2022

MEDICAL LAB AND MOLECULAR DIAGNOSTIC TECHNOLOGY/MEDICAL LABORATORY TECHNICIAN

Job Role : Histotechnician

Paper : MDT/MLT–VE-5036

(Pathology V)

Full Marks : 60

Time : 3 hours

The figures in the margin indicate full marks for the questions

1. Fill in the blanks : $1 \times 7 = 7$

(a) ____ is used as fixative for electron microscopy.

(b) Agar can be used as ____ in histopathology lab.

(c) Ideal thickness of a tissue section is ____.

(d) Xylol is used as ____.

(e) The process of sharpening of microtome knife is known as ____.

(f) Formalin pigments can be removed by applying ____.

(g) Mixture of glycerol and ____ are used as adhesive in histopathology laboratory.

2. Answer the following questions : 2×4=8

(a) How are you going to embed tubular structures?

(b) What is the purpose of placing the tissue section in the tissue flotation bath?

(c) What do you mean by mordant?

(d) Write down the application of vacuum embedding.

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

(a) Write down the roles of histopathology laboratory for disease diagnosis.

(b) Explain progressive and regressive stains with examples.

(c) Write a note on cryostat sectioning.

(d) Explain briefly about tissue processing.

(e) Write down the use and care of microscope.

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

(a) Define fixation. What are the modes of action of histological fixative? Classify fixative and explain in detail with examples. 2+2+6=10

(b) Name the connective tissue fibres. Write down the principle, procedure and results of any trichrome stain. 3+7=10

(c) Define pigments. Classify pigments along with examples.

(d) Write a note on grossing in histopathology in detail.

(e) What do you mean by microtomy? How will you perform sectioning in histopathology? Explain in detail. 1+9=10

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