

B.E. (Chemical) 2nd year (Physical Chemistry)

MST 2

Max. Marks:20

Time 1h

- Q1 1. Write the BET equation, defining all the terms . Discuss its importance. (4)
2. How does ΔG , ΔH and ΔS vary in the process of adsorption. (2)
3. Derive the Michaelis Menton equation . Express it graphically. (4)

(CO 3 Learn to apply various adsorption models and basics of biochemical catalysis)

- Q2 1. A brass sample composed of 20% zinc and 80% copper by mass melts at 1268 K. Pure copper melts at 1357K. What is the molal freezing point constant for copper. (atomic mass of zinc is 65 gm/mole) (5)
2. Give the thermodynamic derivation of Raoult's law. (5)

(CO 1 Learn to make and understand properties of ideal and non ideal solution)