

**F. Y. B. SC. (BIOTECHNOLOGY) SEM – I (CBCS - 2015  
COURSE) : WINTER - 2017  
SUBJECT : ANIMAL SCIENCE**

Day **Wednesday**  
Date **01/11/2017**

Time **02.00 PM TO 05.00 PM**  
Max. Marks : 60

**W-2017-0931**

**N.B.**

- 1) Q.1 and Q.5 are **COMPULSORY**. Answer any **TWO** 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 paramecium.
  - b) Explain in brief spermatheca of earthworm.
  - c) Write names of hormones secreted by neurohypophysis.
  - d) Sketch and label *Plasmodium vivax*. (sporozoite stage)
  - e) Write different uses of honey.
  - f) Give names of fresh water fishes used in aquaculture.
- Q.2** Attempt the following questions: (10)
- a) Describe structure of nephron in rat and add a note on physiology of urine formation.
  - b) Explain digestive system of earthworm.
- Q.3** Attempt the following questions: (10)
- a) Describe internal structure of heart in rat.
  - b) Define respiration. Explain respiratory tract of rat with mechanism of respiration.
- Q.4** Write short notes on any **TWO** of the following: (10)
- a) Describe in brief the functions of female sex hormone.
  - b) Write an account of feedback mechanism of hormone action.
  - c) Explain significance of classification.

**SECTION – II**

- Q.5** Attempt any **TWO** of the following: (10)
- a) Explain in brief vermicompost as the best bio-fertilizer
  - b) Describe the life cycle of *Ascaris*.
  - c) Describe preintestinal blood vascular system in earthworm.
- Q.6** Attempt the following questions: (10)
- a) Describe mode of infection, pathogenicity and control measures of *Entamoeba*.
  - b) Give economic importance of honey, pollen and histolytic propolis.
- Q.7** Attempt the following questions; (10)
- a) Describe economic importance of fish for food and leather.
  - b) Define sericulture and add a note on types of silk.
- Q.8** With the help of well labelled diagram describe the structure of pituitary gland. Explain in detail different hormones secreted by pituitary and their functions. (10)