### THE APOLLO UNIVERSITY

### Saketa, Chittoor, AP

# AHS - V Semester End Examination, June-2024

### **PAPER-III**

# MLTT 3503 - HISTOPATHOLOGY, CYTOPATHOLOGY HAEMATOPATHOLOGY AND MUSEUM TECHNIQUES

Time: 3 hours Max. Marks: 60

## Section –A (10x2=20 marks) Answer all Questions

- 1. Write the classification of mounting media.
- 2. Add a note working principle of polarising microscope.
- 3. Add a note on principles of immunocytochemistry.
- 4. What are the uses of frozen section?
- 5. Mention the Principle of alcian blue stain.
- 6. Write a note on uses of Van Gieson.
- 7. List out indications of flow cytometry.
- 8. What do you mean by tissue banking?
- 9. What is the role of museums in pathology?
- 10. What is fixation of specimen?

# Section –B (5X8=40 marks) Answer all Questions either A or B with essay type answers

11. A) List out the types of microscopes and describe the phase contrast microscope and fluorescent microscope.

#### OR

- B) Describe the microtomy and add a note on types of microtome knives. List out its advantages and disadvantages.
- 12. A) Describe the principle and procedure of PAP staining.

#### **OR**

B) What is freezing microtome? Add a note on methods of cutting frozen section.

13. A) Describe principle, uses and preparation of solution required for PAS stain and mucicarmine.

### OR

- B) Describe principle, uses and preparation of solution required for Phosphotungstic acid haematoxylin (PTAH).
- 14. A) Describe principles of flow cytometry, sample preparation and processing.

### OR

- B) List out Chromosomal Anomalies. Add a note on duplication of Chromosome, inversion and translocation of chromosome.
- 15. A) Describe the process of mounting of museum specimen and the methods of colour maintenance in the museum specimen.

### OR

B) Add a note on Kaiserling Preparation methods and the composition of Kaiserling fluid-I, II, III.

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