

2055

B. Voc. (Medical Lab Technology)

Fourth Semester

BMLT-404: Introduction to Cytopathology  
(Common with ADMLT)

Time allowed: 3 Hours

Max. Marks: 40

*NOTE: Attempt five 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 cytopathology.
2. What are mitochondria?
3. Name two stains used for immunological cells.
4. Where is media used in hematology?
5. What do you understand by FNAC?
6. Define leukemia.
7. What is a sex chromosome?
8. Who is regarded as the father of cytopathology?

**Section I**

2. (a) Briefly describe the cytoplasmic constituents of a cell. (4)  
(b) What major precautions should be taken when handling cytology specimens? (4)
3. (a) Provide a brief overview of cytology. (4)  
(b) Discuss the precautions necessary for handling gynecological samples. (4)

**Section II**

4. (a) Explain the mode of action and effects of cytological fixatives. (4)  
(b) Write a short note on fluid specimens. (4)
5. (a) Describe the key quality parameters in staining techniques. (4)  
(b) Provide a brief description of the Papanicolaou staining method. (4)

(2)

### **Section III**

6. (a) Differentiate between benign and malignant cells. (4)  
(b) How can pre-malignant lesions be detected? (4)
7. (a) Explain hormonal variations observed in cervical samples. (4)  
(b) Write a short note on pregnancy testing. (4)

### **Section IV**

8. (a) What is fine needle aspiration cytology (FNAC)? (4)  
(b) Write a short note on the procedure for fine needle section cutting. (4)
9. (a) Discuss the role of FNAC clinics. (4)  
(b) How can an anxious patient be educated to remain calm? (4)

x-x-x