

**S.Y.B.SC. SEM – IV (CBCS - 2016 Course) : WINTER - 2018**  
**SUBJECT: MICROBIOLOGY: PRINCIPLES OF DISEASE, EPIDEMIOLOGY & IMMUNOLOGY**

Day: Tuesday  
Date: 16/10/2018

**W-2018-0727**

Time: 03.00 P.M. To 06.00 P.M  
Max. Marks: 60

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**N.B:**

- 1) All questions are **COMPULSORY**.
  - 2) Figures to the right indicate **FULL** marks.
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**Q.1** Attempt **ANY TWO** of the following: **(12)**

- a) Discuss the structure and functions of Ig M.
- b) Giving suitable examples, explain 'food borne transmission' of diseases.
- c) With the help of neat and labeled diagram, discuss cytology and functions of 'Neutrophils'.

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

- a) What are carriers in infectious diseases? Explain types of carriers.
- b) Giving suitable examples, explain the role of 'Droplets' and 'Droplet nuclei' in the air borne transmission of diseases.
- c) Define antigen, hapten and carrier protein.

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

- a) With suitable diagram, discuss the structure and function of Ig G.
- b) Giving suitable examples, discuss the water borne transmission of diseases.
- c) Explain the protection acquired through 'natural immunity'.

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

- a) Adjuvants
- b) Types of infectious diseases
- c) Ig E
- d) Normal flora of human being

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

- a) What is passive immunity? Give any two examples of passive immunity.
- b) Enlist the types of Ig A and mention its significance.
- c) Discuss any three examples of arthropod borne diseases.
- d) What is the difference between sequential epitopes and conformational epitopes? Mention the role of epitopes in immunogenicity.
- e) Giving suitable examples, explain 'Active immunity'.

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