

Gurudas College

Internal Assessment- 2020

Bio-chemistry(H)

Semester-III

Subject-BCMA

Paper-CC5

Answer the following questions. (Each question carries **Equal** marks)

- In a tall bath of oil of viscosity 54 poise and density 1.8gm/cc, steel balls of radius 2mm when allowed to fall down, the column of oil acquires uniform velocity of 1cm/sec. What is the density of steel ball?
(A) 8gm/cc (B) 2gm/cc (C) 4gm/cc (D) 12gm/cc
- In case a solute associates in solution, the Van't Hoff factor,
(A) $i > 1$ (B) $i = 1$ (C) $i < 1$ (D) none of these
- Van't Hoff factor for a dilute solution of $K_3[Fe(CN)_6]$ is
(A) 4 (B) 0.25 (C) 0.50 (D) 5
- The S.I. unit of viscosity co-efficient is
(A) Pascal second (B) Poise (C) Newton meter² (D) Newton meter⁻¹
- Isotonic solutions have same
(A) Molar concentration (B) Molality (C) Normality (D) none of these
- Bathochromic Shift means
(a) A shift toward lower wavelength
(b) A shift toward lower intensity
(c) A shift toward higher wavelength
(d) A shift toward higher intensity
- Arrange the following compound in increasing order of λ_{max} value.
(a) 1,3-butadiene > Benzene > Naphthalene
(b) Benzene > 1,3-butadiene > Naphthalene

- (c) Naphthalene > Benzene > 1,3-butadiene
(d) Benzene > Naphthalene > 1,3-butadiene

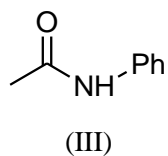
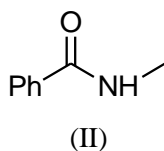
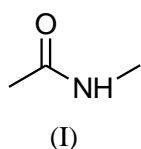
8. Which compound shows Hypsochromic Shift under acidic medium?

- (a) Phenol
(b) p-Cresol
(c) Anisole
(d) Aniline

9. Hypochromic Shift means

- (a) A shift toward lower wavelength
(b) A shift toward lower intensity
(c) A shift toward higher wavelength
(d) A shift toward higher intensity

10. The correct order of carbonyl stretching frequency in the IR spectra of the following compounds



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