QP CODE: 403012 Reg No:.....

## Final Year B.Sc MLT Degree Examinations, October 2015

## HISTOTECHNOLOGY AND CYTOGENETICS

Time: 3 Hours Total Marks: 100

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essay (2x10=20)

- 1. Discuss the various types of embedding media. Mention its uses, advantages and disadvantages. Add a note on double embedding. (3+5+2=10)
- 2. Enumerate the different types of chromosomal abnormalities. Discuss the chromosomal abnormalities seen in acute leukemias. Briefly describe the principles involved in FISH. (3+4+3=10)

Short notes (10x5=50)

- 3. Processing of bone marrow biopsies
- 4. Cryostat
- 5. Immunofluorescent techniques in tissue section.
- 6. Controls in staining procedures
- 7. Bone marrow culture
- 8. Demonstration of bacteria in tissues
- 9. Connective tissue stains
- 10. Transmission electron microscopy
- 11. Enzyme histochemistry applications
- 12. Museum techniques

Answer briefly (10x3=30)

- 13. Histokinette
- 14. Parasites in tissues
- 15. Silver stains
- 16. Demonstration of metals in tissues
- 17. Automatic knife sharpeners
- 18. Down's syndrome
- 19. Demonstration of Y chromosomes
- 20. Artifacts in tissue sections
- 21. Utility of serial sections in histopathology
- 22. Types of molds in paraffin blocking

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