

M.Sc. ZOOLOGY
First Semester (Repeat)
ANIMAL PHYSIOLOGY & ENDOCRINOLOGY
(MSZ - 103)

Duration: 3Hrs.

Full Marks: 70

Part-A (Objective) =20
Part-B (Descriptive) =50

(PART-B: Descriptive)

Duration: 2 hrs. 40 mins.

Marks: 50

Answer any four from Question no. 2 to 8
Question no. 1 is compulsory.

1. Briefly state the mechanism of urine formation in human kidney. How does the counter current Mechanism concentrate urine? (5+5=10)
2. Write short notes on: (5×2=10)
 - (a) Blood clotting mechanism
 - (b) Cardiac cycle
3. Discuss about the Morphology of Pituitary gland. Mention about the hormone secreted by anterior and posterior pituitary gland and their functions. (5+5=10)
4. What is the role of Ca^{++} in muscle contraction? Describe briefly on the biochemical mechanism of muscle contraction. (4+6=10)
5. Explain about the feedback mechanism of Thyroid gland with suitable example. (10)
6. Explain about the Cushing's disease. Mention the sign and symptoms of the disease and its effect on other endocrine glands. (4+6=10)
7. Define Hormone. Classify hormone according to their chemical nature. Explain how transportation of hormones takes place in blood. (2+3+5=10)

8. Write short notes on the following: (*any two*)

(5×2=10)

- (a) Role of Cholecystikin (CCK) in GI tract.
- (b) Enzymes in gastric juice and pancreatic juice.
- (c) Role of HCL in digestion of food in stomach.
- (d) Transmission of nerve impulses at synapse.
