Code No: 07A32303 **R07** **Set No. 2**

**II B.Tech I Semester Examinations,November 2010**
**CELL BIOLOGY**
**Bio-Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

⋆ ⋆ ⋆ ⋆ ⋆

1. Discuss various transport systems adopted by prokaryotic cells. Which molecules utilize these systems. [16]
2. (a) Mention two differences between endocrine and synaptic signaling.
   (b) Explain their mechanism of action using suitable diagrammatic representation [6+10]
3. List some generalized functions of cytoskeleton. Illustrate with diagram. [16]
4. Describe in detail the major cell cycle regulatory proteins and comment on their functions? [16]
5. Sketch the pathway of protein synthesis and targeting. [16]
6. List out the properties of cells, add an account on their structure and function. [16]
7. Explain in detail the role of maternal cytoplasmic determinants in mesoderm patterning. [16]
8. Explain how in a population of telomere deficient cells, the loss of p53 facilitates the development of cancer? [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A32303 **R07** **Set No. 4**

**II B.Tech I Semester Examinations,November 2010**
**CELL BIOLOGY**
**Bio-Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Mention two differences between endocrine and synaptic signaling.
   (b) Explain their mechanism of action using suitable diagrammatic representation [6+10]

2. Describe in detail the major cell cycle regulatory proteins and comment on their functions? [16]

3. List some generalized functions of cytoskeleton. Illustrate with diagram. [16]

4. Sketch the pathway of protein synthesis and targeting. [16]

5. Explain how in a population of telomere deficient cells, the loss of p53 facilitates the development of cancer? [16]

6. Explain in detail the role of maternal cytoplasmic determinants in mesoderm patterning. [16]

7. List out the properties of cells, add an account on their structure and function. [16]

8. Discuss various transport systems adopted by prokaryotic cells. Which molecules utilize these systems. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A32303 **R07** **Set No. 1**

**II B.Tech I Semester Examinations,November 2010**
**CELL BIOLOGY**
**Bio-Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

⋆ ⋆ ⋆ ⋆ ⋆

1. List some generalized functions of cytoskeleton. Illustrate with diagram. [16]
2. Explain how in a population of telomere deficient cells, the loss of p53 facilitates the development of cancer? [16]
3. (a) Mention two differences between endocrine and synaptic signaling.
   (b) Explain their mechanism of action using suitable diagrammatic representation [6+10]
4. Explain in detail the role of maternal cytoplasmic determinants in mesoderm patterning. [16]
5. Discuss various transport systems adopted by prokaryotic cells. Which molecules utilize these systems. [16]
6. Describe in detail the major cell cycle regulatory proteins and comment on their functions? [16]
7. Sketch the pathway of protein synthesis and targeting. [16]
8. List out the properties of cells, add an account on their structure and function. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A32303 **R07** **Set No. 3**

**II B.Tech I Semester Examinations,November 2010**
**CELL BIOLOGY**
**Bio-Technology**

**Time: 3 hours** **Max Marks: 80**

**Answer any FIVE Questions**
**All Questions carry equal marks**

⋆ ⋆ ⋆ ⋆ ⋆

1. (a) Mention two differences between endocrine and synaptic signaling.
   (b) Explain their mechanism of action using suitable diagrammatic representation [6+10]
2. List some generalized functions of cytoskeleton. Illustrate with diagram. [16]
3. Discuss various transport systems adopted by prokaryotic cells. Which molecules utilize these systems. [16]
4. Describe in detail the major cell cycle regulatory proteins and comment on their functions? [16]
5. Explain in detail the role of maternal cytoplasmic determinants in mesoderm patterning. [16]
6. Sketch the pathway of protein synthesis and targeting. [16]
7. List out the properties of cells, add an account on their structure and function. [16]
8. Explain how in a population of telomere deficient cells, the loss of p53 facilitates the development of cancer? [16]

⋆ ⋆ ⋆ ⋆ ⋆