Reg. No.										

MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST MBBS DEGREE EXAMINATION – MAY/JUNE 2019

SUBJECT: ANATOMY: PAPER – I (ESSAY)

Friday, May 31, 2019

Time: 10:20 – 13:00 Hrs. Maximum Marks: 80

- **All questions are compulsory.**
- **Illustrate your answers with diagrams and flow charts wherever appropriate.**

1. A 38 year old woman came to the hospital with a nodular swelling in the midline of the neck. The swelling moved with swallowing. On examination, it was found that she had slight tremors when hands were stretched, her pulse rate was 100 per minute, blood pressure 150/100mmHg and there was slight swelling of the eyes. She complained of loss of weight.

1A. Name the structure that is responsible for midline swelling in the neck.

1B. Give the anatomical reason for the movement of swelling with swallowing.

1C. Describe the external features and relations of the structure involved with a neat labelled diagram.

(1+2+7 = 10 marks)

2. Describe the shoulder joint under the following headings.

2A. Classification of the joint

2B. Articular surfaces & ligaments

2C. Movements of the joint and muscles responsible.

(1+3+6 = 10 marks)

3. **Short answers**:

3A. Explain the floor of the fourth ventricle with the help of a neat labeled diagram

3B. Caudate nucleus

3C. Superficial palmar arch

3D. Structure of a neuron

3E. Formation and fate of the notochord

3F. Cricoid cartilage

3G. Branches of the facial artery

3H. Parotid duct

3I. Interpeduncular fossa

3J. Fornix

3K. Derivatives of neural crest

3L. Erb's palsy

3M. Barr body

3N. Microscopic structure of the cardiac muscle.

3O. Superior colliculus of the midbrain

(4 marks × 15 = 60 marks)

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MANIPAL ACADEMY OF HIGHER EDUCATION

FIRST MBBS DEGREE EXAMINATION – MAY/JUNE 2019

SUBJECT: ANATOMY: PAPER – II (ESSAY)

Saturday, June 01, 2019

Time: 10:20 – 13:00 Hours

Maximum Marks: 80

- **All questions are compulsory. Write brief, clear, relevant and legible answers.**
- **Illustrate your answers with diagrams and flow charts wherever appropriate.**

1. A 13-year-old girl is brought to the examination room after falling from a horse onto her left side. Her pulse is 120/min, blood pressure is 90/60 mm Hg, and respirations are 30/min. Physical examination reveals cold and clammy skin, bruising, blunt injury on the left hypochondriac area and fractured 9^{th} and 10^{th} ribs on her left side close to the posterior axillary line.

1A. Which organ is most likely injured in this patient?

1B. Describe its external features.

1C. Describe the relations of that particular organ.

1D. Describe the blood supply of that organ.

1E. Describe its development.

(1+2+3+2+2 = 10 marks)

2. Describe the right atrium of the heart under:

2A. External features

2B. Internal features

2C. Development

2D. Developmental anomalies

(2+4+2+2 = 10 marks)

3. **Write short notes on:**

3A. Superior mesenteric artery

3B. Anterior relations of the left kidney

3C. Levator ani muscle

3D. Membranous urethra

3E. Menisci of the knee joint

3F. Trochanteric and cruciate anastomoses

3G. Peroneus longus muscle

3H. Flexor retinaculum of the foot

3I. Costodiaphragmatic recess

3J. Azygos vein

3K. Microscopic structure of the prostate

3L. Microscopic structure of the duodenum

3M. Rotation of the midgut and its anomalies

3N. Development of the anal canal and its anomalies

3O. Collateral anastomosis

(4 marks × 15 = 60 marks)