

**CHOITHRAM SCHOOL MANIKBAGH INDORE****CLASS XII Session: 2018-19****Subject: Biology****Allotment Date: 17.08.18****Assignment No: III****Submission Date: 22.08.18**

S.NO	QUESTION	MARKS	LEVEL
<b>OBJECTIVE TYPE</b>			
1.	How many base pairs are present in one turn of DNA helix and what is the distance between consequent base pairs in helix?	1	knowledge
2.	Mention two function of codon AUG.	1	understanding
3.	Which human chromosome has maximum number of genes and the other with least number of genes.	1	hot
<b>SHORT ANSWER TYPE II</b>			
4.	(a)Name the scientist who called t-RNA an adaptor molecule.(b) draw a clover leaf structure of RNA	2	knowledge
5.	Explain the process of Transcription in bacterium.	2	understanding
6.	The base sequence on one of the strands of DNA is ATGTCTATA. (a)Give the base of complementary strand.(b)If a RNA strand is transcribed by this strand, what would be the base sequence of RNA	2	logic
7.	Why hnRNA is required to undergo splicing?	2	hot
8.	Explain hoe Macleod, McCarty and Avery determine the biochemical nature of molecule responsible for transforming R-strain bacteris to S-strain bacteria.	3	understanding
9.	Explain the process of DNA replication with the help of diagram. In which stage of cycle does replication occurs in Eukaryotes? What would happen if cell division is not followed after DNA replication.	3	multiconceptual
10.	a) If a double stranded DNA has 20 percent of cytosine, calculate the percent of adenine in DNA. b)How histones acquire positive charge?	3	application
<b>LONG ANSWER TYPE</b>			
11.	Describe how lac operon operates both in presence and in absence of inducer in E.coli.	5	hot
12.	What is DNA Finger printing? Write the steps to carry out the process.	5	logic