



BIOLOGY

CH-6 MOLECULAR BASIS OF INHERITANCE

Name: _____

Date: _____

Class: XII-A

- 1 What is transformation? Name the chemical which brings about transformation.
- 2 Who performed the first experiment on transformation? Name the organism
- 3 Who proved that transformation is carried out through the agency of DNA?
- 4 Who performed the experiments to prove that DNA is the genetic material in bacteriophages?
- 5 What is Chargaff's rule ?
- 6 What will be the sequence of bases as the complementary strands of DNA and mRNA if the other strand of DNA contains the sequence of AAT CAT TAC TAG GAC?
- 7 What is semiconservative replication of DNA?
- 8 Who proved that DNA replication is semiconservative?
- 9 What is replication fork?
- 10 What is RNA primer?
- 11 What is leading strand?
- 12 What is lagging strand?
- 13 What are Okazaki fragments?
- 14 In what direction does DNA replication occur?
- 15 What is central dogma?
- 16 What are cistrons?
- 17 What is a codon?
- 18 What is anticodon? transcription?
- 19 What is translation?
- 20 Name the enzyme that catalyses i) replication of DNA ii) formation of RNA.
- 21 State the reaction catalyzed by DNA polymerase, DNA ligases and RNA polymerase
- 22 Which anticodons are required to recognize the following codons?
- 23 What is the function of sigma factor in RNA polymerase?
- 24 What is sense strand?
- 25 Name the recognition sites of tRNA
- 26 What is reverse transcription?



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- 27 What is the shape of tRNA?
- 28 Differentiate between codon and anticodon.
- 29 What is genetic code?
- 30 Genetic material is DNA and not protein". How did Griffith's experiment prove it?
- 31 How did Hershy and Chase prove that DNA is the genetic material?
- 32 "Replication of DNA is semiconservative ".Give Meselson and Stahl's experiment to prove this statement



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