WEST BENGAL STATE UNIVERSITY

B.Sc. Honours 4th Semester Examination, 2020

ZOOACOR10T-ZOOLOGY (CC10)

Time Allotted: 2 Hours | Full Marks: 40

The figures in the margin indicate full marks.
Candidates should answer in their own words and adhere to the word limit as practicable.
All symbols are of usual significance.

1. Answer any ***eight*** questions from the following: 2×8 = 16

(a) What is passive immunity?

(b) What are epitope and paratope?

(c) What is cytokine? Write its function.

(d) Differentiate between primary and secondary lymphoid organs.

(e) What is adjuvant? Give example.

(f) How does sickle cell protect against malaria?

(g) Compare between antigen and immunogen.

(h) State the role of mast cells in immunity.

(i) What do you mean by professional and non-professional antigen presenting cells?

(j) Mention the source and function of the Tumour Growth factor.

(k) What is APC? Give examples.

(l) What is Autoimmune disorder? Give example.

(m) Write the full form of AIDS. Why is it so called?

(n) What is cluster of differentiation?

2. Answer any ***three*** questions from the following: 3×3 = 9

(a) Distinguish between T-cell and B-cell. 3

(b) What is active and passive immunization? Cite example. 2+1

(c) Mention the sources and functions of IL-4, IL-12 and IFN-gamma. 1.5+1.5

(d) How do tumour cells escape immune system attack? 3

(e) What is innate immunity? Briefly describe the components of the innate immune system. 1+2

(f) What are MHC molecules? Differentiate between class I and class II MHC? 1+2

3. Answer any ***three*** questions from the following: 5×3 = 15

(a) What is immunoglobulin? Describe briefly the structure of an immunoglobulin molecule with a neat diagram. 1+4

(b) What is Membrane Attack Complex (MAC)? State its role in cell lysis. 2+3

(c) What do you mean by hypersensitivity? State the sequence of events in a typical type I hypersensitivity reaction. 2+3

(d) State the principle and applications of ELISA technique. 2+3

(e) What do you mean by vaccination? Differentiate between active and passive immunization. 2+3

(f) Briefly explain the exogenous pathway of antigen presentation. 5

N.B. : *Students have to complete submission of their Answer Scripts through E-mail / Whatsapp to their own respective colleges on the same day / date of examination within 1 hour after end of exam. University / College authorities will not be held responsible for wrong submission (at in proper address). Students are strongly advised not to submit multiple copies of the same answer script.*

——×——