

Unique Paper Code (UPC) : 32533933-OC

Name of the Paper : Microbial Diagnosis in Health Clinics

Name of the Course : B.Sc. (Hons.) Microbiology

Semester : 3

Duration : 3 hours including time taken for downloading question
paper and uploading answer sheets

Maximum marks : 50

On first page, please write the following details:

1. Date and time of examination (DD/MM/YYYY, Hours:Min)
2. Examination Roll Number
3. Name of the Program, i.e. B.Sc. (H) Microbiology
4. Semester
5. Unique Paper Code (UPC)
6. Title of the Paper
7. Name of the College
8. Email ID of the student
9. Mobile Number of the student

SET 1

Attempt any **four** questions. **All** questions carry equal marks. Please write your answers on A4 size sheets and put the page number at the top of each page.

Q1. What are principles of methods used in collection and transport of clinical specimens from a patient. Name any two pathogens responsible for the following conditions and name suitable clinical specimen/s to be collected for their diagnosis: dysentery, meningitis, and pneumonia.

12.5

Q2. Briefly discuss the terms listed: Otitis Media, specificity of a diagnostic test, abscess, septicemia, agglutination and carrier.

12.5

Q3. Explain the role of PCR in the diagnosis of diseases and discuss any 3 types of PCRs used in the diagnostics. Also discuss the advantages and disadvantages of molecular diagnosis over conventional diagnosis

12.5

Q4. Compare direct, indirect and sandwich ELISA. Draw suitable diagrams. Provide a common example of the enzyme substrate combination used in ELISA.

12.5

Q5. Differentiate between chocolate agar and blood agar? Why is it important to study the colony characteristics of pathogenic bacteria? 12.5

Q6. Discuss the Kirby Bauer method. What is the significance of AMR in clinical microbiology? 12.5