

**QP CODE: 403012**

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

**Final Year B.Sc MLT Degree Supplementary Examinations March 2019**

**Histotechnology and Cytogenetics**

**Time: 3 Hours**

**Total Marks: 100**

- Answer all Questions.
- Draw Diagrams wherever necessary.

**Essay**

**(2x10=20)**

1. Classify fixatives. Discuss the major uses and advantages of each type of fixative  
(4+6)
2. Discuss the organization of a histopathology laboratory on the methodology for reception and documentation of specimens.  
(5+5)

**Short notes**

**(10x5=50)**

3. Spectral karyotyping (SKY)
4. Different types of microtomes and their uses
5. Principle and uses of immunofluorescence (IF) in pathology.
6. Embedding media
7. Chromosome changes in acute leukemias
8. Microwave tissue processing
9. Masson Fontana staining - principle and uses
10. Artifacts in tissue sections
11. Banding techniques in cytogenetics
12. Describe the method of preparation of tissue for electron microscopy

**Answer briefly**

**(10x3=30)**

13. Dehydrating agents
14. Antigen retrieval techniques
15. PTAH staining
16. Demonstration of mucin
17. Barr body
18. Decalcifying agents
19. Impression smears
20. Endogenous pigments
21. Klinefelter syndrome
22. Mordents in histopathology

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