

M.Sc. (Zoology) Semester - 3 (CBCS) Examination
Oct/Nov-2022 (NEW COURSE)
Mammalian Physiology (Core (New))

Time: 2:30 Hours**Marks: 70****Instructions:**

1. All questions are compulsory.
2. Figures to the right indicate marks.

SECTION-1

Que. 1 Answer the Following. (Two short Questions)

- (A) Explain physiology of absorption. (7)
(B) Write about regulation of water balance and Blood pressure. (7)

OR

Que. 1 Answer the Following. (One long Question)**(14)**

Explain structure and functioning of kidney with diagram.

Que. 2 Answer the Following. (Two short Questions)

- (A) Describe comparative anatomy of heart with diagram. (7)
(B) Make a note on cardiac cycle, heart as a pump, neural and chemical regulation. (7)

OR

Que. 2 Answer the Following. (One long Question)**(14)**

Describe blood volume regulation, haemoglobin, immunity and haemostasis.

Que. 3 Answer any seven out of eight.**(07)**

- (1) Comment on electrolyte balance.
- (2) What is micturition?
- (3) Draw a nephron.
- (4) What will happen if waste elimination stops?
- (5) Explain ECG.
- (6) What are the functions of plasma.
- (7) Write about Bombay blood-type.
- (8) Explain haemopoiesis in short.

SECTION-2

Que. 4 Answer the Following. (Two short Questions)

- (A) Explain central and peripheral nervous system. (7)
(B) Comment on hormones and diseases. (7)

OR

Que. 4 Answer the Following. (One long Question)**(14)**

Explain endocrine glands and basic mechanism of hormone action.

Que. 5 Answer the Following. (Two short Questions)

- (A) Describe mechanism of hearing in detail. (7)
(B) Write about physiology of vision. (7)

OR

Que. 5 Answer the Following. (One long Question)**(14)**

Explain Thermoregulation in detail with suitable examples.

Que. 6 Answer any seven out of eight.**(07)**

- (1) List out some diseases caused by hormones irregularities.
- (2) Which are lipid-soluble hormones?
- (3) What is neuroendocrine regulation?
- (4) Explain feedback mechanism.
- (5) How computer oriented statistical techniques used in Research?
- (6) What is acclimatization?
- (7) Explain stress and adaptation in any animal.
- (8) Describe neural regulation of thermoregulation.
