carbon is called:

(Mark 1)

A. Peat

B. Lignite

C. Anthracite

D. Bituminous

Answer:

C. Anthracite

ix) Which is a double salt?

(Mark 1)

A. NaCl

B. CaO

C. AlCl_3

D. $\text{K}_2\text{SO}_4 \cdot \text{Al}_2(\text{SO}_4)_3 \cdot 24\text{H}_2\text{O}$

Answer:

D. $\text{K}_2\text{SO}_4 \cdot \text{Al}_2(\text{SO}_4)_3 \cdot 24\text{H}_2\text{O}$

x) Which acid is used for food preservation? (Mark 1)

- A. Hydrochloric acid
- B. Benzoic acid
- C. Sulphuric acid
- D. Nitric acid

Answer:

B. Benzoic acid

xi) The colour of I₂ gas is: (Mark 1)

- A. Blue
- B. Green
- C. Purple
- D. Red

Answer:

C. Purple

xii) The unit of molar concentration are: (Mark 1)

- A. mol dm⁻³
- B. mol dm⁻²
- C. mol dm³
- D. mol dm⁻³

Answer:

D. mol dm⁻³

Q.2 i) What is static equilibrium? Give an example? (Marks 2)

Q.2 ii) Give two characteristics of forward reaction? (Marks 2)

Q.2 iii) Why the amount of reactant and products do not change in a reversible reaction at equilibrium? (Marks 2)

Q.2 iv) How is active mass represented? Write its unit. (Marks 2)

Q.2 v) Why H⁺ ion acts as Lewis acid? (Marks 2)

Q.2 vi) Define pH of a solution? (Marks 2)

Q.2 vii) Define acid rain? (Marks 2)

Q.2 viii) Give two uses of sodium chloride? (Marks 2)

Q.3 i) Define condensed formula of organic compounds. (Marks 2)

Q.3 ii) What is coal gas? (Marks 2)

Q.3 iii) How animals are sources of organic compounds? (Marks 2)

- Q.3 iv) Define Hydrocarbons? (Marks 2)
- Q.3 v) Write two sources of alkenes? (Marks 2)
- Q.3 vi) Write two characteristics of oligosaccharides? (Marks 2)
- Q.3 vii) How amino acids are building blocks of proteins? (Marks 2)
- Q.3 viii) Name two disease caused by the deficiency of vitamin A.
(Marks 2)
- Q.4 i) What do you mean by atmosphere? (Marks 2)
- Q.4 ii) Why CO₂ is called a green house gas? (Marks 2)
- Q.4 iii) How is aquatic life affected by acid rain? (Marks 2)
- Q.4 iv) Write any two properties of water? (Marks 2)
- Q.4 v) What do you mean by boiler scales? (Marks 2)
- Q.4 vi) What is blister copper? (Marks 2)
- Q.4 vii) Write two uses of petroleum ether. (Marks 2)
- Q.4 viii) What is froth flotation process? (Marks 2)
- Q.5 a) Write five macroscopic characteristics of dynamic equilibrium.
(Marks 5)
- Q.5 b) Explain Lewis concept of acids and bases. Also give examples.
(Marks 4)
- Q.6 a) What type of reaction are given by alkanes? Explain with reference to halogenation of alkanes?
(Marks 5)
- Q.6 b) Explain the uses and sources of proteins? (Marks 4)
- Q.7 a) Explain raw material and manufacturing process of urea along with flow sheet diagram?
(Marks 5)
- Q.7 b) Write in detail any four water borne diseases. (Marks 4)

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2018 GROUP 2

Lesson 1 of 32

Section-A (MCQs)

i) Which is disaccharide? (Mark 1)

- A. Cellulose
- B. Glucose
- C. Sucrose
- D. Starch

Answer:

C. Sucrose

ii) Catalyst used for hydrogenation of vegetable oil is: (Mark 1)

- A. Al
- B. Ni
- C. CO
- D. Pt

Answer:

B. Ni

iii) About 75% atmosphere's mass lies within: (Mark 1)

- A. 11 kilometers
- B. 15 kilometers
- C. 30 kilometers
- D. 35 kilometers

Answer:

A. 11 kilometers

iv) A disease that cause bone and tooth damage is: (Mark 1)

- A. cholera
- B. Fluorosis
- C. Hookworm
- D. Hepatitis

Answer:

B. Fluorosis

v) Temporary hardness is because of:

(Mark 1)

A. CaCO_3

B. $\text{Ca}(\text{HCO}_3)_2$

C. MgCO_3

D. MgSO_4

Answer:

B. $\text{Ca}(\text{HCO}_3)_2$

vi) Which is not a fraction of petroleum?

(Mark 1)

A. Kerosine oil

B. diesel oil

C. alcohol

D. Petrol

Answer:

C. alcohol

vii) The colour of iodine is:

(Mark 1)

A. Blue

B. Green

C. Purple

D. White

Answer:

C. Purple

viii) For a reaction $\text{N}_2 + 3\text{H}_2 \rightleftharpoons 2\text{NH}_3$ equilibrium constant expression is:

(Mark 1)

A. $\frac{[\text{2NH}_3]}{[\text{N}_2][\text{3H}_2]}$

B. $\frac{[\text{NH}_3]^2}{[\text{N}_2][\text{H}_2]^3}$

C. $\frac{[\text{N}_2][\text{H}_2]^3}{[\text{NH}_3]^2}$

D. $\frac{[\text{NH}_3]^2}{[\text{N}_2][\text{3H}_2]}$

Answer:

B. $\frac{[\text{NH}_3]^2}{[\text{N}_2][\text{H}_2]^3}$

ix) Stearic acid is present in:

(Mark 1)

A. Apple

B. Fats

C. Grapes

D. Lemon

Answer:

B. Fats

x) pH of neutral solution is:

(Mark 1)

- A. 05
- B. 06
- C. 07
- D. 08

Answer:

C. 07

xi) General formula of alkyl radicals is:

(Mark 1)

- A. C_nH_{2n+2}
- B. C_nH_{2n+1}
- C. C_nH_{2n}
- D. C_nH_{2n-2}

Answer:

B. C_nH_{2n+1}

xii) Dehydration of alcohols can be carried out with:

(Mark 1)

- A. H_2SO_4
- B. HCl
- C. KOH
- D. NaOH

Answer:

A. H_2SO_4

Q.2 i) How is dynamic equilibrium established?

(Marks 2)

Q.2 ii) Write two characteristics of forward reaction? (Marks 2)

Q.2 iii) Who put forward law of mass action? (Marks 2)

Q.2 iv) How is active mass represented? Also write its units. (Marks 2)

Q.2 v) How is mixed salts? Give an example? (Marks 2)

Q.2 vi) Write two uses of calcium chloride? (Marks 2)

Q.2 vii) Name two acid used in the preservation of food? (Marks 2)

Q.2 viii) Name two uses of pH? (Marks 2)

Q.3 i) What is coke? Write its two uses? (Marks 2)

Q.3 ii) What is meant by isomerism? (Marks 2)

Q.3 iii) Define petroleum? (Marks 2)

Q.3 iv) Define unsaturated hydrocarbons? (Marks 2)

Q.3 v) Write two uses of methane? (Marks 2)

Q.3 vi) What are proteins? (Marks 2)

Q.3 vii) Write the sources of vitamin D. (Marks 2)

Q.3 viii) Write the importance of vitamins? (Marks 2)

Q.4 i) Write two sources of oxides of carbon? (Marks 2)

Q.4 ii) Why CO₂ is called a green house gas? (Marks 2)

Q.4 iii) Write two effects of ozone depletion? (Marks 2)

Q.4 iv) How temporary hardness of water can be removed by boiling? (Marks 2)

Q.4 v) What is hepatitis? (Marks 2)

Q.4 vi) How slag is formed in smelting process? (Marks 2)

Q.4 vii) Write two uses of diesel oil? (Marks 2)

Q.4 viii) Name the various metallurgical operations. (Marks 2)

Q.5 a) Define equilibrium constant. How extent of reaction can be predicted? (Marks 5)

Q.5 b) Write four characteristics/ properties of salt? (Marks 4)

Q.6 a) Give five uses of ethylene? (Marks 4)

Q.6 b) Write four uses and sources of proteins? (Marks 4)

Q.7 a) How crude oil is refined? Explain two important fractions of petroleum along with their usage? (Marks 5)

Q.7 b) Define acid rain. Also write its any three effects. (Marks 4)