

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

[AHS 1122]

NOVEMBER 2022

Sub. Code: 1941

B.Sc. RADIOTHERAPY TECHNOLOGY

FIRST YEAR (Regulation 2018-2019)

PAPER I – HUMAN ANATOMY AND PHYSIOLOGY

Q. P. Code: 801941

Time: Three hours

Maximum : 100 Marks

Answer ALL Questions

I. Elaborate on:

(3 x 10 = 30)

1. Classify Joints. Describe the different types of synovial joints with suitable examples.
2. Describe the Anatomy of Heart with a neat diagram.
3. Write in detail about the structure of Kidney. Add a note on mechanism of urine formation.

II. Write notes on:

(8 x 5 = 40)

1. CO₂ transport.
2. Temporary methods of contraception.
3. Describe the structure of a long bone.
4. External features of the right lung.
5. Exocrine part of pancreas.
6. Functions of Thyroid hormones.
7. Circulation of CSF and its functions.
8. Anatomy of skin.

III. Short answers on:

(10 x 3 = 30)

1. Define coronal plane.
2. Name the openings of the diaphragm with their corresponding vertebral levels.
3. What is mitosis?
4. Name the parts of the small intestine.
5. Name the coverings of the brain.
6. Reflex arc.
7. What is Tidal volume? Give its normal value.
8. Name two common diseases affecting bones.
9. List the granulocytes.
10. Name the ear ossicles.

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

[AHS 0423]

APRIL 2023

Sub. Code: 1941

**B.Sc. RADIOTHERAPY TECHNOLOGY
FIRST YEAR (Regulation 2018-2019 onwards)
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY
Q.P. Code: 801941**

Time: Three Hours

Answer All questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Name the parts of the Reproductive System in Female. Write in detail about the Uterus under the following sub-headings:
i) Clinical Anatomy ii) Blood supply iii) Supports of Uterus.
2. Write in detail about Spinal cord and the ascending and descending pathways.
3. Describe the parts of the Nephron with diagrams. Write a note on excretory and non-excretory functions of Kidney.

II. Write notes on:

(8 x 5 = 40)

1. Ball and Socket joint.
2. Blood supply of brain.
3. Histology of liver.
4. Cell division.
5. Muscles of tongue.
6. Structure of eye ball.
7. Heart sounds.
8. Name the hormones secreted by the pituitary gland.

III. Short answers on:

(10 x 3 = 30)

1. Define dyspnoea and hypoxia.
2. Peritoneum.
3. Name the major blood groups of human beings.
4. Layers of Skin.
5. Functions of large intestine.
6. Importance of lymphatic system.
7. Functions of facial nerve.
8. Components of gastric juice.
9. Role of thymus in immunity.
10. Cartilaginous joint.

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

[AHS 1123]

NOVEMBER 2023

Sub. Code: 1941

**B.Sc. RADIOTHERAPY TECHNOLOGY
FIRST YEAR (Regulation 2018-2019 onwards)
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY
Q.P. Code: 801941**

Time: Three Hours

Answer All questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Describe the structure of Stomach and its function.
2. Draw and label the parts of Respiratory tract. Add a note on Lungs.
3. List the various constituents of Blood. Explain in detail about WBC.

II. Write notes on:

(8 x 5 = 40)

1. Juxta – glomerular apparatus.
2. Structure of Skeletal muscle.
3. Functions of Cerebrospinal fluid.
4. Spermatogenesis
5. Synovial joints.
6. Functions of Liver.
7. Classify Connective Tissue.
8. Heart sounds.

III. Short answers on:

(10 x 3 = 30)

1. Types of Cartilage.
2. Functions of Lymphatic fluid.
3. What is Vital capacity?
4. Structure of Long bone.
5. Name any three Clotting factors.
6. List out Plasma proteins.
7. Name the Lobes of Cerebrum.
8. Importance of Vitamin B12.
9. What is Mitosis and Meiosis?
10. Functions of Nucleus of a Cell.

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

[AHS 0424]

APRIL 2024

Sub. Code: 1941

**B.Sc. RADIOTHERAPY TECHNOLOGY
FIRST YEAR (Regulation 2018-2019 onwards)
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY
Q.P. Code: 801941**

Time: Three Hours

Answer All questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Draw a neat labelled diagram of human cell and write about the cellular organelles in detail.
2. Describe the functional anatomy of heart including chambers and valves.
3. Name the endocrine organs in our body. Mention their location. Write in detail about the hormones secreted by the pituitary gland.

II. Write notes on:

(8 x 5 = 40)

1. Describe the layers of Skin and its functions.
2. What are Lymph nodes and discuss their functions.
3. Structure of DNA.
4. Ball and Socket joint.
5. Structure of Spermatozoa with diagram.
6. Significance of fibre diet.
7. Coverings of Kidney.
8. Functions of Platelet.

III. Short answers on:

(10 x 3 = 30)

1. Components of Blood.
2. Name any three cartilaginous joints.
3. Parts of Small intestine.
4. Coverings of Brain.
5. Peristalsis.
6. SA node.
7. Clotting time.
8. Functions of bile.
9. Parts of Long bone.
10. Types of Muscles.

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

[AHS 1125]

NOVEMBER 2025

Sub. Code: 1941

**B.Sc. RADIOTHERAPY TECHNOLOGY
FIRST YEAR (Regulation 2018-2019 onwards)
PAPER I – HUMAN ANATOMY AND PHYSIOLOGY
Q.P. Code: 801941**

Time: Three Hours

Answer All questions

Maximum: 100 Marks

I. Elaborate on:

(3 x 10 = 30)

1. Name the cellular components of blood and describe their functions.
2. What are the hormones secreted by anterior pituitary gland? Describe the functions of growth hormone.
3. Draw a neat and labelled diagram of cell. Describe the functions of cell organelles.

II. Write notes on:

(8 x 5 = 40)

1. Draw a neat and labelled diagram of large intestine. Add a note on its functions.
2. Structure of sperm.
3. Composition and functions of bile.
4. Carbohydrate digestion and absorption.
5. List the skull bones and briefly describe the joints involving the skull bones.
6. Properties of cardiac muscle.
7. Types of bone and its functions.
8. Composition and functions of cerebrospinal fluid.

III. Short answers on:

(10 x 3 = 30)

1. Mention any three types of anaemia.
2. Clinical features of Diabetes mellitus.
3. Types of cartilage.
4. List the muscles of respiration
5. Anatomy of pleura.
6. List out the names of salivary glands.
7. Define Dyspnoea. Mention any one cause of dyspnoea.
8. Define Glomerular filtration rate
9. Define Cardiac output
10. List out Plasma proteins.
