

Exam Date & Time: 09-Sep-2021 (02:00 PM - 05:00 PM)



MANIPAL ACADEMY OF HIGHER EDUCATION

Manipal Academy of Higher Education, Manipal MPharm Theory End-Semester Examinations.

Immunotechnology [PBT-MPB202T]

Marks: 75

Duration: 180 mins.

SECTION - A

Answer all the questions.

Answer the following (10 marks x 5 = 50 marks)

- 1) Discuss how natural immunity helps in preventing natural infections. (10)
 - 2) Schematically represent and explain the structure of antibodies. Elaborate on the various classes of immunoglobulins. (10)
 - 3) Classify vaccines based on the type of immunogens used in the preparation. Citing suitable examples, discuss 'Whole Organism Vaccines'. (10)
 - 4) Sketch the sequence of events that occurs with generation of malignancy and metastasis. Add a note on common human infectious carcinogens. (10)
 - 5) Explain the mechanism of selection of hybridomas from mixed population of cells. (5)
- A)
- B) What is Immunofluorescence assay? Enlist their types and explain about any one in detail. (5)

SECTION - B

Answer all the questions.

Answer the following (5 marks x 5 = 25 marks)

- 6) Inflammation is considered as a step in our immune protection. Describe the steps involved in acute inflammatory condition. (5)
- 7) Classify lymphoid system. Explain the structure and functions of primary lymphoid organs. (5)
- 8) Define Epitope and Dendritic cells. Enlist the types of T cells and a note on central role of any one. (5)
- 9) Elaborate on 'Antibody-Antigen interactions'. (5)
- 10) "The better matched the donor and recipient are, the more successful the transplantation is likely to be". What are the ways through which a matching donor is found for the recipient? (5)

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