

Shree Manibhai Virani and Smt. Navalben Virani Science College (Autonomous), Rajkot
Affiliated to Saurashtra University, Rajkot

SEMESTER END EXAMINATION APRIL - 2018

B.Voc. Medical Laboratory and Molecular Diagnostic Technology

MLMDT 4.2 – HISTOPATHOLOGY & CYTOLOGY TECHNIQUES

Duration of Exam – 2.30 hrs

Semester – IV

Max. Marks – 70

Que. 1 (A) Answer the following Questions

[20]

1. Define: Histopathology
2. Define: fixative
3. Define: Dehydration
4. Enlist clearing agents
5. Define: neoplasia
6. What are basic components of tumor?
7. Define: microtomy
8. Define : anti roll plate
9. What is HE staining?
10. Define : Histochemical staining
11. What is regressive staining?
12. What is the natural source of hematoxylin?
13. Define: monoclonal antibody
14. Define : affinity of antibody
15. What is Sampling Device?
16. What is Wet Fixation?
17. What is Carnoy Fixative?
18. What are properties of Cytologic Fixative?
19. What is spray fixative?
20. What is plastination?

Que. 2 (A) Answer the following Questions (Any Three)

[06]

1. Enlist Basic steps of Histopathology.
2. Write on specimen identification and labeling.
3. Enlist features of Malignant Tumor.
4. Discuss advantage of Automation in processing as compared to Manual methods.
5. Discuss parts of Microtome.
6. Enlist freezing techniques for tissues.

Que. 2 (B) Answer the following Questions (Any Three)

[09]

1. Note on Techniques to obtain Biopsy Tissue.
2. Brief Note on Steps in Histopathology.
3. Explain Anaplasia and Dysplasia.
4. Discuss cryotome.
5. Enlist reasons for poor quality of staining.
6. Note on trimming of tissue blocks.

Que. 2 (C) Answer the following Questions (Any Two)

[10]

1. Write in detail on various steps of Tissue Processing from Dehydration to Embedding.
2. Brief note on Fixation.
3. Write in details about steps in Histopathology.
4. Discuss in detail about Procedure of Frozen sectioning.
5. Discuss on precautions before section cutting.

Que. 3 (A) Answer the following Questions (Any Three)

[06]

1. Give name of any four staining method.
2. Discuss blueing.
3. Enlist types of hematoxylin.
4. Define IHC
5. Note on types of Antibodies used in IHC
6. Give flowchart of IHC.

Que. 3 (B) Answer the following Questions (Any Three)

[09]

1. Discuss HE staining with steps.
2. Discuss PAS staining.
3. Details on different types of hematoxylin.
4. Give applications of IHC.
5. Note on blocking endogenous enzyme and background staining.
6. Note on preparation of monoclonal antibodies.

Que. 3 (C) Answer the following Questions (Any Two)

[10]

1. What is IF and how it is done? Write in detail.
2. Brief note on IHC.
3. Discuss on basic rules of staining.
4. A note on moutants
5. What is plastination technique? Write its advantages and its steps