

R9

Code: 9A 23302

B.Tech II Year I Semester (R09) Supplementary Examinations, May 2012

CELL BIOLOGY

(Biotechnology)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 Explain in detail the structure and functions of mitochondria.
- 2 (a) Describe briefly the structure of prokaryotic cell.
(b) Explain P-type and V-type pumps.
(c) Describe briefly microtubules of microfilaments.
- 3 (a) Write the characteristics of cancer cells.
(b) Explain receptors associated tyrosine kinases.
(c) Describe cell division in yeast cell.
- 4 Given an account of embryonic and adult stem cells. Add a note on its biological importance.
- 5 (a) Write briefly on structure and functions of Golgi apparatus.
(b) Explain the role of chemical carcinogens in causing cancers. Add a note on cancer therapy.
- 6 (a) Explain the role of peptide hormones in signal transduction.
(b) Explain briefly of chemical carcinogens in causing cancers.
(c) Describe briefly the structures and function of chloroplast.
- 7 Describe in detail the structure and functions of plasma membrane.
- 8 (a) Explain briefly vacuolar membrane ATP dependent proton pumps.
(b) Describe cell theory.
(c) Write the general characteristic of cell differentiation.
