

## MANIPAL ACADEMY OF HIGHER EDUCATION

## MELAKA MANIPAL MEDICAL COLLEGE (MANIPAL CAMPUS) MBBS PHASE - I STAGE - I DEGREE EXAMINATION - SEPTEMBER 2018

Monday, September 10, 2018 Anatomy [M1ANT]

Marks: 90

Duration: 150 mins.

**ANATOMY - PAPER - II (ESSAY)** 

Answer all the questions

Draw diagrams wherever appropriate

 Classify the synovial joints based on their articular surfaces and give one example for each type.

(5 marks)

Max. Marks: 60

- 2) Describe the ankle joint under the following headings: (5)
  - 2A. Type and subtype
  - 2B. Movements occurring at the joint
  - 2C. Muscles producing each of the movements
  - 2D. Applied anatomy

(1+1+2+1=5 marks)

- 3) An exhausted medical student, bored by a prolonged lecture class, involuntarily opened his mouth wide and yawned. To his surprise he could not close his mouth.
  - 3A. Why the student was not able to close his mouth?
  - 3B. Contraction of which muscle of mastication is responsible for opening of the mouth?
  - 3C. Mention its origin, insertion and nerve supply.

[1+1+(1+1+1)=5 marks]

- 4) Write short notes on the following:
  - 4A. Placenta
  - 4B. Umbilical cord

(2.5+2.5 = 5 marks)

- 5) 5A. Mention the formation, termination and tributaries of great saphenous vein.
  - 5B. Mention the formation, termination and tributaries of external jugular vein.

(2+2 = 4 marks)

- 6) 6A. Mention the origin, termination and branches of arch of aorta.
  - 6B. Mention the origin and distribution of left coronary artery.

(2+2=4 marks)

7) Name the bronchopulmonary segments of the left lung and mention their clinical significance.

(3+1=4 marks)

- 8) 8A. Name the parts of the stomach.
  - 8B. Mention the structures forming the posterior relation of the stomach.
  - 8C. Name the peritoneal folds attached to greater and lesser curvatures of the stomach.

(1+2+1 = 4 marks)

9) Describe the microscopic structure (histology) of esophagus.

(4 marks)

10) Write a short note on the gall bladder.

(4 marks)

- 11) A 7-year-old boy, after suffering from herpes of his ear had left angle of his mouth drawn upwards, with inability to close his right eye. Saliva tended to accumulate in his right cheek and dribble from the right corner of his mouth. The condition was due to the involvement of a cranial nerve.
  - 11A. Name the cranial nerve involved in the above case.
  - 11B. Which group of muscles are paralyzed in the above case?
  - 11C. Describe the extra cranial course and mention the terminal branches of the nerve affected in the above case.

$$[1+1+(1+1) = 4 \text{ marks}]$$

- 12A. Mention the relations and arterial supply of posterior limb of the internal capsule.
- 12B. Name any two bundles of nerve fibres present in the posterior limb of the internal capsule.
- 12C. Name any two clinical conditions resulting from lesion of posterior limb of the internal capsule.

$$[(1+1)+1+1=4 \text{ marks}]$$

- 13) An ophthalmologist found that a 53-year-old woman had tunnel vision. Magnetic resonance imaging (MRI) scan of the head confirmed that the condition was due to the compression of optic chiasma by an enlarged gland from below.
  - 13A. Enlargement of which gland is likely to compress the optic chiasma and cause this condition in the above patient?
  - 13B. Mention the relations of that gland.
  - 13C. Name the developmental components of that gland.

$$(1+2+1 = 4 \text{ marks})$$

- 14) A 26-year-old woman with acute pain in the lower abdomen was rushed to the hospital in a state of shock. Her history of two missed periods suggested early pregnancy. The abdominal wall showed tenderness and guarding. Ultrasonography revealed an empty, enlarged uterus and blood in the pouch of Douglas. Diagnosis of rupture of uterine tube was made.
  - 14A. What is the cause of rupture of uterine tube in the above case?
  - 14B. Name the parts of uterine tube.
  - 14C. What are the normal sites of fertilization and implantation?
  - 14D. What is the development of uterine tube?

[1+1+(0.5+0.5)+1=4 marks]