

M.Sc Sem-3 Examination

501

Life Science

Time : 2-30 Hours]

November-2024

[Max. Marks : 70

Instructions:

All questions are compulsory.

Illustrate your answers with neat diagrams wherever necessary.

Question - 1 Write the following

- i) Define immunity in brief and discuss about Innate immunity
- ii) Discuss Secondary Lymphoid organs

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OR

- i) What is complement system and describe Classical pathway in detail
- ii) Explain briefly -- Cytokines and explain any two types of Cytokine

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[07]

Question - 2 Write the following

- i) Explain Antibody in brief and discuss IgA in detail
- ii) Explain in - vivo antigen - antibody interaction

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OR

- i) Give brief account on Properties of antigen and describe Adjuvants and Haptan
- ii) Explain mechanisms for Generating Antibody Diversity

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Question - 3 Write the following

- i) Write a short note on agglutination test with an example
- ii) Write a short note on ELISA and its types.

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OR

- i) Write a short note on immunodiffusion test with an example
- ii) Write a short note on vaccines and immunotherapy.

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Question - 4 Write the following

- i) Write a short note on autoimmunity and tolerance.
- ii) Write a short note on immunodeficiency and their consequences.

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OR

- i) Write a short note on Hypersensitive reactions.
- ii) Write a short note on hazards of vaccine.

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Question - 5 Attempt any seven out of twelve

- i) Write down the importance of ACP
- ii What is the function of T – helper cell
- iii What is diagnostics significance of antigen-antibody interaction?
- iv What is full form of IRMA? For what purpose it is used?
- v What is the role of the complement system in immune response?
- vi What is immunotherapy
- vii What is difference between innate and adaptive immunity?
- viii What are different types of vaccine?
- ix Describe the role of major histocompatibility complex(MHC) molecules in antigen presentation.
- x Explain Type III hypersensitive response.
- xi Explain tolerance with an example in brief.
- xii What are tumor associate antigens?