



Roll No.

Answer Sheet No. _____

Sig. of Candidate. _____

Sig. of Invigilator. _____

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

Time allowed: 10 Minutes

NOTE:- Section-A is compulsory. All parts of this section are to be answered on the question paper itself. It 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 Circle the correct option i.e. A / B / C / D. Each part carries one mark.

- (i) Which of the following cells does **NOT** have nucleus?
A. Goblet cell B. Smooth Muscle cell
C. Mature Red Blood Cell (RBC) D. Neutrophils
- (ii) Which of the following is an inclusion in cytoplasm?
A. Nucleus B. Glycogen C. Ribosomes D. None of these
- (iii) Which of the following is used as a preservative for cytological examination?
A. Alcohol B. Xylene C. Canada Balsam D. Formalin
- (iv) Which stain is more commonly used for cytological specimens obtained from vagina?
A. Pap stain B. Gram stain C. Giemsa stain D. H & E stain
- (v) Which of the following statements is **INCORRECT** about cardiac Muscle cell?
A. There are no striations. B. Nucleus is central.
C. It is involuntary in action. D. It can not regenerate.
- (vi) Which of the following statements is **INCORRECT** about respiratory passages?
A. Mucous membrane has pseudostratified ciliated columnar epithelium in trachea
B. Trachea has a complete "O" shape cartilage
C. Cartilage is Hyaline type
D. Alveoli has squamous epithelial cells
- (vii) Which of the following is **NOT** a part of excretory system?
A. Urethra B. Ureters
C. Prostate Gland D. Urinary bladder
- (viii) Which of the following statements is **CORRECT** about ovary?
A. Surface is lined by simple cuboidal epithelium.
B. It is a glandular tissue.
C. A single ovary is present on the posterior surface of uterus.
D. Remains functional after menopause (ova is released)
- (ix) Which of the following statements is **INCORRECT** about nervous system?
A. Basic cell is Neuron.
B. Supportive tissue is formed by Neuroglial cells.
C. Axon Hillock has the maximum concentration of Nissl bodies.
D. Motor sensations are transmitted by Axons.
- (x) Histamine is a chemical produced by _____
A. Mast cells B. Plasma cells
C. Fibroblasts D. Adipose cells

For Examiner's use only:

Total Marks:

10

Marks Obtained:



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

- (i) Name the fibres of connective tissue. What is the difference between them?
- (ii) Draw and label longitudinal bone (Gross Anatomy of long bone).
- (iii) What is Microtome? Give its types.
- (iv) How will you prepare a solution of 10% formal saline?
- (v) Name the Haematopoietic tissues in adults. What is the difference between yellow and red bone marrow?
- (vi) Draw and label a diagram of Stomach.
- (vii) Draw and label the abdominal regions and name the important organs of each region.
- (viii) What is the difference between Biopsy and Autopsy?
- (ix) Name any four secretions of Pituitary gland. Also write their actions.
- (x) Give four functions of bones.
- (xi) What is a Frozen section? Also give its advantage.
- (xii) Classify epithelial tissue according to layer of cells and shape of cells.
- (xiii) What are Granulocytes and Agranulocytes seen in blood? How will you differentiate between them?
Draw the diagrams.
- (xiv) Name the 12 cranial nerves.
- (xv) Draw and label longitudinal section of Kidney.
- (xvi) Give four functions of Liver.
- (xvii) Define Acid, Basic and Neutral stains. Which component of cells will be coloured by these.
Give example of each type.

SECTION – C (Marks 14)

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

(2 x 7 = 14)

- Q.3 Describe the steps of tissue processing.
- Q.4 Define and classify basic body tissues. Differentiate between the three types of Muscle tissues.
- Q.5 Write down the function of each part of the Digestive system. Also discuss the gastric mucosa.