

BACHELOR OF SCIENCE (CBCS-2018 COURSE)
S. Y. B. Sc. Sem-IV :SUMMER- 2022
SUBJECT : MICROBIOLOGY : PRINCIPLES OF DISEASE, EPIDEMIOLOGY
& IMMUNOLOGY

Day : Friday
Date : 1/7/2022

S-18389-2022

Time : 03:00 PM-06:00 PM
Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
- 2) Figures to the **RIGHT** indicate full marks.

-
- Q.1** Attempt **ANY TWO** of the following: **(12)**
- a) Draw a neat labelled diagram of IgA and enlist its properties.
 - b) Giving appropriate examples, discuss 'Arthropod borne transmission of diseases'.
 - c) Explain cytology and functions of 'Neutrophils'.
- Q.2.** Attempt **ANY TWO** of the following: **(12)**
- a) What is 'probiotic flora'? Explain its significance.
 - b) What is difference between food borne 'Infection' and 'Intoxication'? Discuss food borne infections and intoxications.
 - c) Giving appropriate examples, explain 'Innate immunity'.
- Q.3** Attempt **ANY TWO** of the following: **(12)**
- a) Give an outline of 'Classical pathway' and discuss biological significance of complement factors.
 - b) What is difference between monoclonal antibodies and polyclonal antibodies? Give the uses of monoclonal antibodies.
 - c) What are 'Continuous epitopes' and 'Discontinuous epitopes'? Explain the role of epitopes in immunogenicity.
- Q.4** Write short notes on **ANY THREE** of the following: **(12)**
- a) IgG
 - b) Significance of carrier proteins
 - c) Natural Killer cells
 - d) Waterborne transmission of diseases
- Q.5** Attempt **ANY FOUR** of the following: **(12)**
- a) Enlist the properties of adjuvants.
 - b) Explain the significance of IgD.
 - c) What are 'Acute infections' and 'Chronic infections'?
 - d) Define droplets, droplet nuclei and aerosoles.
 - e) Explain disease transmission through direct contact.
 - f) Describe 'Passive immunity'.

* * *