C. ABDUL HAKEEM COLLEGE (AUTONOMOUS), MELVISHARAM - 632 509. SEMESTER EXAMINATIONS, NOVEMBER - 2018

B.Sc., ZOOLOGY SEMESTER V U15EZL501 — BIOINSTRUMENTATION (ELECTIVE — I)

Time: Three Hours Maximum: 75 Marks

SECTION - A $(10 \times 2 = 20 \text{ Marks})$

Answer ALL Questions.

- 1. Fluorescence Microscope.
- Resolving power.
- Relative centrifugal force
- Calomel electrode.
- Cuvettes.
- 6. Thermal Conductivity Detector (TCD).
- Sterilization.
- Crystal violet.
- Beta mercaptoethanol.
- 10. Southern blotting.

SECTION - B (5 X 5 = 25 Marks)

Answer **ALL** Questions.

11. a) Explain the Light Microscope in detail.

(Or)

- b) Explain the Polarized Microscope.
- 12. a) Explain the types of centrifuge

- (Or
- b) Explain the pH meter in detail.
- 13. a) Explain the principle and applications of Thin Layer Chromatography.

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- b) Explain the principle and applications of Spectrophotometer.
- 14. a) Explain the principle and procedure of Gram staining method.

(Or)

- b) Write a note on the Autoclave.
- a) Explain the ELISA technique in detail.

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b) Explain the Western Blotting.

SECTION - C $(3 \times 10 = 30 \text{ Marks})$

Answer ANY THREE Questions.

- Explain the Electron Microscope in detail.
- . Write an essay on Cryopreservation.
- 18. Explain HPLC techniques in detail.
- 19. Explain the components of tissue culture media and types of Cell culture
- 20. Explain the principle and applications of SDS Polyacrylamide Gel

Electrophoresis

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