O.P.JINDAL SCHOOL,SAVITRINAGAR

PERIODIC TEST –III(Round-II) (2024-25) SET-A

CLASS-XI **MAX.MARKS-20**

SUBJECT-CHEMISTRY **MAX.TIME-1HOUR**

General Instruction:-

(i)All questions are compulsory .There are 12 questions in this question paper with internal choice.
(ii)**SECTION –A:**Question numbers 1 to 6 are MCQs , carrying 1 mark each.
(iii)**SECTION –B:**Question numbers 7 to10 are short answer questions carrying 2 marks each.
(iv)**SECTION –C:**Question numbers 11 and 12 are long questions carrying 3markseach.
(v)Use of calculator is not permitted. However, you may use log tables, if necessary.

Q-1. Correct IUPAC name for $H_3C - \underset{C_2H_5}{\underset{|}{CH}} - \underset{C_2H_5}{\underset{|}{CH}} - CH_3$

(a)2-ethyl-3-methylpentane (b)3,4-dimethylhexane
(c)2-sec-butylbutane (d)2,3-diethylbutane

Q-2. Choose the correct order of stability of carbocation using the concept of hyperconjuction.

(I) $(CH_3)_3\overset{+}{C}$ (II) $(CH_3)_2\overset{+}{C}H$ (III)$CH_3\overset{+}{C}H_2$ (IV) $\overset{+}{C}H_3$

(a)I < II < III < IV (b)II < I < III < IV
(c) IV< III < II < I (d)III < IV < I < II

Q-3 Sodalime is a mixture of

(a)$NaOH + CaO$ (b)$NaOH + Mg(OH)_2$
(c)$NaOH + Ca(OH)_2$ (d)$NaOH + MgO$

Q-4. The correct decreasing order of boiling point of the following is :

(I)n-pentane (II)2-methylbutane (III)2,2-dimethylpropane

(a)I > II >III (b)III > II > I
(c)II > I > III (d) II >III > I

Q-5. The IUPAC name for :

$$CH_3 - \overset{O}{\overset{\|}{C}} - CH_2 - \overset{O}{\overset{\|}{C}} - OH \text{ is}$$

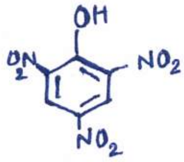
(a)1-hydroxypentane-1,4 –dione (b)1,4-dioxopentanol
(c)1-carboxybutan-3-one (d)4-oxopentanoicacid

Q-6. . The number of position isomers of an alcohol with molecular formula , C_3H_8O is:

(a)2 (b)3
(c)4 (d)8

Q-7. Write the IUPAC name of the following :

(i) 

(ii) 

Q-8. Write the resonating structures of the following :

(i)Phenol

(ii) Nitrobenzene

Q-9. Complete and balance the following reactions:

(i)$CH_4 + O_2 \xrightarrow{Cu}$

(ii) $CH_3 - CH_2 - CH_2 - CH_2 - CH_2 - CH_3 \xrightarrow{V_2O_5}$

Q-10. Write the geometrical isomers of but-2-ene.Which isomers of but-2-ene has more B.P. and why?

Q-11. Write short notes on the following :

(i)Decrboxylation reaction

(ii)Wurtz reaction

Q-12.Complete the following reaction and explain the mechanism involved in this reaction.

$CH_3 - CH = CH_2 + HBr \longrightarrow$