

Course Code	Course Name	Credits
26ZY153	ANIMAL PHYSIOLOGY LAB	02

Objective

To provide practical knowledge on the physiological processes and functional mechanisms operating in animal systems.

Practicals

1. Study of microscope and laboratory instruments used in physiology experiments.
2. Estimation of haemoglobin content in blood.
3. Determination of blood group and Rh factor.
4. Counting of red blood cells (RBC) using haemocytometer.
5. Counting of white blood cells (WBC) using haemocytometer.
6. Differential count of white blood cells from blood smear.
7. Estimation of blood clotting time and bleeding time.
8. Measurement of blood pressure and pulse rate.
9. Study of action of salivary amylase on starch.
10. Qualitative tests for carbohydrates, proteins and lipids.
11. Measurement of oxygen consumption in small animals/aquatic organisms.
12. Study of osmosis and diffusion using suitable membranes.
13. Observation of muscle twitch and simple muscle physiology experiments.
14. Study of effect of temperature on enzyme activity.
15. Estimation of urea or glucose in urine samples.
16. Demonstration of ECG/spirometry through charts or instruments.
17. Study of endocrine glands using charts, models and specimens.
18. Determination of body mass index (BMI) and basal metabolic rate (BMR).
19. Study of reflex action and sensory responses in humans.
20. Demonstration of kidney dialysis and osmoregulatory mechanisms using models/charts.

Students are required to perform and record at least eight experiments in the laboratory manual as part of the course requirements.