



SARDAR PATEL UNIVERSITY

T.Y. Bsc VI SEMESTER EXAMINATION

BIOCHEMISTRY: USO6CBCH05

TITLE: IMMUNOLOGY

Date: 28/6/2022; Tuesday Time: 10:00 AM TO 12:00 PM TOTAL MARKS: 70

Q.1: Select proper option from following MCQ.

[10]

- 1) ___ remain viable in the soil for several decades and serve as the source of infection.
a) spores of tetanus b) fungi c) nocardia d) all of these
- 2) Infectious diseases transmitted from animals to human beings are called _____.
a) zoonoses b) insects c) carries d) none of above
- 3) ___ are the commonest source of infection.
a) Human b) animals c) insects d) food
- 4) The reaction of soluble antigen with antibody is known as
a) Agglutination b) precipitation c) flocculation d) complement
- 5) ___ Ig is produced first by the fetus in response to infection.
a) IgG b) IgA c) IgM d) IgD
- 6) Which of the following is true about prozone phenomenon?
a) It is due to disproportionate antigen and antibody levels.
b) There is no relation with Ag and Ab levels.
c) It is due to proportionate Ag and Ab levels.
d) None of above
- 7) Cancer cells are characterized by _____.
a) Uncontrolled growth b) invasion of local tissues
c) metastasis d) all of above
- 8) In class I MHC molecule, which peptide binding domain is present?
a) $\alpha 1/\alpha 2$ b) $\alpha 1/\beta 1$ c) $\alpha 2/\alpha 1$ d) $\beta 1/\beta 2$
- 9) Passive immunity is acquired through _____.
a) Immunoglobulin b) natural maternal
c) Humanised monoclonal antibody d) all of above
- 10) Rheumatoid arthritis is a _____.
a) Autoimmune disease b) type III hypersensitivity reaction
c) Vaccination type d) none of above

Q2. Fill in the blanks and true false

[8]

1. ___ Compliment is not involved in alternative pathway.
2. There are total ___ types of ELISA.
3. The graft taken from cadaver is _____.
4. Transfusion reaction is _____.

True or false

5. Spleen is not involved in secondary lymphoid organ.
6. 'Specific immune response' name is used for the innate immunity.
7. MHC complex in human is recognized as H -2 complex.
8. Uncontrolled growth of cell lead to autoimmune disease.

Q3. Answer in short. (Any 10)

1. Give the difference between active immunity and passive immunity.
2. Define primary lymphoid organ and secondary lymphoid organ.
3. Give role of WBC and NK cells in immunity.
4. Write down the function of IgG.
5. Write down any 4 general features of Ag-Ab reaction.
6. Explain: why less Ig M than IgG is required to neutralize viral infectivity.
7. Explain any two classes of MHC molecule.
8. Define auto graft, Iso graft.
9. Define MHC and transplantation.
10. Write vaccination schedule resented in India.
11. Write explanatory note on autoimmunity.
12. Write the difference between immediate and delayed types of hypersensitivity.

[32]

Q4. Long answer questions: (answer any four)

1. Define secondary lymphoid organ and explain any one in detail.
2. Give brief account about classical complement pathway.
3. Write short note on RIA.
4. Write down the application of precipitation in disease and diagnosis.
5. Write in detail about immune response in malignancy.
6. Write short note on structure of class – I MHC molecule.
7. Explain the biochemical events in mast cell activation and degeneration.
8. Explain type II hypersensitivity in detail.
