

Paper Id:

154224

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BTECH
(SEM IV) THEORY EXAMINATION 2018-19
IMMUNOLOGY

Time: 3 Hours**Total Marks: 50****Notes:**

- *Attempt all Sections.*
- *Assume any missing data.*

SECTION A

- 1. Attempt all parts. Each part carries equal marks : (2X10=20)**
- a) Demarcate the features of Antigen Presenting Cells with example.
 - b) Describe T and B cell Epitopes.
 - c) Delineate the contribution of M cell in immunity.
 - d) Tag the name of phagocytes present in different parts of body.
 - e) How AP cell generate immune response.
 - f) Briefly describe the role of adjuvants.
 - g) Summarize the types of antigen –antibody interaction techniques.
 - h) Comment on autoimmunity.
 - i) Simplify the DNA Vaccine.
 - j) Reveal the features of cell mediated immune response.

SECTION B

- 2. Attempt any three questions from this section (10x3=30)**
- a) Clarify the principal of Western blot and RIA.
 - b) How adaptive and innate immunity are dissimilar?
 - c) Describe the mechanism of antigen presentation and structural features of Class II MHC molecule with diagram.
 - d) With the support of cartoon reveal the stages of monoclonal antibodies production.
 - e) Differentiate between classical and alternate pathway of complement system.
 - f) Throw Light on the type I hypersensitive reaction.

SECTION- C

- 3. Attempt any one part of the following: (10x1=10)**
- a) Describe the anatomical barrier of the innate immunity with appropriate sketch.
 - b) Show the route of inflammation and phagocytosis with suitable diagram.
- 4. Attempt any one part of the following: (10x1=10)**
- a) Comment on exogenous pathway of antigen processing.
 - b) What qualities are required to be a good immunogen ?
- 5. Attempt any one part of the following: (10x1=10)**
- a) Comment on the applications of cytokines with example
 - b) Give a statement on the functions of complement system.
- 6. Attempt any one part of the following: (10x1=10)**
- a) Give a crunchy demonstration of Primary and secondary lymphoid organs
 - b) Explain the different types of antibodies with their characteristic features.
- 7. Attempt any one part of the following: (10x1=10)**
- a) Comment briefly on organ transplantation.
 - b) How immune system safeguard against tumor?