



/01

**ELEMENTARY ANATOMY AND MICROTECHNIQUES HSSC-I**  
**SECTION – A (Marks 10)**

**Time allowed: 10 Minutes**

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**Note:** Section – A is compulsory. All parts of this section are to be answered on the separately provided OMR Answer Sheet which should be completed in the first 10 minutes and handed over to the Centre Superintendent. Deleting/overwriting is not allowed. Do not use lead pencil.

**Q. 1** Choose the correct answer A / B / C / D by filling the relevant bubble for each question on the OMR Answer Sheet according to the instructions given there. Each part carries one mark.

- 1) Which cell has no nucleus?  
A. Goblet cell  
B. Neutrophils  
C. RBC  
D. Lymphocytes
- 2) Sertoli cells are present in:  
A. Liver  
B. Spleen  
C. Testis  
D. Lymphnode
- 3) Coronary artery supply blood to:  
A. Pancreas  
B. Brain  
C. Kidney  
D. Heart
- 4) Which one is used as fixative for cytological examination?  
A. Formalin  
B. Alcohol  
C. Canada Balsam  
D. Xylene
- 5) Which one is commonly used stain for smear of vagina?  
A. Pap stain  
B. H/E stain  
C. Giemsa stain  
D. ZN stain
- 6) Blueing is done in H/E staining with:  
A. Alkaline tap water  
B. 1% ammonia water  
C. 1% acid water  
D. All of these
- 7) Which one is **NOT** a clearing agent?  
A. Xylene  
B. Toluene  
C. Benzene  
D. Acetic acid
- 8) Total pairs of ribs in the body are:  
A. 8  
B. 10  
C. 12  
D. 14
- 9) Excretory system does **NOT** consist of:  
A. Urethra  
B. Ureter  
C. Urinary bladder  
D. Prostate gland
- 10) The organelle involved in defence mechanism:  
A. Lysosomes  
B. Mitochondria  
C. Golgi bodies  
D. None of these





# ELEMENTARY ANATOMY AND MICROTECHNIQUES HSSC-I

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**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 parts of vertebral column.
- (ii) Describe Hepatic portal system in the body.
- (iii) Name the parts of urinary system.
- (iv) Why pituitary gland is called master gland?
- (v) What is anatomical position of spleen? Write down two functions of spleen.
- (vi) What are the function of liver in the body?
- (vii) Describe difference between pseudostratified and stratified epithelium.
- (viii) What are the openings in pharynx?
- (ix) Name parts of female genital tract.
- (x) Describe Microscopic features of Appendix.
- (xi) Explain properties of paraffin wax technique.
- (xii) How decalcification is confirmed?
- (xiii) Describe anatomical position of pancreas in the body.
- (xiv) Define stain. Explain features of eosin stain.
- (xv) Write down principle of base sledge microtome.
- (xvi) Differentiate between exocrine and endocrine glands.
- (xvii) Write down principle of H/E staining.

## SECTION – C (Marks 14)

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

**(2 x 7 = 14)**

- Q.3** Explain each step taken from receiving a biopsy in the laboratory and making a stained slide.
- Q.4**
- a. Define and classify basic body tissues.
  - b. Describe three types of muscle tissue.
- Q.5**
- a. Write down anatomy and anatomical position of heart.
  - b. Explain structure of heart wall.

