

CHOITHRAM SCHOOL MANIKBAGH INDORE**CLASS XII- Session: 2017-18****Subject: Biology****Allotment Date: 07/ 07/ 2017****Assignment No: II****Submission Date:15/ 07/2017**

S.No	QUESTION	MARKS	LEVEL
OBJECTIVE TYPE			
1.	Name the respective pattern of inheritance where F1 phenotype- a) does not resemble either of the two parents and is in between the two. b) resembles only one of the two parents.	1	Knowledge
2.	Differentiate between back cross and test cross.	1	Understanding
3.	Write the type of sex determination mechanisms the following crosses show. Give an example of each type. (a) Female XX with male XO (b) Female ZW with male ZZ	1	hot
SHORT ANSWER TYPE I			
4.	What is point mutation? Give one example.	2	knowledge
5.	What is co-dominance? How does it differ from incomplete dominance? State one-one.	2	understanding
6.	A pea plant with purple flowers were crossed with white flowers producing 50 plant with only purple flowers. On selfing, these plants produce 482 plants with purple flowers and 162 with white flowers. What genetic accounts for these results? Explain.	2	logic
7.	A normal vision woman, whose father is color blind marries a normal vision man. What would be the probability of her (a) sons (b) daughters to be color blind? Explain with the help of pedigree chart.	2.	Hot
SHORT ANSWER TYPE II			
8.	Write the scientific name of fruit fly. Why did Morgan prefer to work with fruit fly for his experiments. State three reasons.	3	understanding
9.	(a) Write the blood group of people with genotype $I^A I^B$. Give reasons in support of your answer. (b) In one family, the four children each have a different blood group. Their mother has blood group A and father has blood group B. Work out a cross to explain how it is possible.	3	Multi conceptual
10.	In Tarak's neighborhood there is a five year old boy who is suffering from Down's syndrome. Other children in the locality do not interact with him. Answer the following based on the information. a) Is it right not to interact with the boy? What is the cause of Down's syndrome? What value are exhibited by Tarak's neighbor.	3	Value based
LONG ANSWER TYPE			
11.	With the help of Punnett square, find the percentage of homozygous tall in a F_2 population involving a true breeding tall and true breeding dwarf pea plant.	5	Logic
12.	ABO blood grouping in human population exhibits four possible phenotypes from six different genotypes. Explain the different mechanism of inheritance involved in exhibiting the possibility of four phenotypes and six genotypes.	5	Hot