

ACTIVITY ID: 1903232031

B.Sc. 6th Semester (Honours) Practical Examination, October 2020
ZOOLOGY

Course ID: 62622

Course Code: SH/ZOO/602/C-14

(Course Title: Evolutionary Biology Lab)

Full Marks: 10

Time: 1 Hr

The figures in the right hand margin indicate full marks.

Candidates are required to give their answers in their own words as for as practical

1. Write down the name, identifying characters of a Petrified fossil with neat labeled diagram. (1+2+2=5)

Or

Draw a labeled diagram of any homologous organ of bird and mammal. Write down the comments. (1.5+1.5+2=5)

2. A sampling of South Indian population was found 40 individuals with homozygous curly hair, 40 individuals have heterozygous curly hair and 20 individuals have straight hair. Test statistically (Chi square) whether this sample is in equilibrium or not. Mention the reason. (Critical value of X^2 for 1 df=3.84) (4+1=5)

OR

Find whether or not the following observed distribution of phenotype in a sample of 384 *Drosophila* flies have significant goodness of fit with proposed Mendelian 9:3:3:1 distribution ($\alpha=0.05$).

Phenotype	AB	Ab	aB	ab
No. of individuals	232	76	58	18