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TARGET : NEET (UG) 2024

Course : SARANSH (Youtube Live CRASH COURSE)

P/I-CHEMISTRY

DPP

DAILY PRACTICE PROBLEMS

DPP NO. 4

Organic Chemistry : Some Basic Principles and Techniques

DPP No. : 4

SR. No.	DPPs Qs. Details		Marking Scheme				Time Details	
	Type of Questions	Code	Full Marks	(–)ve Marks	Total Ques.	Total Marks	Qs Time (in Min.) for Each Qs	Max. Time (in Min.)
1	MULTIPLE CHOICE QUESTION (ONLY ONE CORRECT OPTION)	MCQ	4	–1	10	40	1	10
	Total				**10**	**40**		**10**

1. Which of the following carbocation will show highest number of hyperconjugation structures?

(1) $CH_3 - \overset{\oplus}{C}H_2$

(2) $C_6H_5 - \overset{\oplus}{C}H_2$

(3) $CH_3 - \underset{CH_3}{\overset{CH_3}{\overset{|}{\underset{|}{C^{\oplus}}}}}$

(4) $C_2H_5 - \underset{C_2H_5}{\overset{C_2H_5}{\overset{|}{\underset{|}{C^{\oplus}}}}}$

2. Resonance energy is :

(1) equal to the energy of resonance hybrid

(2) equal to the energy of most stable canonical structure

(3) equal to the energy of least stable canonical structure

(4) equal to the difference in energies of the most stable canonical structure and resonance hybrid

3. Decreasing + m-power of given group is :

(**I**) – NR_2 (**II**) –OCOR

(**III**) –NHCOR (**IV**) –Ph

(1) **I > III > IV > II** (2) **I > III > II > IV**

(3) **III > I > II > IV** (4) **II > I > IV > III**

4. Cyclohexa-1,3-diene and cyclohexa-1,4-diene are :

(1) Chain isomer (2) Positions isomers

(3) Functional isomer (4) Meta isomer

5. In Kjeldahl's method, nitrogen present is estimated as :

(1) N_2 (2) NO (3) NH_3 (4) NO_2

6. In Kjeldahl's method, during digestion, the nitrogen of the organic compound is converted into :

(1) NH_4Cl (2) $(NH_4)_2SO_4$

(3) $NH_4\ NO_3$ (4) NH_3

7. 0.50 g of an organic compound was Kjeldahlised and the NH_3 evolved was absorbed in 50 ml of 0.5 M H_2SO_4. The residual acid required 60 Ml of 0.5 M NaOH. The percentage of nitrogen in the organic compound is :

(1) 14 (2) 28

(3) 56 (4) 42.

8. In organic compounds, phosphorus is estimated as :

(1) $Mg_2P_2O_7$ (2) $Mg(NH_4)PO_4$

(3) $Mg_3(PO_4)_2$ (4) H_3PO_4

9. In Carius tube, the compound $ClCH_2COOH$ was heated with fuming HNO_3 and $AgNO_3$. After filtration and washing, a white ppt. was formed. The ppt. is :

(1) AgCl (2) $AgNO_3$

(3) Ag_2SO_4 (4) $ClCH_2COOAg$.

10. In Lassaigne's test, the organic compound is fused with a piece of sodium metal in order to

(1) increase the ionization of the compound

(2) decrease the melting point of the compound

(3) increase the reactivity of the compound

(4) convert the covalent compound into a mixture of ionic compounds.