

QP CODE: 403012

Reg No:.....

**Final Year B.Sc MLT Degree Supplementary Examinations
January 2022**

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 the various types of embedding media. Discuss their uses, advantages and disadvantages. What is double embedding. (3+5+2)
2. Enumerate the different types of chromosomal abnormalities seen in myeloid leukemias. Briefly describe the principles involved in FISH. (5+5)

Short notes

(10x5=50)

3. Metaphase preparation from blood samples
4. Banding techniques
5. Processing of bone biopsies
6. Types of hematoxylin stains and their uses
7. Cryostat
8. Fluorescent Microscope.
9. Artifacts in tissue sections
10. Demonstration of mycobacteria in tissues
11. Connective tissue stains
12. Kaiser ling technique

Answer briefly

(10x3=30)

13. Demonstration of calcium in tissues
14. Philadelphia chromosome
15. Clearing agents
16. Turner's syndrome
17. Utility of deeper sections in histopathology
18. Bone marrow culture
19. Demonstration of glycogen in tissues
20. Histokinetite
21. Reticulin stain
22. Automatic knife sharpeners
