

M.Sc. (Zoology) Semester - 3 (CBCS) Examination
OCT/NOV-2025 (AS PER SYLLABUS YEAR JUNE-2024)
Mammalian Physiology (Core (New-23))

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

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

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- Que.1 Answer any seven out of ten. (14)
- 1) What is bile? What are its functions?
 - 2) Is BMR higher in females? Justify.
 - 3) Which substances are absorbed in the stomach?
 - 4) Describe cardiac cycle?
 - 5) Name the pacemaker of the heart.
 - 6) Which factors affect urination?
 - 7) Which force drives the diffusion of gases in alveoli?
 - 8) Define tubular reabsorption.
 - 9) Name any two types of mechanoreceptors in human skin.
 - 10) What is the function of the cochlea?
- Que.2 Answer any two out of three. (14)
- (2.1) Write about digestion and absorption in the small intestine.
 - (2.2) Write short note on menstrual cycle.
 - (2.3) Explain spermatogenesis. with diagram.
- Que.3 Answer any two out of three. (14)
- (3.1) Describe the principle and significance of Electrocardiogram.
 - (3.2) Describe the cardiac cycle with its phases.
 - (3.3) Write a note on blood groups, transfusion and major clotting factors.
- Que.4 Answer any two out of three. (14)
- (4.1) Describe: filtration, reabsorption, secretion.
 - (4.2) Draw structure of kidney and explain the process of micturition in humans.
 - (4.3) Describe physiology of respiration or gas exchange & role of haemoglobin in gas transport.
- Que.5 Answer any two out of three. (14)
- (5.1) Describe the process of vision.
 - (5.2) Describe the structure of the human ear and explain the mechanism of hearing.
 - (5.3) Make a note on homeoregulation or Stress and adaptation.
