

BACHELOR OF SCIENCE (BIOTECHNOLOGY) (CBCS - 2015 COURSE)
F.Y.B.Sc. (Biotech) Sem-I : WINTER :- 2021
SUBJECT: ANIMAL SCIENCE

Day : Tuesday
Date 1/2/2022

W-13204-2021

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

N.B.

- 1) Q.1 and Q.5 are **COMPULSORY**. Answer any **TWO** questions from Section – I and Section – II.
- 2) Figures to the right indicate **FULL** marks.
- 3) Answers to both the sections should be written in **SEPARATE** answer book.
- 4) Draw neat and labeled diagrams wherever necessary.

SECTION – I

- Q.1** Attempt any **FIVE** of the following: **(10)**
- a) Give systematic position of Amoeba.
 - b) Define sexual dimorphism. State any two sexual dimorphic characters in rat.
 - c) Enlist different types of nephridia in earthworm with their locations.
 - d) Write role of MSH and its secretion.
 - e) Sketch and label Trophozoite stage of *Entamoeba histolytica*
 - f) Define aquaculture.
- Q.2** Attempt the following questions: **(10)**
- a) With the help of labeled diagram describe nervous system of rat.
 - b) Explain female reproductive system of earthworm with well labeled diagram.
- Q.3** Attempt the following questions: **(10)**
- a) Explain digestive system of rat and add steps of digestion in small intestine.
 - b) Describe in brief histological structure of pituitary gland in mammals.
- Q.4** Write short notes on any **TWO** of the following: **(10)**
- a) Describe different types of blood cells in rat with their functions.
 - b) Describe the role of estrogen and progesterone.
 - c) Explain five kingdom approach of classification.

SECTION – II

- Q.5** Attempt any **TWO** of the following: **(10)**
- a) Explain economic and ecological importance of vermin-compositing.
 - b) Describe life cycle of *Plasmodium vivax* in man.
 - c) Write a note on the technique of sericulture.
- Q.6** Attempt the following questions: **(10)**
- a) Explain economic importance of honey bee and add a note on bee products.
 - b) Describe in brief hormones secreted by neurohypophysis.
- Q.7** Attempt the following questions; **(10)**
- a) What is pearl fishery ? Add a note on pearl formation.
 - b) Describe the role of insulin and glucagon in relation to diabetes.
- Q.8** Describe the life cycle of *Ascaris* and add a note on its mode of infection, pathogenicity and control measures. **(10)**

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