

MANIPAL ACADEMY OF HIGHER EDUCATION

**FIRST SEMESTER M.Sc. MEDICAL (ANATOMY, PHYSIOLOGY, BIOCHEMISTRY,
PHARMACOLOGY, MICROBIOLOGY) DEGREE EXAMINATION – FEBRUARY 2022**

SUBJECT: BASIC SCIENCES – COMMON CORE 1 (MCC 601)

Monday, February 21, 2022

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

- ✗ Answer Section “A”, Section “B” and Section “C” in THREE separate answer books.
- ✗ All questions are compulsory.
- ✗ Illustrate your answers with neatly drawn and correctly labeled diagrams wherever necessary.

SECTION “A” (ANATOMY) : 20 MARKS

1. Name the parts of the gastro intestinal tract. Describe the stomach in detail.
(4+6 = 10 marks)
2. Write briefly on:
 - 2A. Types of epithelium
 - 2B. Spinal cord

(5 marks × 2 = 10 marks)

SECTION “B” (PHYSIOLOGY) : 15 MARKS

- 1A. With the help of diagram enumerate the stages of erythropoiesis.
- 1B. Give the cause and any two features of cretinism.
- 1C. Name the different types of neuroglia.
(2+(1+1)+1 = 5 marks)
- 2A. List any four functions of saliva.
- 2B. What is Myopia? How it can be corrected?
- 2C. Give the cause and any two symptoms of Parkinsonism.
(1+2+2 = 5 marks)
- 3A. Name any four properties of cardiac muscle.
- 3B. List any two factors needed for spermatogenesis.
- 3C. Define Glomerular Filtration Rate (GFR). Give its normal value.
(2+1+(1+1) = 5 marks)

SECTION “C” (BIOCHEMISTRY) : 15 MARKS

1. Explain competitive and non-competitive types of enzyme inhibitions with examples.
(5 marks)
2. Classify lipoproteins and write their functions. Name any two special products formed from cholesterol.
(4+1 = 5 marks)
3. Describe the structure of starch and glycogen. Write two functions of mucopolysaccharides.
(4+1 = 5 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**FIRST SEMESTER M.Sc. (MEDICAL ANATOMY) DEGREE EXAMINATION – FEBRUARY 2022****SUBJECT: UPPER LIMB AND LOWER LIMB (MAN 603)**

Tuesday, February 22, 2022

Time: 14:00 – 16:30 Hrs.

Maximum Marks: 50

✍ All questions are compulsory.

✍ Illustrate your answers with diagrams wherever appropriate.

1. Enumerate the spaces in the palm. Describe the midpalmar space in detail. Add a note on its applied anatomy

(2+5+3 = 10 marks)

2. Describe the medial longitudinal arch in detail. Add a note on flat foot

(7+3 = 10 marks)

3. Write short notes on:

3A. Axillary lymph nodes

3B. Claw hand

3C. Extensor (dorsal) digital expansion

3D. Cruciate ligaments of knee

3E. Superficial peroneal nerve

3F. Femoral sheath

(5 marks × 6 = 30 marks)



MANIPAL ACADEMY OF HIGHER EDUCATION**FIRST SEMESTER M.Sc. (MEDICAL ANATOMY) DEGREE EXAMINATION – FEBRUARY 2022****SUBJECT: GENERAL EMBRYOLOGY AND GENERAL HISTOLOGY (MAN 605)**

Wednesday, February 23, 2022

Time: 14.00 – 16.30 Hrs.

Max. Marks: 50

✍ **Answer all the questions.**

✍ **Illustrate your answers with neatly drawn diagrams wherever necessary.**

✍ **Long answer questions:**

1. Define and classify epithelium with illustrations and examples.

(10 marks)

2. Discuss the formation and fate of intra-embryonic mesoderm.

(10 marks)

3. **Short answer questions:**

3A. Neural crest

3B. Microscopic structure of spleen

3C. Compare and contrast the microscopic features of medium and large sized arteries.

3D. Implantation

3E. Chorionic villi

3F. Microscopic structure of serous salivary glands

(5 marks × 6 = 30 marks)

