Exam. Code: 1370 Sub. Code: 46483

2055

B. Voc. (Medical Lab Technology) Fourth Semester BMLT-403: Introduction to Histopathology (Common with ADMLT)

Time allowed: 3 Hours

Max. Marks: 40

NOTE: Attempt <u>five</u> questions in all, including Question No. I which is compulsory and selecting one question from each Section.

x-x-x

1. Answer the following in brief: (8x1=8)

- 1. Define histopathology.
- 2. What is the importance of sample handling in histopathology?
- 3. What is a microtome used for?
- 4. Where is embedding media used in histopathology?
- 5. Define mounting in histopathology.
- 6. What is the role of staining in histopathology?
- 7. What is paraffin embedding?
- 8. Name two staining techniques used for carbohydrate detection.

Section I

- 2. (a) Describe the scope of histopathology. (4)
- (b) Explain the organization of a histopathology laboratory. (4)
- 3. (a) What precautions should be taken during the collection of histopathology specimen? (4)
- (b) Briefly describe the recording and labeling of histological specimens. (4)

Section II

- 4. (a) List major fixation methods and explain one in detail. (4)
- (b) Describe the embedding process in tissue fixation. (4)
- 5. (a) Explain tin brief he processing of histological tissues for paraffin embedding. (4)
- (b) Discuss the types of fixatives used in histopathology and their significance. (4)

Section III

- 6. (a) Define microtome & describe its principle and applications in a histopathology lab. (4)
- (b) How is a microtome knife sharpened? (4)
- 7. (a) Discuss the general characteristics of practical section cutting. (4)
- (b) Explain the precautions taken during the preparation of mounting media. (4)

Section IV

- 8. (a) Define dyes and their practical applications in histopathology. (4)
- (b) Write a short note on solvent mordants and their role in staining. (4)
- 9. (a) Explain the staining process for collagen fibers. (4)
- (b) Discuss one method of identification of pigments in histopathology. (4)