

Total No. = 03 pages**Q.P. Code: MBN205****M.B.B.S. 2nd Prof.**

(New Scheme w.e.f. 2019 admission onwards)

BF/2023/06

Microbiology – A

M.M. : 100

Time : 3 Hours (First 30 Min. for MCQs)

- Note: 1. **Use OMR Sheet to answer Multiple Choice Questions(MCQs).**
2. Attempt all questions. Illustrate your answers with suitable diagrams
3. **NO SUPPLEMENTARY SHEET SHALL BE ALLOWED/PROVIDED**
4. **The student must write Q.P. Code in the space provided on OMR Sheet and the Title page of the Answer Book.**

Q.1 MCQs (Attempt on OMR sheet)

[1x20]

1. Most antigenic component in a microbe is
 - a. Lipid
 - b. Protein
 - c. Carbohydrate
 - d. Glycolipid
2. Which immunoglobulin has the least concentration in the human body?
 - a. IgG
 - b. IgM
 - c. IgA
 - d. IgE
3. VDRL test is based on
 - a. Precipitation reaction
 - b. Agglutination reaction
 - c. ELISA
 - d. CFT
4. What is the percentage of agar in most solid media?
 - a. 0.2%
 - b. 2%
 - c. 4%
 - d. 6%
5. Following is an example of enrichment medium
 - a. Alkaline peptone water
 - b. Chocolate agar
 - c. Blood agar
 - d. Nutrient agar
6. Concentration of glutaraldehyde used in high level disinfection of endoscopes is
 - a. 0.5%
 - b. 1%
 - c. 1.5%
 - d. 2%
7. PCR is used to
 - a. Detect target plasmids
 - b. Amplify small amount of DNA
 - c. Seal the cut ends of DNA
 - d. Cleave the bacterial plasmid
8. Antibiotic sensitivity testing is done on
 - a. Blood agar
 - b. MacConkey agar
 - c. Chocolate agar
 - d. Mueller Hinton agar
9. Horizontal transfer of 'R' factor is by
 - a. Transduction
 - b. Transformation
 - c. Conjugation
 - d. Fusion
10. Superantigen is produced by
 - a. Staphylococcus aureus
 - b. Streptococcus pneumonia
 - c. Pseudomonas
 - d. Clostridium

- Q.2. A 10 year old girl gets severe bronchial asthma attacks every year in the month of April. She stays close to a large garden, which has plenty of flowering trees.
- What is the likely cause of her respiratory disorder?
 - Describe the pathogenesis of the above disorder.
 - Enumerate a specific test to make a definitive diagnosis in the above case.
 - What is the treatment approach of the above case? [2+4+2+4]
- Q.3. **Write short notes on:-** [5x4]
- IgA
 - Koch's postulates
 - Bleaching powder
 - R-Plasmid
- Q.4. **Explain in short:-** [3x5]
- Indirect immunofluorescence test
 - Catalase test
 - Real time PCR
 - Differences between amebic and bacillary dysentery
 - Plasmodium LDH test
- Q.5. **Short answers (applied aspects):-** [6x3]
- Enterotoxigenic E. coli
 - Hepatitis B vaccine
 - Lab diagnosis of enteric fever
- Q.6. **Write in brief about:-** [5x3]
- Strategy III in HIV testing
 - Pathogenicity of ascariasis
 - A positive report of HIV is given to a client without counseling. Explain the lapse.