

IMMUNOLOGY

DSE2

UNIT-I

Innate and Adaptive Immunity

Fill in the blanks

1 marks

1. The ability of organisms to resist infections is _____.
2. Immunity present since birth is _____.
3. The 1st line of defence against microbes is _____.
4. Lysozyme is present in _____.
5. _____ and _____ are mediators of inflammatory responses.
6. Adaptive immunity is also known as _____.
7. Humoral immunity is mediated by _____.
8. Cell mediated immunity is carried by _____.
9. The potency of hematopoietic stem cells is _____.
10. T cell matures at _____.

Answer the followings.

1.5/2.5 marks

1. Write a note on primary lymphoid organs.
2. What is immunity and write its type?
3. What is cell mediated immunity?
4. Define passive immunity.
5. What is active immunity?
6. What are immune cells?
7. Define tolerance.
8. Write a note on autoimmune disorders.
9. Write a note on anatomical barriers of immune system.
10. What is humoral immunity?
11. What is opsonization?

Long answer questions.

6 marks

1. Describe the cells of immune system
2. Describe the innate immunity.
3. What is adaptive immunity?
4. What is immune dysfunction?
5. AIDS
6. What is immune tolerance?

UNIT-II

Antigens and Immunoglobulins

Fill in the blanks

1 marks

1. Tear contains Ig _____.
2. _____ Ig cross placenta.
3. The compound that evokes immune response is _____.
4. Generally, antigens are administered by _____ rout to induce stronger immunity.
5. Hypersensitivity is mediated by _____.
6. IgD works along with _____.
7. Two monomeric IgA are joined covalently by _____.
8. The heavy chain of IgM is _____ chain.
9. The light chain of immunoglobulins are _____ & _____.
10. An antibody has _____ number of polypeptide chains.

Answer the followings.

1.5/2.5 marks

1. Define antigens.
2. Write the properties of antigens.
3. Differentiate antigenicity and immunogenicity.
4. Describe B-cell epitopes.
5. Write a note on indirect ELISA.
6. Write a note on antigen-antibody interaction.
7. Write a note on affinity and avidity.
8. What are haptens?

Long answer questions.

6 marks

1. What is antigen? Differentiate it from immunogen.
2. What are immunoglobulins? Write its structure.
3. Describe the process and factors influencing antigen-antibody interaction.
4. What is ELISA? Write its types.

Unit-III

MHC, Cytokines and Complement System

Fill in the blanks

1 marks

1. MHC are found in _____ organisms.
2. MHC is located in chromosome number _____ in humans and _____ in mice.
3. Number of extra cellular domains in MHC is _____.
4. MHCI are expressed on _____ cells.
5. The CD4 of T cells bind to _____.

6. Class II MHC are present on _____ cells.
7. HSPs are related to _____ class of MHC.
8. Interleukins are secreted by _____.
9. MAC causes _____.

Answer the followings.

1.5/2.5 marks

1. What are MHC molecules?
2. Draw the exogenous path way of antigen processing.
3. Write the properties of cytokines.
4. Write the functions of cytokines.
5. Write a note on complement system.
6. What are interferons?
7. What is TNF?

Long answer questions.

6 marks

1. Write the types and structures of MHC molecules.
2. Describe the endogenous and exogenous pathways of antigen processing and presentation.
3. What are cytokines? Write the properties and functions of cytokines.
4. Describe the pathways of complement activation.

UNIT-IV

Hypersensitivity and Vaccines

Fill in the blanks

1 marks

1. Allergic reactions are also known as _____.
2. Allergic reactions are induced by _____.
3. The hereditary tendency to develop allergic reactions is _____.
4. Type III hypersensitivity is mediated by _____.
5. Modified exotoxins are also known as _____.
6. Type IV hypersensitivity is also called _____.

Answer the followings.

1.5/2.5 marks

1. What are vaccines?
2. What do you mean by booster dose?
3. What is hypersensitivity?
4. Write a note on Type II hypersensitivity.
5. What is ADCC?
6. Write different types of vaccines.
7. What is herd immunity?

Long answer questions.

6 marks

1. What is hypersensitivity? Describe the type-I and II hypersensitivity.
2. What are vaccines? Write different types of vaccines.

DEPT OF ZOOLOGY, NAYAGARH AUTONOMOUS COLLEGE, NAYAGARH