

F. Y. B. Sc. (Biotechnology) SEM – I (CBCS - 2015 COURSE) :
SUMMER - 2019

Subject: ANIMAL SCIENCE

Day: Tuesday
Date: 09/04/2019

S-2019-1368

Time: 10.00 AM TO 01.00 PM
Max. Marks: 60

N.B.:

- 1) Q1 and Q5 are compulsory.
- 2) Answer ANY TWO questions from Q 2, 3, 4 in Section I.
- 3) Answer ANY TWO questions from Q 6, 7, 8 in Section II.
- 4) Figures to right indicate FULL marks.
- 5) Answers to Both the sections to be written in *SAME* answer books.
- 6) Draw a labeled diagram WHEREVER necessary.

SECTION - 01

Q.1) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) Sketch and label dorsal view of heart of rat.
- b) Explain in brief spermatheca of earthworm.
- c) Give systematic position of euglena.
- d) Explain dental formula of rat.
- e) Role of oxytocin and ADH.
- f) Define Commensalism with one example.

Q.2) Answer the following: (5 Marks X 2 = 10)

- a) Describe male reproductive system of earthworm.
- b) Explain Systematic position, habitat and habits, and sexual dimorphism in rat.

Q.3) Explain the following: (5 Marks X 2 = 10)

- a) Define digestion? Explain role of pancreas and liver for digestion in rat.
- b) Describe cells of adenohypophysis which are responsible for production of hormones.

Q.4) Write short notes on the following: (5 Marks X 2 = 10)

- a) With suitable labeled diagram describe male urinogenital system in rat.
- b) With suitable labeled diagram explain structure of pancreas and its hormones.

SECTION - 02

Q.5) Answer the following: (ANY FIVE) (2 Marks X 5 = 10)

- a) Explain habit habitat of *Entamoeba histolytica*.
- b) Describe control of *Taenia solium*.
- c) Explain in brief mulberry species of silk worms.
- d) Write role of insulin and glucagon.
- e) Define sericulture and vermiculture.
- f) Sketch and label the structure of pituitary gland.

Q.6) Answer the following: (5 Marks X 2 = 10)

- a) Write functions of testosterone and FSH and inhibin hormone.
- b) Describe life cycle of *Bombax mori*.

Q.7) Explain the following: (5 Marks X 2 = 10)

- a) Describe significance of male and female sex hormones.
- b) Explain in brief about vermicomposting and human health.

Q.8) Write short notes on the following: (5 Marks X 2 = 10)

- a) Explain in brief use of animals and animal products for industrial applications.
- b) Explain fish as bio-control agent.
