2025/11

SET B

BACHELOR OF MEDICAL LABORATORY TECHNOLOGY
THIRD SEMESTER
MICROBIOLOGY III
BMLT – 304

[USE OMR SHEET FOR OBJECTIVE PART]

Duration: 3 hrs. **Full Marks: 70**

(Objective)

Time: 30 min. **Marks: 20**

Choose the correct answer from the following: ***1×20=20***

1. Which of the following tube use in WIDAL test
   a. Khans tube
   b. Eppendrop tube
   c. Wintrobe tube
   d. Test tube

2. Rheumatoid arthritis is example of
   a. Hemolytic disease
   b. Systemic disease
   c. Organ specific disease
   d. None of the above

3. Enteric fever may be due to
   a. Food
   b. Water
   c. Both a & b
   d. None of the above

4. HLA complex present in which chromosome
   a. 6
   b. 9
   c. 7
   d. 8

5. Atopy seen in which hyper sensitivity reaction
   a. Type II
   b. Type I
   c. Type III
   d. Type IV

6. Vaccine can induce
   a. Natural passive immunity
   b. Natural active immunity
   c. Artificial active immunity
   d. Artificial passive immunity

7. Conjugate in Elisa contains
   a. Only enzyme
   b. Primary ab with enzyme
   c. Only Antibody
   d. Secondary ab with enzyme

8. T-lymphocyte is involved in which type of hypersensitivity reaction?
   a. Type IV
   b. Type III
   c. Type II
   d. Type I

9. CD4+ t-cell binds to
   a. MHC class I
   b. MHC class II
   c. MHC class III
   d. All of the above

10. Classical pathway of the complement is activated by
    a. Antigen
    b. Antibody
    c. Both a & b
    d. Ag-Ab complex

11. Which immunoglobulin class can pass through placenta?
    a. IgA
    b. IgG
    c. IgM
    d. IgD

12. VDRL is example of
    a. Precipitation
    b. Flocculation
    c. Agglutination
    d. Both a and b

13. Which Immunoglobulin appears late in infection?
    a. IgG
    b. IgM
    c. IgD
    d. IgA

14. Longest half –life Immunoglobulin is
    a. IgM
    b. IgG
    c. IgD
    d. IgA

15. Which type of immunoglobulin involve in classical pathway of complement
    a. IgE
    b. IgA
    c. IgD
    d. IgM

16. Production of colour shows negative result in
    a. Indirect Elisa
    b. Sandwich Elisa
    c. Competitive Elisa
    d. Direct Elisa

17. Which of the following immunoglobulin is involved in type I hypersensitivity reaction
    a. IgE
    b. IgA
    c. IgD
    d. IgG

18. Allograft means
    a. Transplant between different species
    b. Transplant between same species and genetically identical
    c. Transplant between same species but not genetically identical
    d. Grafting from own body

19. Delayed hypersensitivity reaction is mediated by
    a. T lymphocyte
    b. B lymphocyte
    c. Macrophages
    d. All of the above

20. Autograft is done between
    a. Identical twins
    b. Tissue or organ of same individual
    c. Within same species
    d. between different species

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Descriptive

Time : 2 hrs. 30 min. **Marks : 50**

[Answer question no.1 & any four (4) from the rest]

1. Explain briefly about ELISA along with diagram. Significance immunity in our body. **4+6=10**

2. Write short note on major histocompetible complex. Write notes on IgM and IgG. **4+6=10**

3. **a.** Write a short note on hypersensitivity. **5+5=10**
   b. Explain the classification of hypersensitivity

4. Write short note on classical pathway. **10**

5. Define autoimmunity. Describe briefly the pathogenesis of autoimmunity. Explain the various mechanisms of autoimmunity **2+3+5 =10**

6. Define antibody along with diagram.Write note on types of transplantation. **4+6=10**

7. **a.** Define precipitation and agglutination reaction along with example. **4+6=10**
   b. Explain the WIDAL Test.

8. **a.** Explain in detail about Immune complex hypersensitivity reaction. **5+5=10**
   b. Describe briefly about cytotoxic hypersensitivity reaction.

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