



DOCTORSIMES

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BS(MLT), MS(MV)

Elementary Anatomy & Microtechniques

Microtechniques

- Refers to a set of methods and procedures used in the field of pathology to prepare, process and analyze microscopic specimens including tissues, cells and fluids.



Microtechniques

- Introduction to microtechniques
- Identification of tissues
- Fixation of tissues
- Tissue processing

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- Section cutting
 - Routine Staining
 - Mounting of slides
 - Decalcification of bone



Elementary Anatomy & Microtechniques

ELEMENTARY ANATOMY AND MICROTECHNIQUES

Topics	Weight %
1. Introduction to Anatomy	4 %
2. Respirator System.	6 %
3. Digestive system	6 %
4. Urinary system.	6 %
5. Circulatory system.	6 %
6. Nervous system.	6 %
7. Reproductive system	6 %
8. Muscular and skeletal system	6 %
9. Endocrine system.	4 %
10. Introduction to microtechnique	4 %
11. Identification of tissues	10 %
12. Routine histopathological techniques	8 %
13. Section cutting.	7 %
14. Routine staining.	8 %
15. Mounting of slides.	6 %
16. Decalcification and staining of bone.	6 %
Total % 100 %	

85



Short Questions



ELEMENTARY ANATOMY AND MICROTECHNIQUES HSSC-I

Time allowed: 2:20 Hours

Total Marks Sections B and C: 40

NOTE: Answer any thirteen parts from Section 'B' and any two questions from Section 'C' on the separately provided answer book. Use supplementary answer sheet i.e. Sheet-B if required. Write your answers neatly and legibly.

SECTION - B (Marks 26)

Q. 2 Answer any THIRTEEN parts. The answer to each part should not exceed 2 to 5 lines. (13 x 2 = 26)

- (i) Name any four cytoplasmic organelles.
- (ii) Write down the structure of 'Larynx'. Why is it also called sound box?
- (iii) Pharynx receives seven openings in it. List any four openings.
- (iv) Briefly describe the unit of structure of Kidneys.
- (v) Heart comprises three coats / layers. Write down their names. What type of tissue these are?
- (vi) Name anatomical parts of Human Brain. What are Lateral ventricles?
- (vii) Write down the structure of testis. What is testosterone?
- (viii) Name atypical cervical vertebrae. Why is the seventh cervical vertebra called vertebra prominens?
- (ix) Briefly mention the microscopic features of appendix wall.
- (x) Write down the structure of transitional epithelium. Why is it named so and where it is located?
- (xi) Name the Hormones secreted by anterior lobe of pituitary gland.
- (xii) What are 'Microtechniques'? Write down the significance and scope of this subject of study.
- (xiii) Give any four properties of an ideal fixative.
- (xiv) Write down the working principle and merits of rotary microtome.
- (xv) Briefly describe the method of 'Permanent mounting'. Name any two mounting media.
- (xvi) Define decalcification. Give any two merits of nitric acid as a decalcifying agent.
- (xvii) Write down the features of Haematoxylin stain.



Long Questions

SECTION - C (Marks 14)

Note: Attempt any TWO questions. All questions carry equal marks.

(2 x 7 = 14)

- Q.3** What are 'Stains'? Discuss the steps of Blueing and Differentation in H/E staining.
- Q.4** Write down the structure of liver. What types of vessels enter and leave the liver substance.
- Q.5** Write down the anatomy and anatomical position of Human Heart. Differentiate between 'Endocardium' and 'Endothelium'.



THANK
YOU