

**THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY**

**[AHS 0423]**

**APRIL 2023**

**Sub. Code: 5016**

**B.Sc. MEDICAL LABORATORY TECHNOLOGY  
SECOND YEAR (Regulations 2010-2011 & 2018-2019 onwards)  
PAPER I – HISTOPATHOLOGY AND CYTOLOGY TECHNIQUES  
Q.P. Code: 725016**

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

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

1. Detail account on Automation in Histopathology.
2. Detail account on Immunohistochemistry.
3. Discuss in detail on Cytopathology.

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

1. MGG stain.
2. Stain for melanin pigment.
3. Methods of Decalcification.
4. Agents used in dehydration.
5. Explain the faults and remedies during section cutting through Microtome.
6. Stain for Amyloid.
7. What are the different types of embedding media? Name the commonly used embedding media, its advantages and disadvantages.
8. Stain for connective tissues.

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

1. What is ultra Microtome?
2. Cryostat.
3. Name four Paraffin wax additives.
4. Name the two processes of Haematoxylin ripening. List the chemicals used for ripening.
5. Spray fixatives.
6. What are the two ways of Smearing?
7. Endocervical brush.
8. Define Polymerase Chain Reaction.
9. Composition of Kaiserling solution I, II, III.
10. Uses of Mucin stain.

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