

Swami Ramanand Teerth Marathwada University, Nanded

Semester Pattern of Practical Question Paper

B.Sc IInd year Zoology

Paper – X (Genetics, Genetic Engineering & Evolution)

Time- 4 hrs

Total Marks- 50

Q 1) Solve one problem from monohybrid cross

OR

One problem from dihybrid cross. 05

Q 2) Solve one problem based on blood group inheritance.

OR

Solve one problem based on sex-linked inheritance 05

Q 3) Solve any two problems on Interaction of genes (complementary, supplementary,
Inhibitory factors, duplicate genes) 10

Q 4) Identification of human syndromes (Any two)

OR

Preparation of temporary mount of salivary gland chromosomes of chironomous larvae.

OR

Observation of genetic characters of Drosophila. 05

Q 5) Identify and comments on as per instructions.

a) Human pedigree analysis (Any six symbols) 05

b) Sickle cell anemia –slide/photograph/charts.

OR

Problems based on Hardy-Weinberg Principle for the calculation of -----

Q 6) Identify and comments on as per instructions. 10

a) Adaptation (Any two) Aquatic, Terrestrial, Aerial/Volant, Fossorial, Desert

b) Evidence (any two) Analogous and Homologous organs, Connecting links,
Embryological evidence.

Q 7) Submission of Record Book 05

Q 8) Viva – Voce and excursion report 05