G-4/444(B)/21

Roll No. .....

M.Sc. IV Semester Examination, 2021

ZOOLOGY

Paper IV (B)

(Immunopathology and Immunotechniques)

Time : 3 Hours] [Max. Marks : 80

Note : *All questions are compulsory. Question Paper comprises of 3 sections. Section A is objective type/multiple choice questions with no internal choice. Section B is short answer type with internal choice. Section C is long answer type with internal choice.*

SECTION A **1×8=8**

(Objective Type Questions)

Note : *Answer in one words :*

1. ....., is an Antigen-Antibody reaction brought by exotoxin and antitoxin.
2. Pentamer antibody is ....., .
3. Antibody which can cross the placenta and provides protection to developing foetus is ..... .
4. Solid tumour of connective tissue is known as ....., .
5. Chronic autoimmune disease characterized by muscular weakness is ....., .

P.T.O.

6. Filariasis is caused by which parasite ..... .
7. Least rejected organ during transplantation is ..... .
8. Virus which caused Bird flu is ....., .

SECTION B **4×6=24**

(Short Answer Type Questions)

Note : *Attempt one question from each unit.*

Unit-I

1. Explain how Bacteria evade exposure to immune system.

Or

Explain immunology of malaria

Unit-II

2. Explain structure and HIV with diagram.

Or

Explain X-linked hyper IgM syndrome (X-HM).

Unit-III

3. Explain autoimmune disease with an example.

Or

Explain Graft rejection.

Unit-IV

4. Explain precipitation in the immune system.

Or

Explain Agglutination technique in Ag-Ab interaction.

SECTION C **12×4=48**

(Long Answer Type Questions)

Note : *Attempt one question from each unit.*

Unit-I

1. Describe immune response to extracellular and intracellular bacterial infection.

Or

Explain the role of Innate Immunity in controlling viral infection.

Unit-II

2. Explain severe combined immuno deficiency diseases (SCIDS)

Or

Describe deficiences of complement components.

Unit-III

3. Write down the strategies for the treatment of autoimmune diseases.

Or

Explain tolerance. Describe types of tolerance.

Unit-IV

4. Describe production of monoclonal antibodies with its aplications.

Or

Explain Immunoelectrophoresis.

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