



UNIVERSITY OF JAFFNA, SRI LANKA
FIRST EXAMINATION FOR MEDICAL DEGREES (2nd) –NOVEMBER 2020
ANATOMY – PAPER II

Date : 23.11.2020

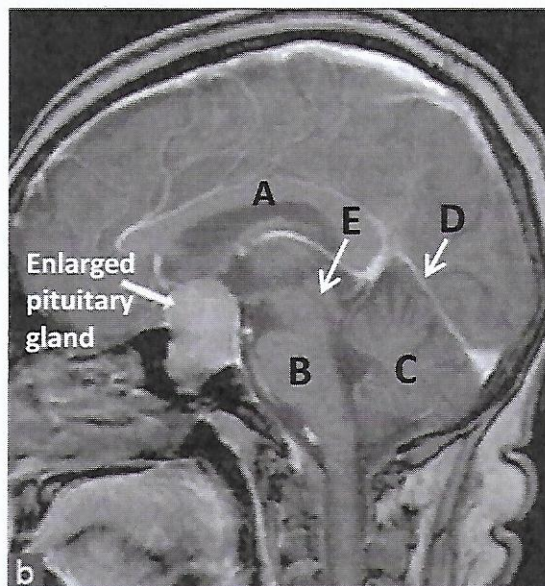
Time: Three hours

Answer all TEN questions

Answer EACH QUESTION in a separate answer book

1. A 54 year multiparous woman presented with a painless lump at anus and bleeding fresh blood per rectum. Proctoscopy revealed internal haemorrhoids
 - 1.1 Enumerate the interior of the anal canal during proctoscopy with diagram (30 Marks)
 - 1.2 Mention the locations of these lumps (20 Marks)
 - 1.3 Why these lumps are painless? (10 Marks)
 - 1.4 Describe how the musculature of the anal canal differ from general pattern of the digestive system (20 Marks)
 - 1.5 Outline the venous return of anal canal (20 Marks)

2. A 50 year man visited an ophthalmologist because of headache and worsening of vision. Visual field assessment report showed bitemporal hemianopia. CT scan (given below) revealed enlarged pituitary gland.



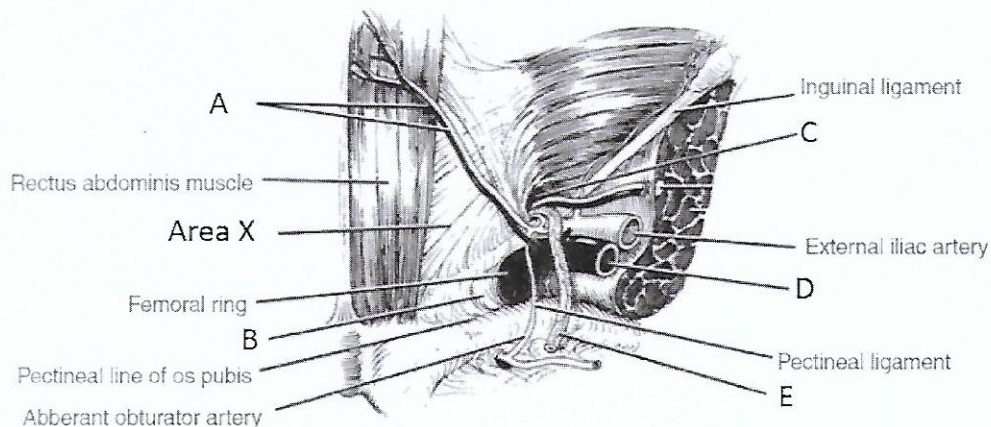
- 2.1 Identify A, B, C, D, E in the above picture (15 Marks)
- 2.2 Mention the cells of the retina which are responsible for visual sensation (10 Marks)
- 2.3 Outline the visual pathway from retina to the visual cortex with a line diagram (40 Marks)
- 2.4 Draw his visual field assessment report (10 Marks)
- 2.5 Explain anatomically how enlarged pituitary gland leads to bitemporal hemianopia (25 Marks)

3. A 28 year married woman with acute pain and tenderness in the lower abdomen was admitted at the hospital. Ultrasound scan revealed an ectopic pregnancy in the fallopian tube.
- 3.1 Briefly describe the reason for tenderness in the lower abdomen (20 Marks)
- 3.2 Write the normal site of fertilization (10 Marks)
- 3.3 Name the normal site of implantation (10 Marks)
- 3.4 List four abnormal implantation sites (20Marks)
- 3.5 Write the blood supply of fallopian tube (20Marks)
- 3.6 Briefly describe the structural features of fallopian tube for its effective function (20 Marks)
- 4.
- 4.1 Enumerate the structures forming the diaphragm (20 Marks)
- 4.2 Briefly describe three abnormalities during the development of diaphragm (25 Marks)
- 4.3 Name the major openings in the diaphragm and write the structures passing through each openings (30Marks)
- 4.4 Write notes on microscopic anatomy of fundus of the stomach (25Marks)
5. A 25 year man suddenly twisted his right leg and developed pain over his right knee joint. On examination the joint was swollen and tender. Joint showed **excess anterior mobility**.
- 5.1 Write the most likely diagnosis and explain it on anatomical basis (20 Marks)
- 5.2 Which ligament prevents posterior displacement of the tibia on the femur? (10 Marks)
- 5.3 Draw and label the structures attached to the tibial plateau (25 Marks)
- 5.4 Outline the function of popliteus muscle in this joint (20 Marks)
- 5.5 List the factors that stabilize the patella (25 Marks)
6. A 40 year male admitted in the hospital with scalp laceration in the left lateral side of scalp and doctor planned to suture the wound
- 6.1 List the layers of scalp (20 Marks)
- 6.2 Write short notes on the blood supply of the scalp (30 Marks)
- 6.3 Explain the reason for profuse bleeding from the injured wound of scalp (20 Marks)
- 6.4 Explain the danger area of face (30 Marks)
7. A
- 7.1 Outline the surface marking of anatomical position of cardiac valves (40 Marks)
- 7.2 Write notes on gross anatomy of superior vena cava (30 Marks)
- B Write six facial features of Down syndrome (30 Marks)

8. A 30year athlete presented hospital following fall on to his outstretched hand on the previous day. He was complaining pain over the wrist. He had tenderness during Bi-manual palpation of the anatomical snuff box. X-ray confirmed fracture of Scaphoid.

- 8.1 Describe the anatomical snuff box (60 Marks)
8.2 Write three clinical significance of the anatomical snuff box (40 Marks)

9. A 20year male university student presented with a 1 year history of right groin swelling which was increasing with cough. It was diagnosed as indirect inguinal hernia and he underwent key holesurgery (laparoscopic hernia repair). Internal view of his right inguinal region is given below.



(Laparoscopic view of right inguinal region from the peritoneal cavity)

- 9.1 Identify structures A to E (15 Marks)
9.2 Name the Area X and list its boundaries (15 Marks)
9.3 What is the clinical significance of Area X? (10Marks)
9.4 Explain how will you surface mark the deep inguinal ring during clinical examination? (20 Marks)
9.5 Describe the boundaries of inguinal canal (40 Marks)
10. A 55year male had metastatic cancer in the left lateral sector of the liver. Affected segment was removed involving upper midline surgical incision in the abdomen.
- 10.1 Write the segment(s) present in the above mentioned sector precisely (10 Marks)
10.2 Briefly describe the attachment of liver to the anterior abdominal wall (30 Marks)
10.3 Outline the arrangement of rectus sheath in between the costal margin and the arcuate line by a labelled diagram only (35 Marks)
10.4 List the structures that lie at the portahepatis (25 Marks)