

B.Sc. Semester - 5 (CBCS) Examination

Oct/Nov. - 2019

IMMUNOLOGY AND MEDICAL MICROBIOLOGY (CORE)

Time: 2:30 Hours

Marks: 70

Instructions:

1. All questions are compulsory.
 2. Figures to the right indicate marks.
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Q : 1a Answer the following (Any one) **07**

1. Describe secondary lymphoid tissues in detail.
2. Explain various cells of immune system with their functional details.

Q : 1b Attempt any one **04**

1. What is Herd immunity ?
2. Describe inflammatory response with suitable diagram.

Q : 1c Attempt any three **03**

1. What are APCs ?
2. Define : MALT and GALT.
3. How skin provides hostile environment for invading microbes ?
4. What is anamnesis ?
5. Write functions of CD4 and CD8 Lymphocytes.

Q : 2a Answer the following (Any one) **07**

1. Write a detailed note on Humoral immune response.
2. Give an overview on Phagocytosis and Opsonization

Q : 2b Attempt any one **04**

1. Explain properties of Class I MHC
2. What are cytokines ?

Q : 2c Attempt any three **03**

1. What are TNFs ?
2. What is properdin pathway ?
3. What is tolerance ?
4. Give examples of various antigen presenting cells.
5. What are NK cells ?

Q : 3a Answer the following (Any one) **07**

1. Discuss various classes of immunoglobulins.
2. Write a note on adjuvants and epitopes.

Q : 3b Attempt any one **04**

1. Explain role of host in immunogenicity.
2. Describe clonal selection theory.

Q : 3c Attempt any three **03**

1. What is HAT medium ?
2. Which antibody is also called homocytotropic antibody ?
3. Who deduced the structure of antibody in 1970s ?
4. How foreignness of Ag affect immunogenicity ?
5. Who developed hybridoma technology ?

Q : 4a Answer the following (Any one)	07
1. Describe primary and secondary immunodeficiency.	
2. Describe the mechanism, symptom and treatment of Type I Hypersensitivity.	
Q : 4b Attempt any one	04
1. What is cancer immunotherapy ?	
2. Discuss any three autoimmune diseases.	
Q : 4c Attempt any three	03
1. What is Arthus Reaction ?	
2. What is Multiple sclerosis ?	
3. What is SCID and CVID ?	
4. What is allograft and autograft ?	
5. Mention names of three chemical mediators of allergy ?	
Q : 5a Answer the following (Any one)	07
1. Explain microbial virulence factors.	
2. Write a note on normal flora of intestine and GI tract.	
Q : 5b Attempt any one	04
1. Describe normal flora of skin and eye.	
2. Explain racial immunity.	
Q : 5c Attempt any three	03
1. What is MLD and LD50 ?	
2. What is axenic life ?	
3. Give examples of endotoxin mediated diseases.	
4. What is bacteremia and septicemia ?	
5. What is the role of Subunit B of an exotoxin ?	
