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End Semester Examination of Semester-I, 2015

Subject : ZOOLOGY (PG)

Paper : ZPGT-104 (Gr A + Gr B)

Full Marks : 40

Time : 2 Hrs

*The figures in the margin indicate the marks
corresponding to the question*

*Candidates are requested to give their answers
in their own word as far as practicable.*

Illustrate the answers wherever necessary.

Use separate Answer scripts for Group A and Group B

Group A

**Answer Question No. 1 and
any one out of Question No. 2 and Question No. 3**

1. Answer any five questions : 2x5=10
- i) What is reticulo-endothelial system?
 - ii) Write a note on Toxoid vaccines.
 - iii) What is cyclopropagative type of vector?
 - iv) Write a note on VSG.
 - v) What is Gynecophoric canal?
 - vi) What is LD bodies? Where do you find it?

- vii) Write down the importance of 'Duffy antigen'.
- viii) Distinguish between 'Recrudescence' and 'Relapse'.
2. What is PKDL? Why immunity against malaria is not more effective till date? State the clinical features of malignant malaria. Mention the properties of ideal antiparasite drug. 2+4+2+2
3. What is 'Schistosomiasis'? Write down the name of various species responsible for causing human schistosomiasis along with their secondary hosts. Briefly discuss the life cycle of any one of them studied by you. 1+3+6

Group B

Answer Question No. 1 and
any one out of Question No. 2 and Question No. 3

1. Answer any five questions : 2X5=10
- i) Compare between primary and secondary lymphoid organs.
 - ii) Differentiate between a monocyte and a macrophage.
 - iii) What are the immunological consequences of blood transfusion from a B-person to B+ person?
 - iv) Characterize NK cells.
 - v) Compare agglutination with precipitation.
 - vi) MHC is polygenic and polymorphic—explain.

- vii) Mention the key differences between B-cell and T-cell epitope.
- viii) What is the role of 'Toll like receptors' in innate immunity?
2. a) Describe the structural features with proper illustration of immunoglobulin molecules those are found in the secretions.
- b) Mention at least three ways following which antibodies can protect the host against invasion by pathogens.
- c) How do the three complement pathways differ in the substances that can initiate activation? 5+3+2
3. a) Who prepared due two gene hypothesis?
- b) Briefly describe due experiment of Tonegawa and Hozami that demonstrated validity of two gene hypothesis.
- c) What do you mean by allelic exclusion and clonal expansion? 1+6+3
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