

**S.Y.B.SC. SEM – IV (CBCS - 2016 Course) : SUMMER - 2019**  
**SUBJECT: MICROBIOLOGY: PRINCIPLES OF DISEASE, EPIDEMIOLOGY & IMMUNOLOGY**

Day: Tuesday  
Date: 16/04/2019

Time: 11.00 A.M. To 02.00 P.M.  
Max. Marks: 60

**S-2019-0845**

**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) Discuss the structure and functions of Ig A.
- b) Giving suitable examples, explain transmission by direct contact.
- c) With the help of neat and labeled diagram, discuss cytology and functions of macrophages.

**Q.2** Attempt **ANY TWO** of the following: **(12)**

- a) Giving suitable examples discuss the distribution and occurrence of normal flora.
- b) Explain food borne transmission of diseases.
- c) What are epitopes? Discuss sequential epitopes and conformational epitopes.

**Q.3** Attempt **ANY TWO** of the following: **(12)**

- a) With suitable diagram, discuss the structure and functions of Ig M.
- b) Discuss any two diseases which get transmitted through arthropod vectors.
- c) Explain the protection acquired through 'Innate immunity'.

**Q.4** Write short notes on **ANY THREE** of the following: **(12)**

- a) Ig G
- b) NK cells
- c) Adjuvants
- d) Active immunity

**Q.5** Attempt **ANY FOUR** of the following: **(12)**

- a) Give the significance of Ig D.
- b) What are 'carrier proteins'? Mention their significance in immunogenicity.
- c) What are 'Droplets', 'Droplet nuclei' and 'Aerosols'?
- d) Define the terms 'Pathogenicity' and 'Virulence'.
- e) Enlist types of infectious diseases.

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