

Assignment 1

**College of Food Processing Technology and Bio-Energy
Anand Agricultural University, Anand**

Fourth Semester B.Tech. (FT)
Food Biotechnology (FQA – 241)

Choose the appropriate answer:

- 1.1 Gene transfer process carried out by bacteriophage is called _____.
A. Transcription
B. Transduction
C. Conjugation
D. Transformation
- 1.2 Identify odd one out with respect to the bacterial DNA replication process.
A. Bidirectional process
B. Semi-Conservative process
C. Starts from multiple point
D. Starts from one point
- 1.3 Which of this is important in protein synthesis process?
A. RNA polymerase
B. DNA polymerase
C. DNA
D. Ribosome
- 1.4 Process of synthesis of messenger RNA from DNA is called _____.
A. Replication
B. Transcription
C. Translation
D. Transformation
- 1.5 Which medium is used for the growth of auxotroph?
A. Complete medium
B. Minimal medium
C. Both a and b
D. None of the a and b
- 1.6 Process of synthesis of mRNA from DNA is called _____.
A. Transduction
B. Transformation
C. Translation
D. Transcription
- 1.7 In protein synthesis process, first amino acid is _____.
A. Glycine
B. Alanine
C. Methionine
D. AUG
- 1.8 Process in which any codon converted in to stop codon is called _____.
A. Missense mutation
B. Silent mutation
C. Nonsense mutation
D. Tranversion mutation
- 1.9 In which of the following gene transfer process direct contact is mandatory?
A. Transcription
B. Transduction
C. Conjugation
D. Transformation
- 1.10 Which of the following statement is not correct?
A. Conversion of cytosine into thymine is called transition mutation
B. Virus can act as a mutagen

- C. Mutation is harmful for the organism
- D. Alteration of one codon with same amino acid codon is called neutral mutation

1.11 Which of this enzyme not participate in DNA repair mechanism?

- A. DNA polymerase
- B. Photolyase
- C. Ligase
- D. Peptidyl transferase

1.12 Nutrient agar media is _____.

- A. Minimal medium
- B. Complete medium
- C. Both a and b
- D. None of the a and b

1.13 Which of this is incorrect for DNA polymerase enzyme?

- A. During replication it also repairs DNA by its 3' – 5' exonuclease activity.
- B. Require free 3' OH group
- C. It can read 3' – 5' template sequence and add its complementary sequence
- D. Like RNA pole it can also act as helicase

1.14 Any part of the DNA of donor bacteria can be transferred to the recipient bacteria through _____ process.

- A. Lytic replication
- B. Specialised transduction
- C. Generalized transduction
- D. Lysogenic replication

1.15 If initiation codon sequence is mutated than which consequences may occur?

- A. First amino acid in protein will be other than methionine
- B. Normal protein synthesis may occur if changed codon code for same amino acid
- C. Translation process do not start
- D. Depending upon the changed codon, it can lead either neutral or missense mutation.

1.16 Which of this site is not found in upstream / regulatory region?

- A. TATA box
- B. - 35 site
- C. + 1 site
- D. - 10 site

1.17 Process of synthesis of protein is called _____.

- A. Réplication
- B. Transcription
- C. Translation
- D. Transformation

1.18 Addition or deletion of just one nucleotide leads to the _____.

- A. Transition mutation
- B. Transversion mutation
- C. Frameshift mutation
- D. Silent / non sense / missense mutation

1.19 Which of this codon present in template strand of DNA called non sense codon?

- A. UAA
- B. TGA
- C. AUG
- D. UAC

1.20 Role of topoisomerase is _____.

- A. To break hydrogen bonds of dsDNA

- B. To repair mutated DNA
- C. To remove super coiling of DNA
- D. To synthesize primer

1.21 Which one is true for enzyme immobilization?

- A. Continuous production system can be used
- B. Product can be easily separated without any additional cost
- C. Immobilization permits repeated use of enzyme
- D. All of the above

1.22 Which is not one type of immobilization method?

- A. Covalent bonding
- B. Hydrogen bonding
- C. Absorption
- D. Encapsulation

1.23 Enzyme which can bind and make cut at palindromic sequence is called?

- A. Topoisomerase
- B. Restriction endonuclease
- C. Ligase
- D. Exonuclease

1.24 _____ is required to carry desired gene into host cell during cloning.

- A. Vector
- B. DNA polymerase
- C. Restriction endonuclease
- D. Exonuclease

1.25 A vector should have: i) multiple cloning site; ii) multiple ori; iii) marker gene
iv) single ori; v) gene of interest

- A. i, ii, iii
- B. i, iii, iv
- C. i, ii, iv
- D. i, iii, v