

B.Sc. Semester - 5 (CBCS) Examination**Oct/Nov - 2021 (NEW COURSE)****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.1(A) Answer the following questions. (04)**
1. What is herd immunity?
 2. Give functions of stem cells.
 3. What are Kupffer cells?
 4. What are NK cells?
- Q.1(B) Answer in Brief. (Any One Out of Two) (03)**
1. Briefly describe central lymphoid organs.
 2. Differentiate natural and acquired immunity.
- Q.1(C) Write a note on. (Any One Out of Two) (07)**
1. Peripheral lymphoid organs.
 2. Immune cells.
- Q.2(A) Answer the following questions. (04)**
1. Explain plasma cells.
 2. What are cytokines?
 3. Give full form of CTL.
 4. What are co stimulatory signals?
- Q.2(B) Answer in Brief. (Any One Out of Two) (03)**
1. Draw the labeled diagram of MHC class I and II
 2. Explain complement system.
- Q.2(C) Write a note on. (Any One Out of Two) (07)**
1. Phagocytosis.
 2. Immune Response.
- Q.3(A) Answer the following questions. (04)**
1. Write types of antigens based on their origin.
 2. Give the role of Adjuvants.
 3. Write biological functions of IgE.
 4. Explain Ouchterlony Double diffusion test.
- Q.3(B) Answer in Brief. (Any One Out of Two) (03)**
1. Write factors affecting immunogenicity.
 2. Explain Clonal Selection Theory.

- Q.3(C) **Write a note on. (Any One Out of Two)** (07)
1. Antibody diversity.
 2. Antigen processing and presentation.
- Q.4(A) **Answer the following questions.** (04)
1. Give full form of SCID?
 2. Define xenograft.
 3. Define Tumor.
 4. Explain ghost versus host disease.
- Q.4(B) **Answer in Brief. (Any One Out of Two)** (03)
1. What is Anaphylaxis?
 2. Differentiate primary and secondary immunodeficiency diseases.
- Q.4(C) **Write a note on. (Any One Out of Two)** (07)
1. Transplantation immunity.
 2. Autoimmune Diseases.
- Q.5(A) **Answer the following questions.** (04)
1. What is pathogenicity?
 2. What is nosocomial infection?
 3. What is DNA probe?
 4. Give full form of ELISA.
- Q.5(B) **Answer in Brief. (Any One Out of Two)** (03)
1. Describe pathophysiology effects of LPS.
 2. Explain the principle of PCR test.
- Q.5(C) **Write a note on. (Any One Out of Two)** (07)
1. Normal Flora of Human Host.
 2. Microbial virulence factor.
