Sahaj Adhyayan (सहज अध्ययन)

जर हे Practice Question Papers तुम्हाला खरंच फायदेशीर वाटत असतील तर तुमच्या सर्व मित्र मैत्रिणींना पाठवा.

त्यांना देखील ह्या सर्वांचा अभ्यासासाठी फायदा होऊ द्या.

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जर तुमच्या जवळ कोणत्याही इयत्तेच्या, कोणत्याही परीक्षेच्या, कोणत्याही विषयाचे, Question Papers असतील

तर ते आम्हाला WhatsApp वर पाठवा,

इतर विद्यार्थी मित्रांना त्या सर्वांचा उपयोग होईल.

First Term Exam 2021-2022

Std. XI Science
Subject: Chemistry

Marks: 50
Time: 2:00 Hrs.

Section A

Q. 1 Select and write correct answers of the following (7 M)

1) Avogadro's Number is the number of particles present in.....

a) 1 molecule b) 1 atom c) 1 kg d) 1 mole

2) SI Unit of mass is .....

a) kg b) mol c) pound d) m^3

3) Which of the following species can form hydrogen bond with water

a) CH_4 b) H-C-OH c) Na^+ d) C_6H_6

4) Which of the following compound is a not closed chain compound

a) Methane b) cyclopropane c) cyclobutane d)cyclohexane

5) The IUPAC name of following compound is CH_3-CH(CH_3)-CH_3

a) 2-methylpropane b) propane c) 2-methylbutane d) butane

6) The functional group of aldehyde is.....

a) R-C-H b) R-C-OH c) R-C-R d) R-OH

7) The unit of viscosity is.....

a) dynes b) Newton c) gram d) poise

Q. 2 Answer the following questions (7 M)

i. Find the molecular mass of carbon dioxide (CO_2)

ii. How many particles are present in 1 mole of a substance?

iii. Define limiting reagent.

iv. Convert the following temperature from degree celcius to Kelvin 273°C

v. Write the structure of 2-methyl butane

vi. Write the bond line formula of pentane

vii. Complete the following reaction

$N_2 + H_2 \longrightarrow ?$

Section B

Attempt any eight **(16 M)**

Q.3 Write note on homologous series.

Q.4 What is the functional group of alcohol and phenol?

Q.5 State and explain law of conservation of mass.

Q.6 Find the formula mass of i) CH_4 ii) H_2O

Q.7 A solution is prepared by adding 2g of a substance A to 18g of water. Calculate the mass percent of the solute.

Q.8 Define i) Molality ii) Molarity

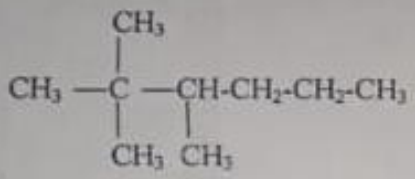
Q.9 What is hydrogen bonding? Explain with suitable example.

Q.10 The volume occupied by a given mass of gas at 298K is 25ml at 1 atm pressure. Calculate the volume of the gas if pressure is increased to 1.25 atmospheres at const. temperature.

Q.11 Derive ideal gas equation.

Q.12 Define i) Electrophile ii) Nucleophile

Q.13 Identify primary, secondary, tertiary and quaternary carbon in the following compounds.



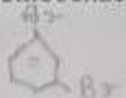
Section C

Attempt any four **(12)**

Q.14 Define isomerism and explain i) chain isomerism ii)functional group isomerism

Q.15 Write the structure of following compound

i) O-Dichlorobenzene ii) m-dibromobenzene iii) P-Dichlorobenzene



Q.16 Calculate the number of moles & molecules of urea present in 5.6g of urea (NH_2-C-NH_2)

Q.17 Perform the following operations $3.5 \times 10^{-2} - 5.8 \times 10^{-3}$

Q.18 Derive Boyles law in terms of density in term of gas.

Q.19 How many significant figures are present in the following measurement

i) 4.065 ii) 0.32 iii) 57.98

Section D

Attempt any two (08)

Q.20 Express the following quantities in exponential term

i) 0.0003498 ii) 235.4678 iii) 70000.0 iv) 1569.00

Q.21 Write the IUPAC name of following compounds

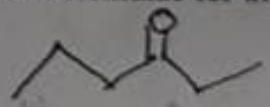
i)  cyclohexene

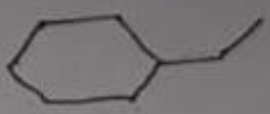
ii)  cyclopentane

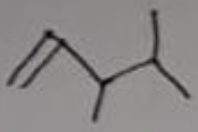
iii)  cyclopropane

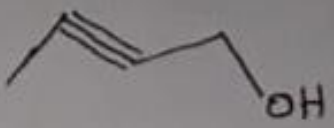
iv)  -cyclo

Q.22 Write dash formulae for the following bond line formulae

(i) 

(ii) 

(iii) 

(iv) 

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