

M.Sc. - II (Zoology) CBCS Pattern Semester-III  
**PSCZOOT09-Paper-IX - Parasitology and Immunology**

P. Pages : 1

Time : Three Hours



**GUG/W/23/11305**

Max. Marks : 80

- 
- Notes :
1. All questions are compulsory.
  2. All questions carry equal marks.
  3. Draw a well labelled diagram, wherever necessary.

**1.** Describe the Life Cycle, mode of transmission, infection and treatment of *Yersinia pestis*. **16**

**OR**

Write notes on-

- a) Life cycle, mode of transmission of *Vibrio cholera*
- b) Life cycle, mode of transmission of Influenza virus

**2.** Describe the life cycle, mode of transmission, infection and treatment of *Trypanosoma*. **16**

**OR**

Write notes on-

- a) Life cycle of Leishmania
- b) *Wuchereria*

**3.** Give an account of Innate and adaptive immunity. **16**

**OR**

Write notes on-

- a) Cells of immune system
- b) MHC molecule and genes

**4.** Write an essay on Cytokines. **16**

**OR**

Write notes on-

- a) Autoimmunity
- b) ELISA

**5.** Attempt the following- **16**

- a) Treatment of Dengue
- b) Toxins
- c) Lectin pathway
- d) Blood antigens

\*\*\*\*\*