BK BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
SENIOR SECONDARY CO-ED DAY CUM BOYS' RESIDENTIAL SCHOOL

PERIODIC TEST-2 2024-25

CHEMISTRY (043)

ANSWER KEY

Class : XI **Duration: 1 Hr**
Sub : CHEMISTRY **Max. Marks: 25**

1. (c)zero

2. (b) zero

3. Which of the following is an extensive property 1

(a) Molar heat capacity (b) Temperature (c) Enthalpy (d) All of these.

4. (c) free radical

5. (c) $CH\equiv CH > CH_2=CH_2 > CH_3-C\equiv CH > CH_3-CH_3$

6. Predict the entropy change in- 2

(i) Decreases (ii) Increases

7. The reaction for formation of one mole of ammonia is ½ N2(g) + 3/2 H2(g)⟶NH3(g) 2

The standard enthalpy of formation of ammonia is Δ fH 0 NH3(g)= -92.4= 46.2 KJmol-1

8. structure of the following compounds 2

(a) CH3CH2CH=CHCH2COOH (b) CH3 CH(Cl)(CH3)CH2CH2OH

9. Give the number of sigma and pi bond in the following molecules 2

(a) 6 SIGMA and 1 Pi (b) 8 sigma and 1 pi

10. Explain the following term 3

(a) Two type of effect + I effect and – I donating and attracting group should be mentioned
(b) Two types of + R and -R effect phenol and Nitrobenzene example should be explained.

11.Write the IUPAC name of the following compounds: 3

(a)Butan-2 ol (b) Ethanal (c) butanoic acid

12. $\Delta H = 400$ kJ mol^{-1}

and $\Delta S = 0.2$ kJ K^{-1} mol^{-1}

$\Delta G = \Delta H - T\Delta S$

ΔG should be taken -ve for the reaction 3

13. Explain the following terms with examples 3

a) Intensive Properties Properties of the system which depend only on the nature of matter but not on the quantity of matter are called Intensive properties, e.g., pressure, temperature, specific heat, etc (b) Extensive Properties Properties of the system which are dependent on the quantity of matter are called extensive properties, e.g., internal energy, volume, enthalpy, etc.