

M.B.B.S. FIRST PROFESSIONAL EXAMINATION, SEPTEMBER-2025**ANATOMY
PAPER - SECOND****[Time allotted: Three hours]****SET - A****[Max Marks: 100]****Q. 1. Multiple choice questions (Darken the single best response in OMR sheet. Time allotted 20 minutes) (20 x 01 = 20)**

1. A surgeon exploring the inguinal region identifies the superficial inguinal ring. In which structure does it lie?
 - a. Transversus abdominis muscle
 - b. Fascia transversalis
 - c. Internal oblique muscle
 - d. External oblique aponeurosis
2. During late pregnancy, an ultrasound reveals the descent of testes into the scrotum. At what time does this normally occur?
 - a. 8th month end
 - b. 9th month
 - c. Just before birth
 - d. 6th month
3. A Patient undergoes gallbladder surgery. The fundus of the gall bladder lies at the level of:
 - a. Tip of 6th costal cartilage
 - b. Tip of 7th costal cartilage
 - c. Tip of 9th costal cartilage
 - d. Tip of 10th costal cartilage
4. During a cross-sectional scan, which of the following structures is not found at the level of the transpyloric plane?
 - a. Origin of superior mesenteric artery
 - b. Pylorus of stomach
 - c. Hilum of both kidneys
 - d. Termination of portal vein
5. A fractured rib injures the spleen. Which ribs are normally in contact with the spleen?
 - a. 9–11
 - b. 10–12
 - c. 8–12
 - d. 11–12
6. During colon surgery, the middle colic artery is ligated. It is a branch of which artery?
 - a. Coeliac trunk
 - b. Superior mesenteric artery
 - c. Inferior mesenteric artery
 - d. Phrenic artery
7. In a male cadaver dissection, bulbourethral (Cowper's) glands are found. These are located in which part of the perineum?
 - a. Ischioanal fossa
 - b. Superficial perineal pouch
 - c. Deep perineal pouch
 - d. False pelvis
8. An MRI pelvis reveals the angle of anteversion in a female patient. It is formed between:
 - a. Body of uterus & cervix
 - b. Cervix & vagina
 - c. Vagina & perineum
 - d. Vagina & body of uterus
9. During abdominal surgery, the portal vein is located. It is formed by the union of:
 - a. Superior mesenteric & Inferior mesenteric veins
 - b. Superior mesenteric & Splenic veins
 - c. Inferior mesenteric & Splenic veins
 - d. Superior mesenteric & Left gastric veins
10. A radiologist finds the tail of the pancreas. It lies in which ligament?
 - a. Lesser omentum
 - b. Lienorenal
 - c. Gastrosplenic
 - d. Splenophrenic
11. An athlete complains of groin pain. MRI shows strain at the adductor magnus insertion. Where does it attach?
 - a. Base of the patella
 - b. Apex of the patella
 - c. Adductor tubercle
 - d. Soleal line
12. A vascular surgeon is tracing the adductor canal. What forms its posterior wall?
 - a. Sartorius
 - b. Adductor longus
 - c. Adductor brevis
 - d. Vastus lateralis
13. A patient is diagnosed with piriformis syndrome. Where does the piriformis muscle insert?
 - a. Lesser trochanter
 - b. Greater trochanter
 - c. Neck of femur
 - d. Shaft of femur
14. During cardiac surgery, the anatomical base of the heart is examined. It is formed by:
 - a. Left & Right Atrium
 - b. Left & Right Ventricle
 - c. Left Ventricle & Right Atrium
 - d. Left Atrium & Right Ventricle
15. The cardiologist notes a vein that drains directly into the right atrium and is not a tributary of the coronary sinus. Which one is it?
 - a. Great cardiac vein
 - b. Middle cardiac vein
 - c. Small cardiac vein
 - d. Anterior cardiac vein
16. During thoracic duct tracing, the duct is found to shift course at which vertebral level?
 - a. T3
 - b. T5
 - c. T7
 - d. T9
17. During an endoscopy, the physician notes the beginning of the esophagus. At what level does it start?
 - a. C5
 - b. C6
 - c. T1
 - d. T2
18. A karyotype is obtained for a child with developmental delay. Trisomy 21 is diagnosed. What is the condition?
 - a. Turner's syndrome
 - b. Edward's syndrome
 - c. Down's syndrome
 - d. Patau's syndrome
19. A female child with webbed neck and short stature is found to have chromosomal abnormalities. What is the chromosomal complement in Turner syndrome?
 - a. XXY
 - b. XX
 - c. XO
 - d. XYY
20. A histology slide of the urinary bladder reveals large umbrella-shaped cells. These are found in:
 - a. Duodenum
 - b. Supra renal gland
 - c. Urinary bladder
 - d. Stomach

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Note: Attempt all questions in sequence.
Draw suitable diagrams (wherever necessary)

- Q. 2. Give reasons:** (5 x 2 = 10)
- a. Liver disease may lead to haemorrhoids
 - b. Pain of appendix is first felt around umbilicus and later shifts to right iliac fossa
 - c. Splenectomy may lead to diabetes mellitus
 - d. Fracture neck femur may lead to necrosis of femur neck
 - e. Foreign bodies commonly lodge in right lung
- Q. 3. Problem based question:** (1+3+3+3 = 10)
- A patient presented to OPD with frequent complaint of burning pain in left upper abdomen after taking spicy food or drinks. On endoscopy ulceration was seen along the lesser curvature of stomach.
- a. Why are ulcerations more common along lesser curvature?
 - b. Draw a well labeled diagram showing blood supply of the stomach
 - c. Write a note on development of the stomach
 - d. Draw a well labeled diagram showing stomach bed contents
- Q. 4. Write short notes on:** (4 x 6 = 24)
- a. Boundaries of Inguinal canal
 - b. Boundaries & Contents of popliteal fossa
 - c. Development of male external genitalia
 - d. Write a note on the importance of Cadaver as the first teacher
- Q. 5. Structured questions:**
- (i) Describe prostate under following headings: (2+3+3+2= 10)
- a. Capsules
 - b. Lobes of the prostate
 - c. Zones in the prostate
 - d. Changes in the prostate with age
- (ii) Describe right coronary artery under following headings: (2+3+3+2= 10)
- a. Origin
 - b. Course
 - c. Branches
 - d. Applied aspects of coronary circulation
- Q. 6. Answer as indicated:** (4 x 4 = 16)
- a. Draw a well labeled diagram of stratified squamous epithelium
 - b. Write a note on Turner's syndrome
 - c. Write a note on Medial longitudinal arch
 - d. Development of Inter ventricular septum
