



NAN-003-038402 Seat No. _____

B. Voc. (MLMDT) (Sem. IV) (CBCS) Examination

March / April - 2017

MLMDT - 4.2 : Histopathology & Cytology

Faculty Code : 003

Subject Code : 038402

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) All questions are compulsory.
(2) The paper is divided in two sections.
(3) Figures on right indicate marks

SECTION – I

- 1 Answer the following : 20
- (1) Give basic components of all types of connective tissue.
 - (2) How tissue for study can be obtained?
 - (3) Define: special stains.
 - (4) State use of DPX.
 - (5) Define: Histopathology.
 - (6) Enlist calcified/firm tissues.
 - (7) Give examples of Microtome.
 - (8) What is IHC?
 - (9) Small chemical groups on the antigen molecule that can react with antibody is known as _____.
 - (10) Reticulin staining used for diagnosis of _____.
 - (11) Define: affinity of antibody.
 - (12) Define: Cytology.
 - (13) What is IF.
 - (14) Write full form of BSCC.
 - (15) What is Carnoy Fixative?

- (16) _____ is used for examination of cervical cells.
- (17) Define: Maceration.
- (18) What are trigger for neoplastic transformation ?
- (19) Give major parts of Microtome.
- (20) Define: Chatter effect.

SECTION – II

- 2 (A) Answer in brief : (Any 3) : **3×2=6**
- (1) Enlist things needed for dissection,
 - (2) Write on specimen identification and labeling.
 - (3) Give difference between cytology and histopathology
 - (4) Differentiate benign and malignant tumor.
 - (5) What are uses and advantages of formalin?
 - (6) State examples of special staining.
- (B) Answer in brief : (Any 3) **3×3=9**
- (1) Note on floating bath and hot plate with its uses.
 - (2) Details on different types of hematoxylin.
 - (3) Enlist different types of Staining with examples:
 - (4) Note on base sledge and sliding microtome.
 - (5) Note on preparation of monoclonal antibodies.
 - (6) Note on Pap Staining.
- (C) Answer in brief : (Any 2) **2×5=10**
- (1) Discuss in detail about procedure of frozen sectioning.
 - (2) What is tumor staging and grading? Give its importance.
 - (3) Discuss on troubleshooting of IHC staining.
 - (4) Note on Minnot's Microtome.
 - (5) Discuss on basic rules of staining and different types of staining.

- 3 (A) Answer in brief : (Any 3) 3×2=6**
- (1) Give details on antigen retrieval.
 - (2) Give name of any four staining method.
 - (3) Give advantage of disposable blades.
 - (4) Enlist specimens for cytology examinations.
 - (5) Give normal anatomy of CVS.
 - (6) Name the fixative solutions used in museum technique.
- (B) Answer in brief : (Any 3) 3×3=9**
- (1) Write in brief on automated tissue processing.
 - (2) Give diagrammatic representation of steps in immunohistochemistry.
 - (3) Write difference between normal cell and abnormal cell.
 - (4) Note on blocking endogenous enzyme and background staining.
 - (5) How the mounting of museum specimen is done?
 - (6) Discuss different types of knives in brief.
- (C) Answer in brief : (Any 2) 2×5=10**
- (1) Discuss on different types of IHC staining methods.
 - (2) Discuss on precautions before section cutting.
 - (3) Write in details about steps in histopathology.
 - (4) Detail note on different types of plastination methods.
 - (5) Define cytology. Give brief note on exfoliative cytology and its applications.
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