2024

MEDICAL LABORATORY TECHNICIAN/ MEDICAL LAB AND MOLECULAR DIAGNOSTIC TECHNOLOGY

Paper : MLT-VE-6036/MDT-VE-6036

(Pathology—VI)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Fill in the blanks : 1×7=7

(a) The presence of _____ in the body cavity fluids is a key indicator of inflammation or infection.

(b) _____ crystals are frequently found in urine and may appear as enveloped-shaped structure.

(c) The process of collection of pericardial fluid is known as _____.

(d) In cervical cytology, _____ is the primary screening method for detecting precancerous and cancerous lesions.

(e) Hematoxylin is used in pap stain the cell _____.

(f) _____ is a commonly used fixative in cytology that preserves cellular morphology by denaturing proteins.

(g) _____ is specimen with low pH.

2. Answer the following questions : 8

(a) Write short notes on the following : 2+2=4

(i) Triple smear

(ii) Ileal conduit of urine

(b) What is the difference between a wet smear and a dry smear in cytology preparation? 2

(c) What are the common types of urinary crystals encountered in urine cytology? 2

3. Answer any *three* of the following questions : 5×3=15

(a) Discuss the role of interventional cytology in the diagnosis and management of various types of lesions or diseases.

(Continued)

(b) Define effusion. Describe the common types of effusion.

(c) Define dyskaryotic changes and explain the cellular abnormalities associated with dyskaryosis.

(d) How will you process a bloody specimen in cytopathology laboratory?

(e) Describe the steps involved in preparing a cell block from cytological specimen.

4. Answer any *three* of the following questions : 10×3=30

(a) What is the primary purpose of conducting cervical cytology? Describe the process of collection of specimen from the female genital tract emphasizing patient comfort and sample integrity. 2+8=10

(b) What is FNAC? Write two advantages of FNAC. Describe the procedure of FNAC. 1+2+7=10

(c) Write a note on papanicolaou stain and its application. 10

(d) Explain the applications of exofoliative cytology in the diagnosis of urinary tract disorders. Explain the types of specimen obtained for urine cytology. 5+5=10

(e) What is interventional cytology? Describe the technique used to collect samples for cytological examination. 1+9=10

(f) Explain the methodologies used to process fluid specimens in a cytology laboratory. 10

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