

S.No. 391

17PAME02

(For the candidates admitted from 2017–2018 onwards)

M.Sc. DEGREE EXAMINATION, NOVEMBER 2017.

First Semester

Applied Microbiology

BIO INSTRUMENTATION AND BIOLOGICAL  
TECHNIQUES

Time : Three hours

Maximum : 75 marks

PART A — (5 × 5 = 25 marks)

Answer ALL the questions.

1. (a) What is buffer? Explain its with one example.

Or

- (b) Write about water bath shaker.

2. (a) Write in detail account on low speed centrifuge.

Or

- (b) What are the applications of centrifuges?

3. (a) What is southern blotting? Explain it.

Or

(b) Write about Agnrobe gel electrophoresis.

4. (a) Write about the principle mechanism and uses of Ion-exchange chromatography.

Or

(b) What is biosensor? Explain it.

5. (a) Write a detail account on double immuno diffusion.

Or

(b) Explain the principle and mechanism of RIA.

PART B — (5 × 10 = 50 marks)

Answer ALL questions.

6. (a) Explain in detail about principle and mechanism of pH meter.

Or

(b) Write a detail account on incubator and laminar air flow.

7. (a) Write about the principle, mechanism and uses of ultra centrifuge.

Or

(b) Write a detail account on differential centrifugation.

8. (a) Explain in detail about SDS-PAGE.

Or

(b) Write about principle procedures and uses of western blotting techniques.

9. (a) Write a detail account on paper chromatography.

Or

(b) What is HPLC? Explain it in detail.

10. (a) What is ELISA? Explain its principle and procedure.

Or

(b) What is agglutination? Write about different types of agglutination reaction.