

U.G. 4th Semester Class test (NEP)
Department of Zoology
Raghunathpur College
Course Title: Parasitology and Immunology
Course code -BZOOMAJ05C (Major)

Full Marks: 60

Time: 3 hours

1 Answer any ten questions from the following: $2 \times 10 = 20$

- a) What is Loeffler's syndrome?
- b) What is amoebuli? What is the mode of infection of *Wuchereria* sp.?
- c) Differentiate between antigenicity and immunogenicity.
- d) Explain the role of alternative splicing in immunoglobulin synthesis.
- e) Define pathogen, antigen, and immunogen.
- f) State the significance of Hybridoma technology
- g) Write two points how autoimmune disease can be prevented?
- h) What is TBRF?
- i) Differentiate mechanical and biological vectors.
- j) Distinguish T_c and T_H function.
- k) Mention two functions of IgG.
- l) Define parasitism and parasitoid.
- m) State the epidemiology of *Schistosoma haematobium*.
- n) Write the prophylaxis of *Plasmodium* sp.
- o) State the function of Antigen Presenting Cell (APC).

2. Answer any six questions from the following: $5 \times 6 = 30$

- a) Describe host-parasite relationship with suitable examples.
- b) What is an adjuvant? Explain the chemical composition of any two adjuvants and their role in vaccines. 2+3
- c) What do you mean by passive immunization? "All immunogens are antigens, but not all antigens are immunogen" — Explain. 2+3
- d) Explain the terms prevalence, epidemiology, pathogenicity, diagnosis, prophylaxis and treatment with reference to parasitic diseases. 1+1+1+0.5+0.5
- e) Briefly describe the structure of IgG molecule with suitable diagram.
- f) Write the process of T-cell activation and differentiation. 5
- g) Briefly describe the alternate pathway of complement activation. 5
- h) Write a short note on parasitic adaptations in helminths.
- i) Describe the life cycle and pathogenicity of *Trypanosoma* in human.

3. Answer any one question from the following: $1 \times 10 = 10$

- a) What are the differences between male and female *Ascaris*? Describe the life cycle, pathogenicity and medical importance of *Ascaris lumbricoides* 2+4+2+2
- b) Describe autoimmune diseases with reference to rheumatoid arthritis and Type I diabetes.
- c) Describe life cycle of *Leishmania donovani*. Describe pathogenicity, treatment of *Giardia intestinalis*. 5+2.5+2.5