

# FAISALABAD BOARD

## GRADE 10

## CHEMISTRY

## 2019 GROUP 1

Lesson 1 of 32

Section-A (MCQs)

i) The colour of iodine is: (Mark 1)

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

Answer:

D. Purple

ii) How many possibilities are there in chemical equilibrium state: (Mark 1)

- A. 1
- B. 2
- C. 3
- D. 4

Answer:

B. 2

iii) Acetic acid is used for: (Mark 1)

- A. Flavoring food
- B. Making explosives
- C. Etching designs
- D. Cleaning metals

Answer:

A. Flavoring food

iv) KCl is an example of: (Mark 1)

- A. Double salt
- B. Mixed salt

- C. Normal salt
- D. Complex salt

Answer:

C. Normal salt

Answer:

D

vi) Which is used as dry cleaning:

(Mark 1)

- A.  $\text{CCl}_4$
- B.  $\text{CHCl}_3$
- C.  $\text{CH}_4$
- D.  $\text{CH}_2\text{Cl}_2$

Answer:

A.  $\text{CCl}_4$

vii) Which is tasteless:

(Mark 1)

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

Answer:

D. Starch

viii) Vitamin B complex includes \_\_\_\_\_ vitamins:

(Mark 1)

- A. 8
- B. 9
- C. 10
- D. 11

Answer:

A. 8

ix) How much percent of solid mass is reduced by the process of incineration:

(Mark 1)

- A. 80-85
- B. 88-90
- C. 91-92
- D. 95-97

Answer:

A. 80-85

x) A disease that causes bone and tooth damage is:

(Mark 1)

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

Answer:

B. Fluorosis

xi) Potable water on earth is only \_\_\_\_\_ of total water: (Mark 1)

- A. 0.01%
- B. 0.1%
- C. 0.2%
- D. 0.3%

Answer:

C. 0.2%

xii) Matte is a mixture of: (Mark 1)

- A.  $\text{Cu}_2\text{S}$ , FeS
- B. FeS, CuS
- C.  $\text{Cu}_2\text{O}$ , FeO
- D. CuS, FeO

Answer:

A.  $\text{Cu}_2\text{S}$ , FeS

Q.2 i) Write two differences between forward and reverse reactions.

(Marks 2)

Q.2 ii) Write the equilibrium constant expression for the reaction:

(Marks 2)

Q.2 iii) When and why KC has no units? (Marks 2)

Q.2 iv) Write two microscopic characteristics of the reverse reaction.

(Marks 2)

Q.2 v) Write two uses of pH. (Marks 2)

Q.2 vi) Write the names of any two naturally occurring acids. (Marks 2)

Q.2 vii) What is meant by term auto-ionization? Give an equation.

(Marks 2)

Q.2 viii) Write two uses of calcium sulphate ( $\text{CaSO}_4 \cdot 2\text{H}_2\text{O}$ ) (Marks 2)

Q.3 i) What is vital force theory? (Marks 2)

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

- Q.3 iii) Define functional group and give an example. (Marks 2)
- Q.3 iv) Why are the alkanes called paraffin? (Marks 2)
- Q.3 v) Write two uses of methane. (Marks 2)
- Q.3 vi) Write two characteristics of polysaccharides. (Marks 2)
- Q.3 vii) What is meant by genetic code of life? (Marks 2)
- Q.3 viii) Differentiate between oil and fats. (Marks 2)
- Q.4 i) Write the composition of dry air. (Marks 2)
- Q.4 ii) What do you mean by atmosphere? (Marks 2)
- Q.4 iii) Write two effects of ozone depletion. (Marks 2)
- Q.4 iv) Why the water molecule is polar. (Marks 2)
- Q.4 v) How does sodium zeolite soften water? (Marks 2)
- Q.4 vi) Define blister copper. (Marks 2)
- Q.4 vii) List the raw materials used in Solvay's process. (Marks 2)
- Q.4 viii) Write the names of residual oil fractions. (Marks 2)
- Q.5 a) Define reversible and irreversible reactions and give examples. (Marks 5)
- Q.5 b) Define salt and write three important characteristics of salts. (Marks 4)
- Q.6 a) Write any five physical properties of alkanes. (Marks 5)
- Q.6 b) Write any four commercial uses of enzymes. (Marks 4)
- Q.7 a) How sodium carbonate is manufactured by Solvay's process? (Marks 5)
- Q.7 b) Give four properties of water. (Marks 4)

# FAISALABAD BOARD

## GRADE 10

## CHEMISTRY

## 2019 GROUP 2

Lesson 1 of 32

Section-A (MCQs)

i) Substitution reactions is the characteristic of: (Mark 1)

- A. Alkanes
- B. Alkenes
- C. Alkynes
- D. Ethene

Answer:

A. Alkanes

ii) The functional group -COOH is found in: (Mark 1)

- A. Carboxylic
- B. Aldehydes
- C. Alecohols
- D. Esters

Answer:

A. Carboxylic

iii) A reaction between an acid and a base produces: (Mark 1)

- A. Salt and gas
- B. salt and base
- C. Salt and acid
- D. Salt and water

Answer:

D. Salt and water

iv) The colour of  $\text{Ca}(\text{OH})_2$  is: (Mark 1)

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

Answer:

C. White

v) A reverse reaction is one:

(Mark 1)

A. Which proceeds from left to right

B. In which reactants react to form products

C. Slow down gradually

D. Speed up gradually

Answer:

D. Speed up gradually

vi) Active mass is generally expressed as:

(Mark 1)

A. ()

B. {}

C. []

D.  $\oplus$

Answer:

C. []

vii) When  $\text{NaHCO}_3$  is heated it forms:

(Mark 1)

A.  $\text{CO}_2$

B.  $\text{Ca}(\text{OH})_2$

C.  $\text{CaCO}_3$

D.  $\text{CaO}$

Answer:

A.  $\text{CO}_2$

viii) Specific heat capacity of water is:

(Mark 1)

A.  $4.2\text{KJg}^{-1}\text{K}^{-1}$

B.  $4.2\text{Jg}^{-1}\text{K}^{-1}$

C.  $2.4\text{KJg}^{-1}\text{K}^{-1}$

D.  $2.4\text{Jg}^{-1}\text{K}^{-1}$

Answer:

B.  $4.2\text{Jg}^{-1}\text{K}^{-1}$

ix) Percentage portion of ground water is:

(Mark 1)

A. 2.1%

B. 0.6%

C. 0.2%

D. 97%

Answer:

B. 0.6%

x) About 99% atmosphere's mass lies within:

(Mark 1)

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

Answer:

A. 30Km

xi) Thousands of amino acids polymerize to form: (Mark 1)

- A. Carbohydrates
- B. Proteins
- C. Lipids
- D. Vitamins

Answer:

B. Proteins

xii) Formula of palmitic acid is: (Mark 1)

- A.  $C_{14}H_{29}COOH$
- B.  $C_{14}H_{31}COOH$
- C.  $C_{15}H_{31}COOH$
- D.  $C_{15}H_{29}COOH$

Answer:

C.  $C_{15}H_{31}COOH$

Q.2 i) What is meant by irreversible reactions? (Marks 2)

Q.2 ii) Write one difference between forward and reverse reaction.  
(Marks 2)

Q.2 iii) How is dynamic equilibrium established? (Marks 2)

Q.2 iv) How direction of reaction can be predicted? (Marks 2)

Q.2 v) What is the purpose of pH meter? (Marks 2)

Q.2 vi) State Lowry Bronsted acid-base concept. (Marks 2)

Q.2 vii) Write two uses of sulphuric acid. (Marks 2)

Q.2 viii) What are mixed salts? Give an example. (Marks 2)

Q.3 i) How is coal formed? (Marks 2)

Q.3 ii) Define condensed formula with one example. (Marks 2)

Q.3 iii) Write two uses of organic compound. (Marks 2)

Q.3 iv) Why are the alkanes called paraffins? (Marks 2)

- Q.3 v) What is combustion? Give chemical equation. (Marks 2)
- Q.3 vi) What is the difference between glucose and fructose?  
(Marks 2)
- Q.3 vii) What are the functions of DNA? (Marks 2)
- Q.3 viii) What are disadvantages of fat-soluble vitamins. (Marks 2)
- Q.4 i) How is acid rain formed? (Marks 2)
- Q.4 ii) Write two effects of ozone depletion. (Marks 2)
- Q.4 iii) Define global warming. (Marks 2)
- Q.4 iv) Write the cause and effects of fluorosis. (Marks 2)
- Q.4 v) How can temporary hardness of water be removed? (Marks 2)
- Q.4 vi) Write two uses of petroleum ether. (Marks 2)
- Q.4 vii) How can granulation of liquid urea be done? (Marks 2)
- Q.4 viii) What is the froth flotation process? (Marks 2)
- Q.5 a) Write five macroscopic properties of a dynamic equilibrium.  
(Marks 5)
- Q.5 b) Find out the pH and pOH of 0.001M solution of KOH. (Marks 4)
- Q.6 a) Write five uses of ethylene. (Marks 5)
- Q.6 b) What are nucleic acids? Write a note on deoxyribonucleic acid.  
(Marks 4)
- Q.7 a) Explain the importance and status of urea. (Marks 5)
- Q.7 b) Explain four important water-borne diseases. How can these be prevented?  
(Marks 4)