



MANIPAL ACADEMY OF HIGHER EDUCATION

**MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS)
MBBS PHASE - I STAGE - I DEGREE EXAMINATION - MARCH 2018**

Monday, March 12, 2018

Time : 2.00 p.m. - 4.30 p.m.

Anatomy [ANAT]

Marks: 90

Duration: 150 mins.

ANATOMY-PAPER-II (ESSAY)

Answer all the questions.

Draw diagrams wherever appropriate

- 1) Describe the microscopic structure (histology) of hyaline cartilage (5)
- 2) Describe the temporomandibular joint under the following headings: (5)
 - 2A. Type and subtype
 - 2B. Movements occurring at this joint
 - 2C. Muscles producing each of the movements

(1+2+2 = 5 marks)
- 3) Following a left radical mastectomy, a 53-year-old woman was unable to raise her left arm above to comb her hair. When she was asked to push hard against the wall with both outstretched hands, inferior angle and medial border of her left scapula projected backwards making a prominent elevation.
 - 3A. Name the above clinical condition
 - 3B. Name the nerve that has been injured during mastectomy in the above case
 - 3C. Name the muscle affected in the above case and mention its origin and insertion

(1+1+1+2 = 5 marks)
- 4) Describe the development and fate of the notochord (5)

(3+2 = 5 marks)
- 5) Describe the arterial supply of heart (4)
- 6) A 17-year-old girl visited her dermatologist because of severe acne on her face. On examination, a small abscess was found on the side of her nose. She was given the antibiotics and warned not to press the abscess in this dangerous area of the face because, the infection can spread to an important dural venous in the cranial cavity.
 - 6A. Mention the dural venous sinus into which the infection from dangerous area of the face can spread.
 - 6B. Mention the relations and any two tributaries of that sinus

(1+2+1 = 4 marks)
- 7) Describe the features of lateral wall of the nasal cavity (4)
- 8) During a surgery for treatment of chronic gastric ulcer, it was found that posterior wall of patient's stomach was stuck to the structures lying behind it. (4)

- 8A. Name the structures lying behind the stomach
8B. Give the development of stomach

(3+1 = 4 marks)

- 9) Write a short note on the epiploic foramen (4)

- 10) Describe the anterior relations of right and left kidneys (4)

(2+2 = 4 marks)

- 11) A patient presented lateral strabismus, ptosis, diplopia and dilatation of pupil. On clinical investigation, it was confirmed that the condition was due to lesion of a cranial nerve. (4)

11A. Name the cranial nerve involved in the above case

11B. Mention its course and give its distribution

(1+1+2 = 4 marks)

- 12) Describe the boundaries of the third ventricle of the brain (4)

- 13) 13A. Mention the anterior and posterior relations of the left supra renal gland. (4)

13B. Mention the arterial supply and venous drainage of the left supra renal gland.

(1+1+1+1 = 4 marks)

- 14) A 70-year old man was admitted to the hospital due to his inability to pass urine for the past two days. Digital rectal examination revealed a large, firm, fixed swelling below the unusually distended urinary bladder in front of lower part of rectum. Radiological examination showed extensive carcinomatous metastases in the skull and lumbar vertebrae. With your knowledge of anatomy, (4)

14A. Name the enlarged organ below the bladder and in front of the lower part of rectum

14B. Mention the relations of that organ

14C. Mention the possible route taken by the cancer cells from the organ to the lumbar vertebrae.

(1+2+1 = 4 marks)

-----End-----