

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

[AHS 0222]

**FEBRUARY 2022
(OCTOBER 2021 EXAM SESSION)**

Sub. Code: 2401

**M.Sc. RADIOTHERAPY TECHNOLOGY
FIRST YEAR**

(Candidates admitted from 2019-2020 onwards – Paper I)

(Candidates admitted from 2020-2021 onwards – Paper II)

**PAPER I & II – HUMAN APPLIED AND IMAGING ANATOMY,
PHYSIOLOGY, PATHOLOGY & TERMINOLOGY**

Q.P. Code : 282401

Time: Three hours

Answer ALL Questions

Maximum: 100 Marks

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

1. Describe the Female Reproductive system, location and its functions.
2. Describe the phases of digestion. Explain the major hormones that regulate the digestive system.

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

1. Differentiate between acute and chronic inflammation .
2. Apoptosis.
3. Pathogenesis of septic shock
4. Structure of Eyeball.
5. Blood supply of the Heart.
6. Types of muscles.
7. Process of absorption in the large intestine.
8. Reflex arc.
9. Types of hypoxia with suitable examples.
10. Functions and location of pituitary gland.

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

[AHS 1022]

OCTOBER 2022

Sub. Code: 2401

M.Sc. RADIOTHERAPY TECHNOLOGY

FIRST YEAR

(Candidates admitted from 2019-2020 onwards – Paper - I)

(Candidates admitted from 2020-2021 Batch onwards – Paper - II)

**PAPER I & II – HUMAN APPLIED AND IMAGING ANATOMY,
PHYSIOLOGY, PATHOLOGY & TERMINOLOGY**

Q.P. Code : 282401

Time: Three hours

Maximum : 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Describe the Macroscopic features and major functions of the brain and spinal cord.
2. Describe the Structure and properties of cardiac muscle. Explain in detail the Cardiac cycle.

II. Write notes on:

(10 x 6 = 60)

1. Parathyroid glands.
2. Functions of Estrogen.
3. Blood - A B O System and mismatch-transfusion.
4. Neoplasia.
5. Deep Vein thrombosis (DVT).
6. RECIST Criteria for response evolution.
7. Normal ECG.
8. Pulmonary Volumes and capacities.
9. Major functions and location of the scrotum, Testes and Epididymis,
10. Biliary system.

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

[AHS 1023]

OCTOBER 2023

Sub. Code: 2401

M.Sc. RADIOTHERAPY TECHNOLOGY
FIRST YEAR (From 2020-2021 onwards)
PAPER II – HUMAN APPLIED AND IMAGING ANATOMY, PHYSIOLOGY,
PATHOLOGY & TERMINOLOGY

Q.P. Code: 282401

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Describe the Macroscopic features and major functions of the Mouth, Salivary glands, Pharynx, esophagus, stomach. Mention the common malignancies arising in each site.
2. Describe the Major functions and location of the ovaries Uterine tubes, Uterus, Vagina and external genitalia.

II. Write notes on:

(10 x 6 = 60)

1. Internal ear.
2. Structure of cell membrane.
3. Plasma protein.
4. Action potential.
5. Limbic System.
6. Pulmonary function tests.
7. Inflammation and repair.
8. Cardio-Pulmonary, Resuscitation.
9. Coronary Angiography.
10. Testosterone.

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PAPER II – HUMAN APPLIED AND IMAGING ANATOMY, PHYSIOLOGY,
PATHOLOGY & TERMINOLOGY

Q.P. Code: 282401

Time: Three hours

Maximum: 100 Marks

Answer ALL Questions

I. Elaborate on:

(2 x 20 = 40)

1. Elaborate the Macroscopic features and major functions of the esophagus. Explain the divisions of the esophagus and the anatomic relations of esophagus at each level. Mention the applied anatomy of esophagus.
2. What are the divisions of the nervous system? Explain each division in detail with appropriate diagram.

II. Write notes on:

(10 x 6 = 60)

1. Types of anemia.
2. Apoptosis.
3. Cardio Pulmonary Resuscitation.
4. Cardiac cycle.
5. Dead space.
6. Breast self examination.
7. Synapse.
8. ABO blood grouping.
9. Pineal gland.
10. Middle ear.
