

Code: 9A23302

B.Tech II Year I Semester (R09) Supplementary Examinations June 2017

**CELL BIOLOGY**

(Biotechnology)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 Explain in detail the structure and functions of Prokaryotic and Eukaryotic cells.
- 2 Write short notes on the following:
  - (a) Cytoskeleton.
  - (b) Structure and function of plasma membrane.
- 3 Write short notes on the following:
  - (a) Mitochondria.
  - (b) Protein glycosylation.
- 4 Compare and Contrast:
  - (a) Endocytosis and exocytosis.
  - (b) Passive and active transport.
- 5 Explain in detail the different stages of cell cycle and its significance.
- 6
  - (a) Differentiate unicellular with multicellular organism.
  - (b) Give an account on Embryonic stem cells.
- 7 Write briefly the cell signaling mechanism.
- 8 Write short notes on:
  - (a) Apoptosis.
  - (b) Characteristics of cancer cells & tumor types.

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