

**MANIPAL ACADEMY OF HIGHER EDUCATION**  
(Deemed University)

**MSc (FINAL) ANATOMY DEGREE EXAMINATION**

**PAPER I : *GROSS ANATOMY, APPLIED ANATOMY AND MORPHOLOGY***

Monday, 27 November 2000

Time available : 3 hours

Maximum marks : 100

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**\* Answer all the questions.**

**\* Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**

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1. Describe the temporomandibular joint. Discuss its applied aspects. (25 marks)
  
2. Describe the ventricles of the heart. Add a note on atrio-ventricular valves. (25 marks)
  
3. Describe the stomach in detail. (25 marks)
  
4. Write short notes on : (5x5 = 25 marks)
  - 4A. Interossei of hand
  - 4B. Nasolacrimal duct
  - 4C. Popliteus muscle
  - 4D. Cervix of uterus
  - 4E. Right supra renal gland

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**PAPER II : *EMBRYOLOGY, HISTOLOGY AND GENETICS***

Tuesday, 28 November 2000

Time available : 3 hours

Maximum marks : 100

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**\* Answer all the questions.**

**\* Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**

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1. Describe the development of endodermal pouches of primitive pharynx. Discuss anomalies.  
(25 marks)
  
2. Discuss the microscopic structure of lymphatic tissue.  
(25 marks)
  
3. Describe the development of urinary bladder and urethra. Discuss anomalies.  
(25 marks)
  
4. Write short notes on :  
(5x5 = 25 marks)
  - 4A. Autosomal dominance
  - 4B. Anomalies of placenta
  - 4C. Growth of cartilage
  - 4D. Microscopic structure of veins
  - 4E. Ossification centre

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**PAPER III : *NEUROANATOMY AND RECENT ADVANCES***

Wednesday, 29 November 2000

Time available : 3 hours

Maximum marks : 100

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**\* Answer all the questions.**

**\* Illustrate your answers with neatly drawn and correctly labelled diagrams wherever appropriate.**

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1. Describe the visual pathway. Discuss the effects of lesion at various levels.  
(25 marks)
  
2. Describe the nuclei, connections and functions of hypothalamus.  
(25 marks)
  
3. Describe the peripheral parasympathetic ganglia.  
(25 marks)
  
4. Write short notes on :  
(5x5=25 marks)
  - 4A. Subarachnoid cisterns
  - 4B. Choroid plexus
  - 4C. Fornix
  - 4D. Artery of cerebral haemorrhage
  - 4E. Parkinson's disease