QP CODE: 403012	Reg No:

## Final Year B.Sc MLT Degree Regular/Supplementary Examinations March 2021

## **Histotechnology and Cytogenetics**

Time: 3 Hours Total Marks: 100

- Answer all questions to the point neatly and legibly Do not leave any blank pages between answers • Indicate the question number correctly for the answer in the margin space
- Answer all parts of a single question together Leave sufficient space between answers

Draw table/diagrams/flow charts wherever necessary

Essay (2x10=20)

- 1. Explain the principles and methodology in processing of tissues for histopathology. Describe the various parts and care of an automatic tissue processor. (5+5)
- 2. Mention the various methods of chromosome analysis. Describe the cytogenetic abnormalities in acute leukemias. (5+5)

Short notes (10x5=50)

- 3. Methods of decalcification
- 4. Immunofluorescence tests in histopathology
- 5. Rapid tissue processing
- 6. Identification of pigments in tissues
- 7. Connective tissue stains
- 8. Transmission Electron Microscope
- 9. Types of microtomes and their uses
- 10. Fixatives in histopathology
- 11. Demonstration of bacteria in tissues
- 12. Principle of PAS staining and its uses

Answer briefly (10x3=30)

- 13. Resin embedding
- 14. Mucin stains
- 15. Down's syndrome
- 16. Tissue mountants
- 17. Feulgen stain
- 18. Demonstration of lipid in tissues
- 19. Knife sharpening
- 20. Mordents
- 21. Barr body
- 22. Disposable microtome blades

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