



Class: XI

Time Allowed: 20 minutes

Q1:

Note: Attempt **ALL** questions from this section. Each question carries **ONE** mark.

Marks: 17

MODEL PAPER EXAMINATION 2026

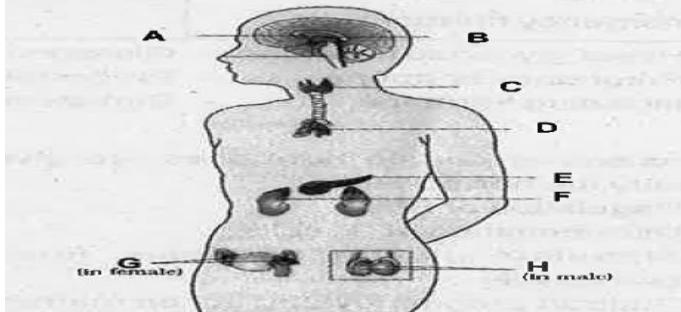
SUBJECT: ELEMENTARY ANATOMY & MICROTECHNIQUES
SECTION "A"

1. Which body system removes waste products from the blood and maintains water and electrolyte balance?
 - A. Urinary system
 - B. circulatory system
 - C. digestive system
 - D. respiratory system
2. Which layer of the meninges is closest to the brain's surface?
 - A. Hinge joint
 - B. Ball and Socket joint
 - C. Pivot joint
 - D. Condyloid joint
3. If a patient is lying on their back, this position is known as:
 - A. Prone
 - B. Lateral
 - C. Supine
 - D. Medial
4. Which abdominal region is primarily associated with the liver and gallbladder?
 - A. Epigastric region
 - B. Right Hypochondriac region
 - C. Umbilical region
 - D. Left hypochondriac region
5. Which cellular component acts as a selective barrier, regulating the entry and exit of substances?
 - A. Nucleus
 - B. Cytoplasm
 - C. Cell membrane
 - D. Mitochondria
6. The pelvic cavity primarily contains which organs?
 - A. Heart and lungs
 - B. Reproductive organs and bladder
 - C. Brain and spinal cord
 - D. Stomach and liver
7. What is the correct path through the circulatory system which describes the passage of blood originating in the left leg?
 - A. Vena cava → left atrium → right atrium → lungs
→ left ventricle → right ventricle → aorta
 - B. Vena cava → right atrium → left atrium → lungs
→ right ventricle → left ventricle → aorta
 - C. Vena cava → left atrium → left ventricle → lungs
→ right atrium → right ventricle → aorta
 - D. Vena cava → right atrium → right ventricle → lungs → left atrium → left ventricle → aorta
8. The heart is enclosed in a protective sac called the:
 - A. Pericardium
 - B. Pleura
 - C. Peritoneum
 - D. Myocardium
9. Which enzyme in saliva breaks down starches into sugars?
 - A. pepsin
 - B. lipase
 - C. amylase
 - D. trypsin
10. Which hormone is produced by the pancreas to regulate blood sugar levels?
 - A. Insulin
 - B. Thyroxin
 - C. Cortisol
 - D. Adrenaline
11. The hormone melatonin, produced by the pineal gland, is associated with:
 - A. Sleep-wake cycles and circadian rhythms
 - B. Blood sugar regulation
 - C. Immune system function
 - D. Bone development
12. Oxytocin and ADH are produced by the _____ and stored in the _____.
 - A. Posterior pituitary; Anterior pituitary
 - B. Adrenal cortex; Adrenal medulla
 - C. Hypothalamus; Neurohypophysis
 - D. Adenohypophysis; Kidneys
13. What is the function of the seminal vesicle in the male reproductive system?
 - A. Sperm storage
 - B. Secretion of alkaline fluid
 - C. Sperm maturation
 - D. Production of testosterone
14. What is the function of ligaments in the musculoskeletal system?
 - A. Connect muscle to bone
 - B. Facilitate joint movement
 - C. Connect bone to bone
 - D. Store minerals
15. Which type of muscle is responsible for involuntary movements like digestion?
 - A. Smooth muscle
 - B. Cardiac muscle
 - C. Skeletal muscle
 - D. Ligaments
16. Which type of joint allows movement in multiple planes, including flexion, extension, abduction, and adduction?
 - A. Ball and Socket joint
 - B. Hinge joint
 - C. Condyloid joint
 - D. Pivot joint
17. Which process involves the elimination of concentrated urine from the body?
 - A. absorption
 - B. Selective reabsorption
 - C. micturition
 - D. glomerular filtration

Practical Based Assessment (PBA)
(Marks: 15)

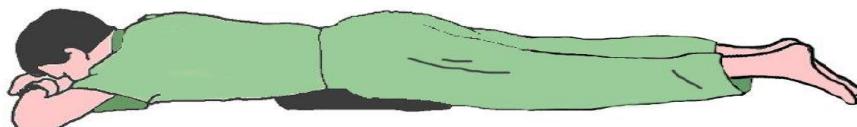
18. The diagram of the human body shows some parts of the endocrine system. Label the given parts.

Marks (4)



19. Identify the position given below:

Marks (1)



20. Answer the given questions:

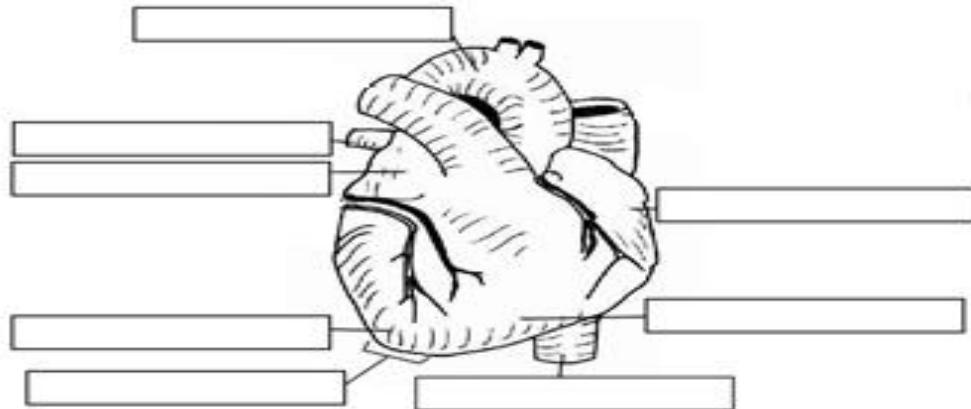
Marks (2)

a) Which is the largest and the main artery of the circulatory system? _____

b) Name the blood vessels that carry blood from upper and lower parts of the body? _____

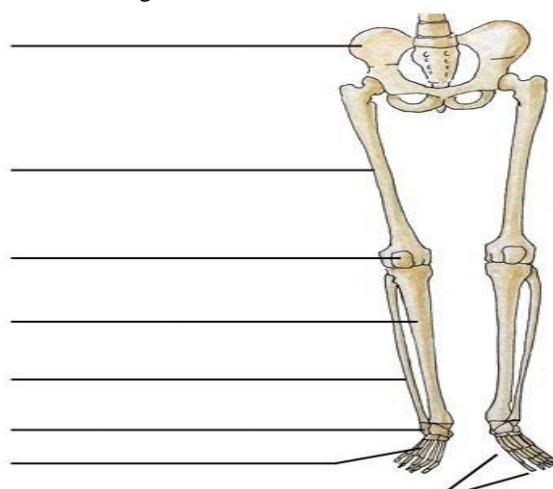
21. Label the given parts:

Marks (4)



22. Label the diagram.

Marks (4)



**Class: XI****Time: 2 hours 40 minutes****Q2:**
MODEL PAPER EXAMINATION 2026
SUBJECT: ANATOMY & MICROMECHANICS
SECTION "B" AND SECTION "C"
SECTION "B" SHORT ANSWER QUESTIONS
Total Marks 68
36 Marks

Note: Answer any **NINE** questions from this section. All questions carry equal marks.

- (i) Give a comparison of types of muscle.
- (ii) Enlist hormones of anterior pituitary gland.
- (iii) How does the exchange of gases occur at the alveolar level?
- (iv) List down the main nine abdominal regions along with their organs
- (v) Differentiate between smooth & cardiac muscles.
- (vi) Write down the difference between meiosis & mitosis.
- (vii) Write down the steps of paraffin wax embedding.
- (viii) Differentiate between light and electron microscopy.
- (ix) Enlist the different types of stains used for bone tissues.
- (x) Why are secretions of the adrenal cortex called corticosteroids?
- (xi) Differentiate between the following:
 - a. Insulin & Glucagon
 - b. Central Nervous system & Peripheral Nervous system

SECTION "C" DETAILED ANSWER QUESTIONS
32 Marks

Note: Answer any **TWO** questions from this section. All questions carry equal marks. Your answer should not exceed 30 to 40 lines

- Q3: Describe the structure and function of a neuron.
- Q4: Explain pituitary gland, its lobes and hormones in details.
- Q5: Explain the skeletal system in detail with diagram.

END OF PAPER