

**QP CODE: 403012**

**Reg No:.....**

**Final Year B.Sc MLT Degree Examinations, September 2014**

**HISTOTECHNOLOGY AND CYTOGENETICS**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essay**

**(2x10=20)**

1. Explain the principle and methodology in processing of tissues for histopathology. Describe the various parts and care of an automatic tissue processor (2+3+5=10)
2. Mention the various methods of chromosome analysis. Describe the cytogenetic abnormalities in myeloid leukemia. Discuss briefly the use of FISH in chromosome analysis (3+3+4=10)

**Short notes**

**(10x5=50)**

3. Methods of decalcification
4. Frozen sections
5. Rapid tissue processing
6. Banding techniques
7. Types of microtomes and its uses
8. Fungal stains
9. Tissue processing for electron microscopy
10. Fixatives in histopathology
11. Role of histopathology laboratory in disease diagnosis
12. Types of haematoxylin stains and its uses

**Answer briefly**

**(10x3=30)**

13. Vacuum embedding
14. Mucin stains
15. Silver stains
16. Demonstration of lipid in tissues
17. Knife sharpening
18. Mordant
19. Barr body
20. Resin embedding
21. Types of disposable microtome blades
22. Identification of pigments in tissue

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