

QP CODE: 403012

Reg No:.....

**Final Year B.Sc MLT Degree Regular/Supplementary Examinations
September 2019**

Histotechnology and Cytogenetics

Time: 3 Hours

Total Marks: 100

- Answer all Questions.
- Draw Diagrams wherever necessary.

Essay

(2x10=20)

1. Enumerate the different types of embedding media. Mention the specific uses of these media. What is meant by vacuum embedding. Indicate its advantages and disadvantages. (3+4+2+1)
2. Discuss the principles and applications of immune fluorescent techniques in histopathology. Describe the equipments and reagents required for immune fluorescent studies. (5+5)

Short notes

(10x5=50)

3. Application of enzyme histochemistry
4. Criteria for chromosome identification
5. Microarray in histopathology
6. Mounting of museum specimens
7. Methods of decalcification of tissues
8. Methods of chromosome analysis
9. Sampling methods in cytogenetic analysis
10. Fixatives in histopathology
11. Automated tissue processor- principles and advantages
12. Tissue processing for electron microscopy

Answer briefly

(10x3=30)

13. Demonstration of human sex chromosomes
14. Sledge microtome
15. Microtomy for electron microscopy
16. Artifacts caused in microtomy
17. Dehydrating agents
18. Down's syndrome
19. Demonstration of iron in tissues
20. Enumerate any four parasites seen in tissue sections
21. Removal of formalin pigment.
22. Connective tissue stains
