Code No: R05212303 **R05** **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

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1. Describe the structural features cell wall in prokaryotic and eukaryotic cells. [16]
2. How are blood cells formed through stem cell concept? [16]
3. Why do cells divide? How do cells know when they are becoming too large and need to divide? [16]
4. Using suitable examples explain what are micro filaments. [16]
5. What are "Protein Kinases", "Phosphatases" and "Phosphodiesterases" and their role in signal transduction? [16]
6. Explain the difference between passive transport and active transport. Describe the action of the sodium-potassium pump. [16]
7. Explain how the nucleolus, ribosomes, endoplasmic reticulum, and Golgi apparatus function together in protein synthesis. [16]
8. Write short notes on:
   (a) Membrane bound receptors
   (b) Nuclear receptors. [8+8]

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Code No: R05212303 **R05** **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. Using suitable examples explain what are micro filaments. [16]
2. Why do cells divide? How do cells know when they are becoming too large and need to divide? [16]
3. Explain the difference between passive transport and active transport. Describe the action of the sodium-potassium pump. [16]
4. How are blood cells formed through stem cell concept? [16]
5. Describe the structural features cell wall in prokaryotic and eukaryotic cells. [16]
6. Explain how the nucleolus, ribosomes, endoplasmic reticulum, and Golgi apparatus function together in protein synthesis. [16]
7. Write short notes on:
   (a) Membrane bound receptors
   (b) Nuclear receptors. [8+8]
8. What are "Protein Kinases", "Phosphatases" and "Phosphodiesterases" and their role in signal transduction? [16]

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Code No: R05212303 **R05** **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. Explain the difference between passive transport and active transport. Describe the action of the sodium-potassium pump. [16]
2. Using suitable examples explain what are micro filaments. [16]
3. Explain how the nucleolus, ribosomes, endoplasmic reticulum, and Golgi apparatus function together in protein synthesis. [16]
4. Why do cells divide? How do cells know when they are becoming too large and need to divide? [16]
5. Write short notes on:
   (a) Membrane bound receptors
   (b) Nuclear receptors. [8+8]
6. Describe the structural features cell wall in prokaryotic and eukaryotic cells. [16]
7. How are blood cells formed through stem cell concept? [16]
8. What are "Protein Kinases", "Phosphatases" and "Phosphodiesterases" and their role in signal transduction? [16]

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Code No: R05212303 **R05** **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

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1. Explain how the nucleolus, ribosomes, endoplasmic reticulum, and Golgi apparatus function together in protein synthesis. [16]
2. Explain the difference between passive transport and active transport. Describe the action of the sodium-potassium pump. [16]
3. Write short notes on:
   (a) Membrane bound receptors
   (b) Nuclear receptors. [8+8]
4. How are blood cells formed through stem cell concept? [16]
5. What are "Protein Kinases", "Phosphatases" and "Phosphodiesterases" and their role in signal transduction? [16]
6. Describe the structural features cell wall in prokaryotic and eukaryotic cells. [16]
7. Why do cells divide? How do cells know when they are becoming too large and need to divide? [16]
8. Using suitable examples explain what are micro filaments. [16]

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