

**CHOITHRAM SCHOOL MANIKBAGH INDORE**

**CLASS XII- Session: 2017-18**

Subject: Biotechnology  
Allotment Date: 14/07/2017

Assignment No: II  
Submission Date: 25/07/2017

S.NO	QUESTION	MARKS	LEVEL
1.	Define Genomics.	1	KNOWLEDGE
2.	What are SNPs?	1	KNOWLEDGE
3.	You are interested in studying the effect of specific point mutation. How will you induce specific point mutation?	1	LOGIC
<b>SA type 1</b>			
4.	What is Substilisin? How it emerge as good biological laundry detergent.	2	UNDERSTANDING
5.	How the protein expressed in normal person and cancer patient can be characterized and identified?	2	LOGIC
6.	Discuss in brief protein designing and protein engineering and its use.	2	MULTICONCEPTUAL
7.	How does the relation between gene and protein can be explained?	2	HOTS
<b>SA type 2</b>			
8.	What is gene prediction and gene counting? Write gene prediction algorithms.	3	UNDERSTANDING
9.	What is microarray technique and how it is used to differentiate a normal cell from diseased one.	3	LOGIC
10.	Why random shotgun sequencing strategy was more effective than direct sequencing method?	3	HOT
<b>LA</b>			
11.	Explain in detail how bioinformatics emerges as multidisciplinary branch of science?	5	MULTICONCEPTUAL
12.	Human genome project was completed in 10 years. What is HGP? Why it took such a long time? What strategies were followed to sequence complete genome? What difficulties were faced by scientists? What values you learned from above?	5	VALUE BASED