



DMLT/DMRT EXAMINATION BOARD, ODISHA

FINAL D.M.L.T. Annual Exam Of 2021

QUESTIONS (PATHOLOGY, PAPER-I)

(HISTO-TECHNOLOGY, CYTOLOGY & MUSEUM STUDY)

TIME:3 Hours

FULL MARKS:100

Answer all questions

1. Answer (AnyTWO) (15 x 2 = 30)
 - a. What is fixation? Classify fixatives; What are the different forms of formalin used in the laboratory ? Write the Advantages & Disadvantages of formalin fixative. [2+ 3+2+8]
 - b. What is tissue processing? Enumerate the different steps of tissue processing including (i) fixation, (ii) dehydration, (iii) clearing, (iv) impregnation, (v) embedding and (vi) paraffin block making. [2+3+2+2+2+2+2]
 - c. Enumerate in detail the collection, fixation and staining procedure of Pap smear;write the advantages of Pap staining. [3+2+8+2]
2. Write short notes on : (Any FIVE) (6 x 5 = 30)
 - a. Dehydration
 - b. Hematoxylin and Eosin stain
 - c. Honing & Stropping
 - d. Sex chromatin staining
 - e. Decalcification
 - f. Blocking out
3. Write in brief : (Any FIVE) (2 x 5 = 10)
 - a. What is scoring?
 - b. What is the composition of 10% buffered formalin ?
 - c. What is freeze drying ?
 - d. What are mordants ? Give examples of some mordants used in Hematoxylin staining.
 - e. What is a counter stain ? Give some examples.
 - f. Write the colour of bins used for disposing the different types of Hospital wastes

4. Choose the correct answer

(2 X 5 = 10)

1) Which of the following fixatives is routinely used

- A) 10% Formalin
- B) Zenker's fluid
- C) 40% Formalin
- D) Bouin's fluid

2) The ideal thickness of gross specimen for tissue processing is

- A) 3-5 mm
- B) 6-8 mm
- C) 10-12 mm
- D) 3-5 um

3) All of the following are nuclear fixatives, except

- A) Carnoy's fluid
- B) Clark's fluid
- C) New Comer's fluid
- D) Champy's fluid

4) Formalin is

- A) 10% Formaldehyde
- B) 40% Formaldehyde
- C) 20% Formaldehyde
- D) 30% Formaldehyde

5) Leukhart's L pieces are made up of

- A) Iron
- B) Copper
- C) Brass
- D) Steel

5. Fill in the blanks-

(2 x 10 = 20)

- a) The fixative of choice for frozen section is _____
- b) Example of a metachromatic dye _____
- c) Block remaining fixed, knife moves in _____ microtome.
- d) Full form of DPX is _____
- e) Differentiation in Hematoxylin & Eosin stain is done using _____
- f) Example of an intolerant fixative is _____.
- g) Example of a decalcifying fluid is _____
- h) Trimming of paraffin block is done at _____ thickness.
- i) Von kossa stain is used to stain _____.
- j) In Pap stain, nucleus is stained by _____.
