BHARATIYA VIDYA BHAVAN'S V.M.PUBLIC SCHOOL, VADODARA
SESSION 2017-18
Question Bank

CHAPTER-6
MOLECULAR BASIS OF INHERITANCE
VERY SHORT ANSWER QUESTIONS (1 marks each)
Q1 Write the cetral dogma of mlecular biology?
Q2 What is nucleoid?
Q3 Mention the function of DNAase.
Q4 Name amino acid residues of histone protein.
Q5 How many base pairs are their in a Nucleosome?
Q6 What is chargaff's rule?
Q7 Name causal organism for pneumonia .
Q8 Name the genetic material in TMV.
Q9 What is transformation ?
Q10 Mention the function of DNA ligase.
Q11 What is origin of replication ?
Q12 What is replication fork?
Q13 What are exons?
Q14 When does DNA replicate in the cell cycle?
Q15 What is genetic code?
Q16 What is codon ?
Q17 What is anticodon?
Q18 Define translation .
Q19 What are introns ?
Q20 What is amino acylation ?
SHORT ANSWER TYPE QUESTIONS (2 marks each)
Q1 What is meant by semi-conservatives nature of DNA replication?
Q2 Name the first two steps in DNA fingerprinting .Describe them briefly.
Q3 What is amplification with reference to DNA fingerprinting?
Q4 What are the functions of DNA polymerase?
Q5 Differenciate between codon and an anti codon .
Q6 How is elongation carried out during protein synthesis in a cell?
Q7 How is protein synthesis terminated during protein synthesis?
Q8 Write the full form of SNPs, BAC and YAC .
Q9 What do you mean by central dogma ?
Q10 What are untranslated regions (UTRs)?
SHORT ANSWER QUESTIONS (3 marks each)
Q1 Describe the dis continuous of DNA.
Q2 State the structural and functional differences between mRNA and tRNA.
Q3 Explain the steps involved in the elongation of polypeptide during its synthesis?
Q4 List the three main functions of a gene.
Q5 What is DNA fingerprinting? Give two examples of its application.
LONG ANSWER QUESTION (5 marks each)
Q1 Draw a labelled diagram of DNA molecule.
Q2 Describe the process of DNA replication.
Q3 Describe in detail the step involved in the replication of DNA.
Q4 Describe in detail the steps in the technique of DNA fingerprinting.
Q5 Bring out the salient feature of genetic code.