

Code No: 07A32303

**R07**

**Set No. 2**

II B.Tech I Semester Examinations, MAY 2011  
CELL BIOLOGY  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. What are homeotic selector genes? How do they play a role in patterning of the antero-posterior axis? [16]
2. (a) What are E-cadherins?  
(b) Explain how E-cadherin gene can function as a tumor suppressor gene? [5+11]
3. Write about the structure, motion and origin of cilia and flagella. [16]
4. (a) Name six signaling ligands and their respective receptors that act via receptor tyrosine kinases?  
(b) Comment on the responses generated in these diverse cell types following receptor tyrosine kinase activation? [10+6]
5. Describe in detail the major cell cycle regulatory proteins and comment on their functions? [16]
6. Describe the process by which molecules get transported across biological membranes. [16]
7. Explain the structure of DNA with a suitable diagram. [16]
8. Write a short note on:
  - (a) Cell Theory
  - (b) Prokaryotic Cell. [16]

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R07

Set No. 4

II B.Tech I Semester Examinations, MAY 2011  
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 in detail the major cell cycle regulatory proteins and comment on their functions? [16]
2. Describe the process by which molecules get transported across biological membranes. [16]
3. (a) Name six signaling ligands and their respective receptors that act via receptor tyrosine kinases?  
(b) Comment on the responses generated in these diverse cell types following receptor tyrosine kinase activation? [10+6]
4. Explain the structure of DNA with a suitable diagram. [16]
5. Write a short note on:  
(a) Cell Theory  
(b) Prokaryotic Cell. [16]
6. (a) What are E-cadherins?  
(b) Explain how E-cadherin gene can function as a tumor suppressor gene? [5+11]
7. Write about the structure, motion and origin of cilia and flagella. [16]
8. What are homeotic selector genes? How do they play a role in patterning of the antero-posterior axis? [16]

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R07

Set No. 1

II B.Tech I Semester Examinations, MAY 2011  
CELL BIOLOGY  
Bio-Technology

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions  
All Questions carry equal marks

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1. Write about the structure, motion and origin of cilia and flagella. [16]
2. (a) Name six signaling ligands and their respective receptors that act via receptor tyrosine kinases?  
(b) Comment on the responses generated in these diverse cell types following receptor tyrosine kinase activation? [10+6]
3. (a) What are E-cadherins?  
(b) Explain how E-cadherin gene can function as a tumor suppressor gene? [5+11]
4. What are homeotic selector genes? How do they play a role in patterning of the antero-posterior axis? [16]
5. Describe in detail the major cell cycle regulatory proteins and comment on their functions? [16]
6. Write a short note on:  
(a) Cell Theory  
(b) Prokaryotic Cell. [16]
7. Describe the process by which molecules get transported across biological membranes. [16]
8. Explain the structure of DNA with a suitable diagram. [16]

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Code No: 07A32303

**R07**

**Set No. 3**

II B.Tech I Semester Examinations, MAY 2011  
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 process by which molecules get transported across biological membranes. [16]
2. (a) Name six signaling ligands and their respective receptors that act via receptor tyrosine kinases?  
(b) Comment on the responses generated in these diverse cell types following receptor tyrosine kinase activation? [10+6]
3. Write a short note on:  
(a) Cell Theory  
(b) Prokaryotic Cell. [16]
4. Describe in detail the major cell cycle regulatory proteins and comment on their functions? [16]
5. (a) What are E-cadherins?  
(b) Explain how E-cadherin gene can function as a tumor suppressor gene? [5+11]
6. Explain the structure of DNA with a suitable diagram. [16]
7. What are homeotic selector genes? How do they play a role in patterning of the antero-posterior axis? [16]
8. Write about the structure, motion and origin of cilia and flagella. [16]

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