

**B.Sc. MEDICAL LABORATORY TECHNOLOGY  
SECOND YEAR  
PAPER I – HISTOPATHOLOGY & CYTOLOGY TECHNIQUES**

*Q.P. Code: 725016*

**Time: Three Hours**

**Maximum: 100 Marks**

**Answer all questions**

**I. Elaborate on:** **(3 x 10 = 30)**

1. What is microtomy? Mention various types of microtomes available and describe the important parts of Rotary microtome.
2. What is Exfoliative cytology? Explain the methods of processing and smear preparation from fluids.
3. Explain the principle and uses of Immunohistochemistry.

**II. Write notes on:** **(8 x 5 = 40)**

1. Liquid based cytology.
2. What is the principle and use of enzyme histochemistry?
3. Mention the Staining methods for amyloid.
4. Principle and use of Polarising microscope.
5. What is a Counterstain? Give example.
6. Mention any three stains used for the identification of fungi and describe the appearance of fungi in any one stain.
7. Safe practices in Histopathology lab.
8. What is fixation? Mention any three fixatives in Histo and Cytopathology.

**III. Short answers on:** **(10 x 3 = 30)**

1. Principle of silver stains.
2. Use of Ultramicrotome.
3. Uses of Frozen sections.
4. MGG stain – Expand and mention its use.
5. What is Regressive staining?
6. Use of Fite faraco stain.
7. Mounting agent for immunoflorescence sections.
8. Expand FISH and mention any one use.
9. Mention the use of microwave in immunohistochemistry.
10. Name any two clearing agents and mention its use.