

**B.Sc. IN MEDICAL LABORATORY  
TECHNOLOGY (BMLT)**

**Term-End Examination**

**December, 2015**

**BAHI-008 : HISTOPATHOLOGY AND CYTOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

- Notes : (i) The question paper consist of Three Parts, Part A, B, C.*  
*(ii) Attempt any three questions from Part A.*  
*(iii) Attempt all the questions from Part B and C.*

**PART - A**

Answer **any three** questions. Each carries **10** marks.

1. Describe the preparation, steps and care to be taken in the use of Giemsa or May - Grunwald Giemsa (MGG) stain in cytology. 2+6+2
2. What is tissue fixation ? Classify various fixatives used in the histopathology laboratory giving examples. 2+6+2
3. Define tissue processing. Describe the steps in tissue processing in detail. 2+8
4. Define decalcification and describe how it is done in the histopathology laboratory. List commonly used decalcifying agents. 2+6+2

## PART - B

5. Write short notes on **any four** of the following :  
(a) H and E (Hematoxylin and Eosin) stain **5x4=20**  
(b) Clearing of tissues  
(c) Stain for AFB on tissues  
(d) Glucose Tolerance Test (GTT)  
(e) Frozen section
6. Write briefly on **any two** of the following : **5x2=10**  
(a) Dehydrating agents  
(b) Sharpening of a microtome knife  
(c) Processing of fluids for cytology

## PART - C

7. Indicate **True (T)** or **False (F)** for the following : **5x1=5**  
(a) EDTA and nitric acid are commonly used clearing agents.  
(b) Rapid diagnosis can be made by frozen sections.  
(c) Masson's trichrome stain demonstrates collagen fibrosis in the tissues.  
(d) Cervical smears for cytological study are usually stained by H and E (Hematoxylin and Eosin) stain.  
(e) Paraffin blocks are usually cooled on an ice tray before cutting.
8. **Fill up the blanks :** **5x1=5**  
(a) Paraffin and resins are used in tissue processing as \_\_\_\_\_ media.  
(b) \_\_\_\_\_ can be used as a simple yet good fixative of tissue for electron microscopy.  
(c) Perl's Prussian Blue method is used to stain tissue to detect \_\_\_\_\_.  
(d) The instrument on which paraffin blocks are cut into sections is called a \_\_\_\_\_.  
(e) An example of an accreditation body for quality control in Indian laboratories is \_\_\_\_\_.