

BACHELOR OF SCIENCE (BIOTECHNOLOGY) (CBCS-2021 COURSE)
B.Sc. (Biotechnology) Sem - I : WINTER :- 2021
SUBJECT: ANIMAL SCIENCE

Day : Thursday
Date 27-01-2022

W-24849-2021

Time : 10:00 AM-01:00 PM
Max. Marks: 60

N.B.

- 1) All questions are **COMPULSORY**.
- 2) Figures to the right indicate **FULL** marks.
- 3) Draw neat and labelled diagram **WHEREVER** necessary.
- 4) Both section should be written in **SAME** answer books.

SECTION – I

- Q.1** Attempt any **FIVE** of the following. **(10)**
- a) Give classification of Euglena.
 - b) Write significance of clitellum in earthworm.
 - c) What is composition of blood plasma?
 - d) Explain dental formula of rat.
 - e) Write functions of liver in rat.
 - f) Enlist five kingdom with one example each.
 - g) Sketch and label spermatheca in earthworm.
- Q.2** Attempt any **TWO** of the following. **(10)**
- a) Explain habit, habitat and external morphology of earthworm.
 - b) With suitable diagram describe intestinal blood vascular system of earthworm.
 - c) Explain phylum protozoa with any two examples.
- Q.3** Attempt any **TWO** of the following. **(10)**
- a) With suitable labeled diagram explain digestive system of rat.
 - b) With suitable diagram describe internal structure of heart of rat.
 - c) Describe effects of hyposecretion and hypersecretion of GH and TSH.

SECTION - II

- Q.4** Attempt any **FIVE** of the following. **(10)**
- a) Define sericulture and apiculture.
 - b) Write pathogenicity of *Entamoeba histolytica*.
 - c) Define commensalism with one example.
 - d) Sketch and label sporozoite stage of *Plasmodium vivax*.
 - e) Write mode of infection of *Taenia solium*.
 - f) Explain in brief duties of worker bee.
 - g) How important is animal research in drug discovery?
- Q.5** Attempt any **TWO** of the following. **(10)**
- a) Explain in brief life cycle *Entamoeba histolytica*.
 - b) Explain in brief life cycle *Plasmodium vivax* in man.
 - c) Write mode of infection, pathogenicity and control measures in *Acaris lumbricoides*.
- Q.6** Attempt any **TWO** of the following. **(10)**
- a) Define sericulture and add note on different types of silk worms.
 - b) Explain economic and ecological importance of vermicomposting.
 - c) Write note on culture fishery and economic value of fishes.