Code No: 07A42303 **R07** **Set No. 2**

II B.Tech II Semester Examinations,April/May 2012
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Explain the functions of:
   (a) alpha amanitin
   (b) rifampicin
   (c) Cycloheximide
   (d) Actinomycin D. [4×4]
2. Discuss the composition and functions of subunits of DNA pol (III). [16]
3. Explain the mechanism of processing of various classes of RNAs in the prokaryotes. [16]
4. Define point mutation and distinguish between substitutions and frame-shift mutations. [16]
5. Write on the 2^0 structures of DNA and its analysis. [16]
6. Explain about enzymes that have important function at the replication fork? [16]
7. What are the several types of transfer sequences postulated in explaining post-translational translocation of polypeptides? [16]
8. What is meant by spontaneous mutagenesis? Explain the three types of oligonucleotide based mutagenesis. [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A42303 **R07** **Set No. 4**

II B.Tech II Semester Examinations,April/May 2012
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Discuss the composition and functions of subunits of DNA pol (III). [16]
2. Define point mutation and distinguish between substitutions and frame-shift mutations. [16]
3. Explain the mechanism of processing of various classes of RNAs in the prokaryotes. [16]
4. Write on the 2^0 structures of DNA and its analysis. [16]
5. What are the several types of transfer sequences postulated in explaining post-translational translocation of polypeptides? [16]
6. What is meant by spontaneous mutagenesis? Explain the three types of oligonucleotide based mutagenesis. [16]
7. Explain the functions of:
   (a) alpha amanitin
   (b) rifampicin
   (c) Cycloheximide
   (d) Actinomycin D. [4×4]
8. Explain about enzymes that have important function at the replication fork? [16]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A42303 **R07** **Set No. 1**

II B.Tech II Semester Examinations,April/May 2012
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Define point mutation and distinguish between substitutions and frame-shift mutations. [16]
2. Write on the 2^0 structures of DNA and its analysis. [16]
3. Explain the mechanism of processing of various classes of RNAs in the prokaryotes. [16]
4. Discuss the composition and functions of subunits of DNA pol (III). [16]
5. What is meant by spontaneous mutagenesis? Explain the three types of oligonucleotide based mutagenesis. [16]
6. Explain about enzymes that have important function at the replication fork? [16]
7. What are the several types of transfer sequences postulated in explaining post-translational translocation of polypeptides? [16]
8. Explain the functions of:
   (a) alpha amanitin
   (b) rifampicin
   (c) Cycloheximide
   (d) Actinomycin D. [4×4]

⋆ ⋆ ⋆ ⋆ ⋆

Code No: 07A42303 **R07** **Set No. 3**

II B.Tech II Semester Examinations,April/May 2012
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Discuss the composition and functions of subunits of DNA pol (III). [16]
2. Explain the functions of:
   (a) alpha amanitin
   (b) rifampicin
   (c) Cycloheximide
   (d) Actinomycin D. [4×4]
3. Define point mutation and distinguish between substitutions and frame-shift mutations. [16]
4. Explain the mechanism of processing of various classes of RNAs in the prokaryotes. [16]
5. What is meant by spontaneous mutagenesis? Explain the three types of oligonucleotide based mutagenesis. [16]
6. Explain about enzymes that have important function at the replication fork? [16]
7. What are the several types of transfer sequences postulated in explaining post-translational translocation of polypeptides? [16]
8. Write on the 2^0 structures of DNA and its analysis. [16]

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