

**2203000206026004**  
**EXAMINATION FEBRUARY-MARCH 2024**  
**BACHELOR OF SCIENCE (SIXTH SEMESTER)**  
**MICROBIOLOGY-XX MB-604**  
**DIAGNOSTIC MICROBIOLOGY MB-604 LEVEL 2**

[Time: As Per Schedule ]

[Max. Marks: 50]

**Instructions:**

- 1. 1. Fill up strictly the following details on your answer book**
  - a. Name of the Examination: **BACHELOR OF SCIENCE (SIXTH SEMESTER)**
  - b. Name of the Subject: **MICROBIOLOGY-XX (MB-604-DIAGNOSTIC MICROBIOLOGY) LEVEL 2**
  - c. Subject Code No: **2203000206026004**
2. Sketch neat and labelled diagram wherever necessary.
3. Figures to the right indicate full marks of the question.
4. All questions are compulsory.

Seat No:

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Student's Signature

**Q.1 Give Specific answers**

**8**

- a. Name the staining methods performed to detect microorganisms in CSF sample?
- b. Which is the preferred site for the collection of venous blood?
- c. State the role of Restriction Endonucleases.
- d. Define: Reporter molecule.
- e. What is Conglutination?
- f. Give full form: VDRL and RPR test
- g. Define: Antibiotic resistance.
- h. Differentiate: MIC and MBC.

**Q.2 Explain / comment on any two of the following** **14**

- a. Organism Identification using phenotypic criteria
- b. Write in brief about nucleic acid hybridization methods.
- c. Explain principles of serological test methods.

**Q.3 Discuss any two of the following.** **14**

- a. Detection of Specific Resistance Mechanisms.
- b. Collection and transport of urogenital and stool samples.
- c. Applications of Nucleic Acid Based Methods.

**Q.4 Write short notes on any two of the following** **14**

- a. Flow cytometry
- b. Methods that directly measure antimicrobial activity
- c. Enzyme Immunoassays

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