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

II B.Tech II Semester Examinations,APRIL 2011
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Describe the processes and role of different components in the chain elongation and chain termination steps of protein synthesis. [16]
2. Describe the structure of t-RNA and give its functional role in protein biosynthesis. [16]
3. Does intervening sequences have any protein coding sequences? If so which type of proteins produced due to them? What are their functions? [16]
4. What is the evidence that an mRNA exporter directs mRNPs through the nuclear pores? Give evidence with reference to the vertebrate system. [16]
5. Write on:
   (a) M13 DNA synthesis
   (b) ϕX174 DNA synthesis
   (c) Single strand binding proteins
   (d) Dna A protein. [4×4]
6. Correlate DNA damage with carcinogenesis. [16]
7. Discuss the procedure of preparation of nucleic acids from tissues and how are they characterized using chemical procedures? [16]
8. How telomeres are related to carcinogesis? [16]

⋆ ⋆ ⋆ ⋆ ⋆

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

II B.Tech II Semester Examinations,APRIL 2011
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Describe the structure of t-RNA and give its functional role in protein biosynthesis. [16]
2. What is the evidence that an mRNA exporter directs mRNPs through the nuclear pores? Give evidence with reference to the vertebrate system. [16]
3. Discuss the procedure of preparation of nucleic acids from tissues and how are they characterized using chemical procedures? [16]
4. Write on:
   (a) M13 DNA synthesis
   (b) ϕX174 DNA synthesis
   (c) Single strand binding proteins
   (d) Dna A protein. [4×4]
5. Describe the processes and role of different components in the chain elongation and chain termination steps of protein synthesis. [16]
6. Does intervening sequences have any protein coding sequences? If so which type of proteins produced due to them? What are their functions? [16]
7. Correlate DNA damage with carcinogenesis. [16]
8. How telomeres are related to carcinogesis? [16]

⋆ ⋆ ⋆ ⋆ ⋆

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

II B.Tech II Semester Examinations,APRIL 2011
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. What is the evidence that an mRNA exporter directs mRNPs through the nuclear pores? Give evidence with reference to the vertebrate system. [16]
2. Correlate DNA damage with carcinogenesis. [16]
3. Describe the processes and role of different components in the chain elongation and chain termination steps of protein synthesis. [16]
4. Write on:
   (a) M13 DNA synthesis
   (b) ϕX174 DNA synthesis
   (c) Single strand binding proteins
   (d) Dna A protein. [4×4]
5. How telomeres are related to carcinogesis? [16]
6. Discuss the procedure of preparation of nucleic acids from tissues and how are they characterized using chemical procedures? [16]
7. Does intervening sequences have any protein coding sequences? If so which type of proteins produced due to them? What are their functions? [16]
8. Describe the structure of t-RNA and give its functional role in protein biosynthesis. [16]

⋆ ⋆ ⋆ ⋆ ⋆

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

II B.Tech II Semester Examinations,APRIL 2011
MOLECULAR BIOLOGY
Bio-Technology

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

Answer any FIVE Questions
All Questions carry equal marks

⋆ ⋆ ⋆ ⋆ ⋆

1. Describe the structure of t-RNA and give its functional role in protein biosynthesis. [16]
2. Does intervening sequences have any protein coding sequences? If so which type of proteins produced due to them? What are their functions? [16]
3. Correlate DNA damage with carcinogenesis. [16]
4. How telomeres are related to carcinogesis? [16]
5. Describe the processes and role of different components in the chain elongation and chain termination steps of protein synthesis. [16]
6. Write on:
   (a) M13 DNA synthesis
   (b) ϕX174 DNA synthesis
   (c) Single strand binding proteins
   (d) Dna A protein. [4×4]
7. Discuss the procedure of preparation of nucleic acids from tissues and how are they characterized using chemical procedures? [16]
8. What is the evidence that an mRNA exporter directs mRNPs through the nuclear pores? Give evidence with reference to the vertebrate system. [16]

⋆ ⋆ ⋆ ⋆ ⋆