

Roll No.

Total No. of Pages : 02

Total No. of Questions : 11

M.Sc (Medical Microbiology) (Sem.3)
HISTOPATHOLOGY AND CYTOLOGY

Subject Code : MMB-303-21

M.Code : 92527

Date of Examination : 16-12-22

Time : 3 Hrs.

Max. Marks : 70

INSTRUCTIONS TO CANDIDATES :

1. **SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.**
2. **SECTION - B & C. have FOUR questions each.**
3. **Attempt any FIVE questions from SECTION B & C carrying TEN marks each.**
4. **Select atleast TWO questions from SECTION - B & C.**

SECTION-A

- 1. Answer all of them :**
- a) Discuss the maintenance of important equipment used in the lab.
 - b) What are the various phases of the menstrual cycle?
 - c) Briefly describe clearing agents & dehydrating media.
 - d) Discuss the importance of muscle biopsies in diagnostic procedures.
 - e) Which stain is used in cytological staining?
 - f) Describe the cytological fixatives & cytological screening.
 - g) Discuss the fluorescence methods for mycobacterium leprae.
 - h) What is an enzyme? Discuss its types.
 - i) What are the specific and non-specific esterases?
 - j) Describe the McManus PAS method for fungi

SECTION-B

2. Discuss in brief the simple & compound fixatives along with the fixatives for a special component of tissue.
3. Describe the paraffin embedding station and cryostat. Write the various applications of H&E stain.
4. Briefly explain the automated & microwave tissue processing.
5. Write a detailed note on thin prep 2000, automated slide strainer along with its applications.
6. Discuss the specificity and sensitivity of immunohistochemistry.
7. Explain the Warthin starry method for spirochetes.
8. Elaborate on the different types of enzymes & histochemical reactions.
9. Discuss the transportation and preservation of histological specimens.

SECTION-C

10. Describe the histopathology lab? Explain its general organization and maintenance of important equipment used in the lab.

OR

Explain in detail the steps of tissue processing. Discuss the various application of histopathology.

11. Briefly explain the preparation of the specimen for immunofluorescence. Discuss its various applications.

OR

Discuss Gram staining types along with suitable examples. Elaborate ziehl-neelsen stain with a mechanism in detail.

NOTE : Disclosure of Identity by writing Mobile No. or Marking of passing request on any paper of Answer Sheet will lead to UMC against the Student.