

**MANIPAL UNIVERSITY****FIRST MBBS DEGREE EXAMINATION – SEPT/OCT 2017****SUBJECT: ANATOMY: PAPER – I (ESSAY)**

Monday, September 25, 2017

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 5-year old child swallowed a small part of a toy. Since the child began to suffocate she was rushed to the hospital, where on X-ray examination, impaction of foreign body in the larynx was confirmed. Answer the following questions.

1A. Which is the narrowest part of laryngeal cavity?

1B. Explain the interior of the larynx.

1C. Explain the blood supply and nerve supply of the larynx.

(1+5+4 = 10 marks)

2. Describe the shoulder joint under the following headings:

2A. Articular surfaces

2B. Ligaments

2C. Movements and muscles responsible for the movements

(2+4+4 = 10 marks)

3. **Write short notes on:**

3A. Blood supply of spinal cord

3B. Primitive streak

3C. Profunda brachii artery

3D. Flexor retinaculum

3E. Substantia nigra

3F. Oogenesis

3G. Turner's syndrome

3H. Histology of lymph node

3I. Ansa cervicalis

3J. Lateral geniculate body

3K. Blood supply and nerve supply of nasal septum

3L. Histology of cardiac muscle

3M. Corpus callosum

3N. Ophthalmic artery

3O. Caudate nucleus

(4 marks × 15 = 60 marks)



# MANIPAL UNIVERSITY

## FIRST MBBS DEGREE EXAMINATION – SEPT/OCT 2017

### SUBJECT: ANATOMY: PAPER – II (ESSAY)

Tuesday, September 26, 2017

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 48-year-old investment banker was brought to the emergency department with complaints of severe constricting type of chest pain. The pain radiated to the neck & left upper limb. On investigation an infarct was found in the inferior surface of the right ventricle. The conducting system of the heart was involved and the patient would require a pacemaker to set up the sinus rhythm. Based on the knowledge of blood supply to the heart:
  - 1A. Describe the course, branches, & distribution of the coronary artery blocked in this case.
  - 1B. Describe the arterial supply of the conducting system of heart.
  - 1C. Give the nerve supply to the heart with reasons for pain radiating to the left upper limb.  
(4+2+4 = 10 marks)
  
2. Describe the prostate gland under location, coverings, parts and lobes, structures within and applied anatomy  
(1+2+3+2+2 = 10 marks)
  
3. **Short answers:**
  - 3A. Portal vein
  - 3B. Interior of anal canal
  - 3C. Saphenous nerve
  - 3D. Collateral ligaments of knee joint
  - 3E. Microscopic structure of fallopian tube
  - 3F. Development of pancreas
  - 3G. Hepatorenal pouch
  - 3H. Attachments of diaphragm
  - 3I. Thoracic duct
  - 3J. 1<sup>st</sup> rib
  - 3K. Popliteal artery
  - 3L. Peroneus longus muscle
  - 3M. Microscopic structure of cornea
  - 3N. Development of parathyroid glands
  - 3O. Periosteum

(4 marks × 15 = 60 marks)

