Reg. No.										

MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) ANATOMY DEGREE EXAMINATION – JULY 2014

PAPER I: GROSS ANATOMY, APPLIED ANATOMY AND MORPHOLOGY

Thursday, July 10, 2014

Time: 14:00 – 17:00 Hrs. Maximum Marks: 100

✍ **Answer ALL the questions**

✍ **Long Essay**

1. Describe the arches of foot.

(15 marks)

2. Describe the gross anatomy of the extra hepatic biliary apparatus.

(15 marks)

3. **Write short notes on:**

3A. Ossification
3B. 1st carpometacarpal joint.
3C. Interior of the right atrium.
3D. Anastomosis
3E. Pterygopalatine ganglion
3F. Killian's dehiscence
3G. Cavity of larynx
3H. Superficial perineal pouch
3I. Subtalar joint
3J. Posterior interosseous nerve

(7 marks × 10 = 70 marks)

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MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) ANATOMY DEGREE EXAMINATION – JULY 2014

PAPER II: EMBRYOLOGY, HISTOLOGY AND GENETICS

Friday, July 11, 2014

Time: 14:00 – 17:00 Hrs. Maximum Marks: 100

- **Answer ALL the questions**
- **Draw neat labeled diagrams wherever necessary**

- **Long Essay**

1. Describe the events of gastrulation and discuss the anomalies related to it

(10+5 = 15 marks)

2. Describe the development of kidney and write briefly on genetic basis of polycystic kidney. Give an account of the ultra-structure of different parts of the nephron

(7+3+5 = 15 marks)

3. **Write short notes on**

3A. Development of palate and its anomalies
3B. Neural tube defects
3C. Chromosomal microarray test in prenatal diagnosis
3D. Rotation of the midgut loop and related anomalies
3E. Congenital cyanotic cardiac anomalies
3F. Mucosa of the small intestine
3G. Microscopic structure of thyroid and parathyroid glands
3H. Microscopic structure of the thymus
3I. Haematoxylin and Eosin stain
3J. Commonly used fixative agents in histology, their merits and demerits

(7 marks×10 = 70 marks)

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MANIPAL UNIVERSITY

M.Sc. MEDICAL (FINAL) ANATOMY DEGREE EXAMINATION – JULY 2014

PAPER III: NEUROANATOMY AND RECENT ADVANCES

Saturday, July 12, 2014

Time: 14:00 – 17:00 Hrs. Maximum Marks: 100

- **Answer ALL the questions**
- **Draw neat labeled diagrams wherever necessary**

- **Long Essay**

1. Discuss the connections of the cerebellum on the basis of its functions

(15 marks)

2. Describe the lateral ventricles of the brain. Discuss the circulation of C.S.F. Add a note on hydrocephalus

(15 marks)

3. **Write short notes on**

3A. Astrocytes
3B. Circle of Willis
3C. Cerebral asymmetry
3D. Typical Spinal nerve
3E. Piamater
3F. Stretch reflex
3G. Cross sectional study of Medulla at the level of sensory decussation
3H. Neurobiotaxis
3I. Supraoptic and paraventricular nuclei
3J. Striatum

(7 marks × 10 = 70 marks)