

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

**Term-End Examination**

**June, 2014**

**BAHI-009 : APPLIED HISTOPATHOLOGY AND  
CYTOLOGY**

*Time : 3 hours*

*Maximum Marks : 70*

*Note : Attempt all questions as indicated below.*

**PART - A**

1. (a) Fill up the blanks appropriately : 1x5=5
- (i) Oil Red 'O' is mixed with \_\_\_\_\_  
for fat staining procedure.
  - (ii) In perl's method of iron staining  
pottasium ferrocyanide is mixed with  
\_\_\_\_\_ acid in staining  
procedure.
  - (iii) PAS-Alcian blue method is commonly  
use to stain \_\_\_\_\_.
  - (iv) Congo-Red and methyl violet are  
common stains to demonstrate  
\_\_\_\_\_.
  - (v) Verhoeff's is specific stain to  
demonstrate \_\_\_\_\_.
- (b) Answer **True (T)** or **False (F)** of the  
following : 1x5=5
- (i) Bone lesions are normally studied by  
frozen sections for early diagnosis.

- (ii) Elastic fibres stained by Van Gieson technique stains fibres pink, nuclei - black, and other tissue violet.
- (iii) Haemosoidrin stains blue in Perl's - Prussian blue method.
- (iv) Karyotyping is a routine procedure for detection of cytogenetic abnormalities
- (v) In embedding - a tissue processing procedure needs preferably celloidin in comparison to paraffine in Histo Kinelt.

### PART - B

2. Answer in brief **any two** of the following : **5x2=10**
- (a) Applications of immuno histochemistry.
  - (b) Quality control parameters in histopathology.
  - (c) FNAC - applications : Technical Procedures

### PART - C

3. Answer **any four** of the following : **5x4=20**
- (a) PTAH - method for connective tissue staining
  - (b) Stains for pigment
  - (c) Osmic acid stain
  - (d) Vonkossa's silver nitrate
  - (e) PAS stain

### PART - D

4. Answer **any three** of the following :
- (a) What is amyloid ? Describe the principle and procedure of staining of amyloid by Congo Red staining. **3+4+3=10**
  - (b) What are advantages of Frozen section ? Describe method and procedure in brief for Cryostat sections. **3+4+3=10**

- (c) Give an account of restoration of museum specimen. Describe procedures of fixation, preservation and presentation of specimen for museum. **3+4+3=10**
- (d) Enumerate stains for mucosubstances and carbohydrate. Describe complete procedure of Alcian - blue method for staining mucosubstances. **3+2+5=10**
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