THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0321] MARCH 2021 Sub. Code: 2301

(OCTOBER 2020 EXAM SESSION)

M.Sc. NUCLEAR MEDICINE TECHNOLOGY

FIRST YEAR (From 2019-2020 onwards)

PAPER I – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY

Q.P. Code : 282301

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate notes on: **(2 x 20 = 40)**

1. Describe the synthesis, activation, function, and deficiency manifestations of Vitamin D. [5+5+5+5]
2. Describe the Lungs under following headings [6+4+5+5]
   a) Location and Gross Anatomy
   b) Pulmonary Blood Supply
   c) Muscles of respiration
   d) Bronchopulmonary segments applied aspect

II. Write Short Notes on: **(10x6 = 60)**

1. Blood supply of Stomach.
2. Cardiac cycle.
3. Write briefly on the types of RNA and their functions.
4. Parts of brain stem and cranial nerves attached to it.
5. List the parts and functions of Gallbladder.
6. Write a note on the plasma membrane and its various functions.
7. Blood Supply of Heart.
8. What is the composition and functions of Saliva
9. Lobes and functions of Cerebellum.
10. Explain the factors that affect enzyme activity.

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THE TAMIL NADU DR. M.G.R. MEDICAL UNIVERSITY

[AHS 0222] **FEBRUARY 2022** **Sub. Code: 2301**
(OCTOBER 2021 EXAM SESSION)

M.Sc. NUCLEAR MEDICINE TECHNOLOGY
FIRST YEAR
(Candidates admitted from 2019-2020 onwards – Paper I)
(Candidates admitted from 2020-2021 onwards – Paper II)
PAPER I & II – ANATOMY, PHYSIOLOGY AND BIOCHEMISTRY
Q.P. Code : 282301

Time: Three hours **Answer ALL Questions** **Maximum: 100 Marks**

I. Elaborate notes on: **(2 x 20 = 40)**

1. Describe the CSF circulation under following headings [4+4+4+4+4]
   a) Formation
   b) Circulation
   c) Absorption
   d) Composition of CSF
   e) Applied aspect
2. Define the Cardiac cycle. What are the events in a cardiac cycle? Describe the ventricular events in detail. Add a note on heart sounds. [5+5+5+5]

II. Write Short Notes on: **(10x6 = 60)**

1. Blood supply of Pancreas.
2. Describe the different types of neuroglia and mention function of each.
3. Ligaments of shoulder joint.
4. Pituitary gland with applied aspects.
5. Explain the biochemical significance of urea cycle.
6. Deltoid muscle-attachments and applied anatomy
7. Classify fractures and describe stages of healing.
8. Describe the synthesis and function of Thyroid gland.
9. Broncho pulmonary segments.
10. List the various constituents of blood. What are the functions of blood?

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