

MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) ANATOMY DEGREE EXAMINATION – JULY 2013

PAPER I: GROSS ANATOMY, APPLIED ANATOMY AND MORPHOLOGY

Thursday, July 11, 2013

Time: 14:00 – 17:00 Hrs.

Maximum Marks: 100

- ✍ **Answer ALL the questions.**
- ✍ **Illustrate your answers with neatly drawn and correctly labeled diagrams wherever necessary.**

1. Describe the ventricles of the heart. Add a note on atrioventricular valves.
(25 marks)
2. Describe the tongue under surface features, muscles, nerve supply, lymphatic drainage and their clinical significance.
(25 marks)
3. Describe the gross anatomy of the urinary bladder. Give its nerve supply.
(25 marks)
4. **Write short notes on:**
 - 4A. Cervix of the uterus
 - 4B. Interossei muscles of the hand
 - 4C. Costodiaphragmatic pleural recess and its clinical significance
 - 4D. Perineal membrane
 - 4E. Dermatomes of the lower limb

(5×5 = 25 marks)



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PAPER II: EMBRYOLOGY, HISTOLOGY AND GENETICS

Friday, July 12, 2013

Time: 14:00 – 17:00 Hrs.

Maximum Marks: 100

- ✍ Answer **ALL** the questions.
- ✍ Illustrate your answers with neatly drawn and correctly labeled diagrams wherever appropriate.

1. Describe the development, fate and significance of structures that form the fetal membranes.
(25 marks)
2. Describe the development of the duodenum, the liver and biliary apparatus and the spleen.
(25 marks)
3. Describe the microscopic anatomy of the cerebellum with special reference to structure and functions of the cells and fibres.
(25 marks)
4. **Write short notes on:**
 - 4A. Chronic villus sampling
 - 4B. Chromosomal banding
 - 4C. Autosomal dominant disorders
 - 4D. Junctional complex
 - 4E. Nucleus

(5×5 = 25 marks)



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PAPER III: NEUROANATOMY AND RECENT ADVANCES

Saturday, July 13, 2013

Time: 14:00 – 17:00 Hrs.

Maximum Marks: 100

✍ **Answer ALL the questions.**

1. Describe the Thalamus and its connections. Add a note on its applied aspects. (25 marks)

2. Describe the facial nerve and its applied anatomy. (25 marks)

3. Describe the nuclei of cerebellum, their connections and applied anatomy. (25 marks)

4. **Write short notes on:**
 - 4A. Choroid Plexus
 - 4B. Optic chiasma
 - 4C. Crus cerebri
 - 4D. Conus medullaris
 - 4E. Draw labelled diagram of cross section of medulla at the level of pyramidal decussation. (5×5 = 25 marks)

