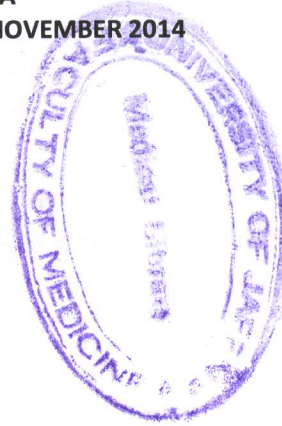


UNIVERSITY OF JAFFNA, SRI LANKA
FIRST EXAMINATION FOR MEDICAL DEGREES – NOVEMBER 2014
ANATOMY - PAPER II

Date : 12.11.2014

Answer all TEN questions (Answer each part in separate answer book)

Time : 3 hours



PART A

- 1 Write short notes on
 - 1.1 Lateral wall of nasal cavity 30 Marks
 - 1.2 Middle ear 40 Marks
 - 1.3 Internal jugular vein 30 Marks

- 2 A 71 year old man was admitted to the emergency department due to sudden onset of right sided weakness. Examination revealed **right sided hemiplegia and hemianaesthesia**
 - 2.1 Draw and label circle of Willis 30 Marks
 - 2.2 With line diagrams show the areas of arterial distribution on
 - 2.2.1 Lateral surface of cerebral hemisphere 20 Marks
 - 2.2.2 Medial surface of cerebral hemisphere 20 Marks
 - 2.3 Describe the above symptoms on the basis of defect to the blood supply of cerebrum 30 Marks

- 3 A 63 year old man was admitted to surgical ward with right lower limb pain that aggravates with walking. Investigations revealed popliteal artery aneurysm and the patient was scheduled for a surgery.
 - 3.1 List the boundaries of the popliteal fossa 20 Marks
 - 3.2 Describe the contents of popliteal fossa and their relation 30 Marks
 - 3.3 Explain on anatomical basis how the popliteal pulse is checked 20 Marks
 - 3.4 Describe the arterial anastomosis around the knee joint 30 Marks

- 4 A patient had a swelling below the lower jaw on the right side. The swelling increased in size during eating. The surgeon did a bimanual examination of the submandibular salivary gland
 - 4.1 Describe the gross anatomy of submandibular salivary gland 45 Marks
 - 4.2 Describe the submandibular duct 20 Marks
 - 4.3 Name the vulnerable structure that can be affected **during incision** for submandibular surgery 10 Marks
 - 4.4 Where the incision is made to prevent the damage of the above structure (4.3) 10 Marks
 - 4.5 Mention the anatomical basis of bimanual examination of submandibular gland 15 Marks

PART B

- 5 A 30-year old male was brought to the hospital following a motor bike accident. The patient showed features of Erb's paralysis.
- | | | |
|-----|---|----------|
| 5.1 | Describe the formation of brachial plexus | 50 marks |
| 5.2 | Write the location of the different components in the brachial plexus precisely | 20 Marks |
| 5.3 | What is/are the cause(s) for the above paralysis | 10 Marks |
| 5.4 | Write the characteristic features of the Erb's paralysis | 20 Marks |
6. Regarding abdominal part of aorta
- | | | |
|-----|--|----------|
| 6.1 | List the ventral branches of abdominal aorta | 10 Marks |
| 6.2 | Write the branches arising from the above (6.1) separately | 40 marks |
| 6.3 | List the paired branches arising from it | 20 Marks |
| 6.4 | Briefly describe the light microscopic appearance of aorta | 30 Marks |
- 7.
- 7.1 Regarding liver
- | | | |
|-------|---|----------|
| 7.1.1 | Write the surface marking | 20 Marks |
| 7.1.2 | Briefly describe the structural features of visceral surface of liver | 30 Marks |
| 7.1.3 | Describe the light microscopic appearance of liver | 25 Marks |
| 7.2 | Write notes on methods to prevent birth defects | 25 Marks |

PART C

- 8 A 55 year- old female had a lump in the upper outer quadrant of the right breast. It was histologically confirmed as carcinoma
- | | | |
|-----|---|----------|
| 8.1 | Enumerate the anatomical extent of the female breast | 15 Marks |
| 8.2 | List the arteries which supply the breast | 25 Marks |
| 8.3 | Write the lymphatic drainage of the breast | 25 Marks |
| 8.4 | Briefly describe the development of breast and indicate three anomalies | 35 Marks |

9. A 68 year-old woman had a history of passing blood stained stools for three months. After the proctoscopic examination it was diagnosed as internal hemorrhoids
- 9.1 Name the blood vessels which are engorged in the above condition 10 Marks
- 9.2 Describe the microscopic features of anal canal 25 Marks
- 9.3 Describe the external anal sphincter 25 Marks
- 9.4 Write the blood supply, lymphatic drainage & nerve supply of anal canal 40 Marks
10. A 75 year-old man had a one year history of difficulty and frequency in micturition. Per rectum examination confirmed the enlargement of prostate.
- 10.1 Draw and label the internal appearance of prostatic urethra 30 Marks
- 10.2 Write briefly about the capsules of prostate 30 Marks
- 10.3 Name the zones which are involved in cancer and benign lesion 20 Marks
- 10.4 Write the development of prostate gland 20 Marks