

QP CODE: 403012

Reg. No:.....

**Final Year B.Sc MLT Degree Supplementary Examinations
September 2024
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. Discuss in detail the different types of microtomes with their advantages and disadvantages. Add a note on artefacts in tissue sections (7+3)
2. What is karyotyping. Mention its application in pathology. Discuss banding techniques (2+3+5)

Short notes

(10x5=50)

3. Picric acid fixatives
4. Rapid manual processing of tissues
5. Stains for demonstration of mucin
6. Mounting media
7. Safety measures in histopathology lab
8. Cryostat and its application in histopathology
9. Types of structural abnormalities in chromosomes
10. Ripening of hematoxylin
11. Endogenous pigments
12. Application of serial sections in histopathology

Answer briefly

(10x3=30)

13. Automatic knife sharpening
14. Double embedding
15. Reticulin stain
16. Regressive staining
17. Zenkers fluid
18. Tissue Tek
19. Schiffs reagent
20. Rake angle
21. Mounting fluids for museum specimen
22. Deparaffinisation
