NOVEMBER/DECEMBER 2019

BSBT55 — BIOINSTRUMENTATION

Time : Three hours Maximum : 75 marks

SECTION A — (10 × 2 = 20 marks)

Answer ALL questions.

Each answer should not exceed 50 words.

1. What is iso electric focusing?
2. Explain SDS-PAGE.
3. What are ion exchangers? Give ex.
4. List out the applications of TLC.
5. What are plasmids? Give their uses.
6. What is PCR?
7. Give Beer-Lamber's law.
8. What is radiation energy?
9. List out the use of Monometer?
10. Give the principle of pH meter.

SECTION B — (5 × 5 = 25 marks)

Answer ALL questions.

Each answer should not exceed 200 words.

11. (a) Explain about the principle of Agarose gel electrophoresis.

Or

(b) Give an account on immuno electrophoresis.

12. (a) Explain Western blot analysis.

Or

(b) Explain the principle and application of PCR.

13. (a) Explain the methodology of affinity chromatography.

Or

(b) Give an account on adsorption chromatography.

14. (a) Differentiate single beam and double beam Spectrophotometry.

Or

(b) Give details on Basic law of absorption.

15. (a) Write an account on working, principle and applications of Hot plate and magnetic stirrer.

Or

(b) What is manometer? Explain.

SECTION C — (3 × 10 = 30 marks)

Answer any THREE questions.

Each answer should not exceed 500 words.

16. Elaborate in detail on density gradient ultracentrifugation.

17. Brief out the working principle and application of HPLC.

18. Brief out DNA finger printing techniques.

19. Explain the principle methodology and application of UV – VISIBLE spectrophotometer.

20. What is pH meter? How pH is measured in pH meter? Explain.

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