

Govt. Degree College, Basohli

Internal Assignment Test of Semester IV (Session 2019-20) for Promotion to Semester V

Subject: Zoology

MM: 30

Note: All questions are compulsory. The answer should be in detail covering diagrams/ figures/ etc. if required and based on more than one source for high scoring. A medium sized notebook (separate for each subject) shall be used for writing the assignment test and all the assignments as well as **Practical Notebooks in case of Science Subjects** relating to one student shall be **submitted together in the college in one visit** latest by 31/08/2020. (Students shall strictly follow the COVID-19 guidelines issued by the Govt. during their visit to the college such as maintaining social distancing and wearing the face mask)

(Theory Assignment)

Section A: Long Answer Questions (7 marks each)

- Q1. Describe the Mendel's principles and laws of inheritance.
- Q2. Discuss the cytological basis and the mechanism of crossing over in detail.
- Q3. Give a detailed account of the numerical chromosomal changes.

Section B: Short Answer Questions (3 marks each)

- Q4. Discuss the phenomenon of extra chromosomal inheritance with suitable examples.
- Q5. What is linkage? Define the terms 'interference' and 'coincidence'.
- Q6. Write a note on the DNA repair mechanisms.

(Practical Assignment)

Note: All the questions are compulsory (5 marks each)

- Q1. Give a detailed account of the various stages of Mitosis. Draw a well labelled diagram of each type.
- Q2. Elaborate the concept of phylogeny of Horse in detail. Justify your answer with the help of well labelled diagram.