

APRIL/MAY 2019

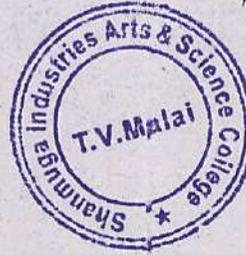
BBC41— BIOCHEMICAL TECHNIQUES II

Time : Three hours

Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.



1. What is the supporting media used for electrophoresis?
2. Give the use of TEMED.
3. Bring out the use of agarose in molecular biology.
4. Name any two techniques by which serum proteins can be separated.
5. Define wave number and wave length.
6. Write any two applications of colorimeter.
7. What is FRET?
8. Define the term quenching.
9. What is Grey? Define it.
10. Mention the role of POPOP and PPO in scintillation counting.

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SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

11. (a) Write the factors that affect electrophoretic mobility.

Or

- (b) Discuss about the supporting medium and composition of the buffer in SDS-PAGE.

12. (a) Outline the principle and methodology of immuno electrophoresis.

Or

- (b) Brief on Tiselius moving boundary electrophoresis.

13. (a) Draw and explain the instrumentation of UV visible spectrophotometer.

Or

- (b) List the applications of UV visible spectrophotometer.

14. (a) State and explain the principle on which an atomic absorption spectroscopy works.

Or

- (b) Illustrate the instrumentation of a spectrofluorimetry with a neat diagram and explain.

15. (a) Detail on the operation of GM counter.

Or

- (b) How are radio isotopes useful for clinical scanning?

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

16. You are given a mixture of protein. How will you separate it using SDS-PAGE?

17. Write an essay on the methodology and applications of agarose gel electrophoresis.

18. Elaborate the basis principle electromagnetic radiation.

19. How will you estimate sodium using flame photometer?

20. Explain in detail the principle, methodology and applications of Radio Immuno Assay.

