B.Sc. FITNESS AND LIFESTYLE MODIFICATION (New Syllabus 2017-2018)

PAPER I – ANATOMY AND PHYSIOLOGY

FIRST YEAR

O.P. Code: 802801

Time: Three Hours Maximum: 100 Marks

Answer all questions

I. Elaborate on: $(3 \times 10 = 30)$

1. Describe in detail on the mechanism of urine formation.

- 2. Describe in detail on circulation of blood.
- 3. (a) Exchange of gases (b) Calcium metabolism

II. Write notes on: $(8 \times 5 = 40)$

- 1. Optic nerve and retina.
- 2. Cell division.
- 3. Functions of Liver.
- 4. Sliding filament theory.
- 5. Difference between Cardiac muscle, Skeletal muscle and Smooth muscle.
- 6. Spinal cord and its coverings.
- 7. Innervations of Bladder.
- 8. Lung Volumes and its capacities.

III. Short answers on:

 $(10 \times 3 = 30)$

- 1. Tissues and its types.
- 2. Define neuron and classify them.
- 3. Diabetes mellitus.
- 4. Lobes of the Lung.
- 5. Gigantism and dwarfism.
- 6. Name the hormones of adrenal gland.
- 7. Lobes of cerebrum.
- 8. Function of skin.
- 9. Difference between artery and vein.
- 10. Hilum of Kidney.

B.Sc. FITNESS AND LIFESTYLE MODIFICATION (New Syllabus 2017-2018)

FIRST YEAR

PAPER I – ANATOMY AND PHYSIOLOGY

Q.P. Code: 802801

Time: Three Hours Maximum: 100 Marks

Answer all questions

I. Elaborate on: $(3 \times 10 = 30)$

- 1. Describe in detail on cell division with labelled diagram.
- 2. Write a note on pituitary gland and its function.
- 3. (a) Renin angiotensin system (b) Valves of the heart

II. Write notes on: $(8 \times 5 = 40)$

- 1. Visual pathway.
- 2. Micturition reflex.
- 3. Glomerular filtration.
- 4. Spinal cord.
- 5. Types of muscles.
- 6. Enzymes of liver.
- 7. Broncho pulmonary segment.
- 8. Heart rate and cardiac output.

III. Short answers on: $(10 \times 3 = 30)$

- 1. Parts of nephron with diagram.
- 2. Cell organelles and its functions.
- 3. Taste buds.
- 4. Alveoli.
- 5. Cardiac cycle.
- 6. Draw a neat labeled diagram of a neuron.
- 7. Muscles of respiration.
- 8. Name the hormones of thyroid.
- 9. Functions of Spleen.
- 10. Components of conducting system.

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

[AHS 0321] MARCH 2021 Sub. Code: 2801

(AUGUST 2020 EXAM SESSION) B.Sc. FITNESS AND LIFESTYLE MODIFICATION FIRST YEAR (Regulation 2017-2018 & 2019-2020) PAPER I – ANATOMY AND PHYSIOLOGY

Q.P. Code: 802801

Time: Three hours Answer ALL Questions Maximum: 100 Marks

I. Elaborate on: $(3 \times 10 = 30)$

1. Define a cell and add a note on cell organelles.

- 2. (a) Micturition
- (b) Valves of the heart
- 3. Classification of muscle and mechanism of muscle contraction.

II. Write notes on: $(8 \times 5 = 40)$

- 1. Role of Kidneys in water balance.
- 2. Brain stem.
- 3. Functions of skin.
- 4. Optic nerve.
- 5. Broncho Pulmonary Segments.
- 6. Tissues and its types.
- 7. Glucocorticoids and mineralocorticoids.
- 8. Define neuron and classify neurons.

III. Short answers on: $(10 \times 3 = 30)$

- 1. Hormones of neurohypophysis.
- 2. What is tachypnoea?
- 3. Functions of Liver.
- 4. Gastrin.
- 5. Define Blood Pressure.
- 6. Nephron.
- 7. Types of cartilage.
- 8. Alveoli.
- 9. Lobes of cerebrum.
- 10. Functions of spleen.

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

[AHS 0422] APRIL 2022 Sub. Code: 2801

(FEBRUARY 2021& AUGUST 2021 EXAM SESSIONS) B.Sc. FITNESS AND LIFE STYLE MODIFICATION FIRST YEAR (Regulations 2017-2018 / 2019-2020 / 2020-2021) PAPER I– ANATOMY & PHYSIOLOGY O.P NO. 802801

Time: Three Hours Answer All questions Maximum: 100 Marks

I. Elaborate on : (3X10=30)

- 1. What are actin and myosin? Explain briefly about the mechanism of skeletal muscle contraction.
- 2. Draw a neat diagram of the urinary system. Explain briefly about the formation of urine.
- 3. Draw a neat labelled diagram of the respiratory system. Explain briefly about the bronchopulmonary segment.

II. Write Notes on: (8X5=40)

- 1. What is a cell? Write about cell membrane.
- 2. Classify tissues. Write in brief about each type.
- 3. Difference between smooth and cardiac muscle.
- 4. Functions of skin.
- 5. Functions of liver.
- 6. Growth hormone.
- 7. Valves of the heart.
- 8. Micturition.

III. Short Answers on: (10X3=30)

- 1. Pericardium.
- 2. Lobes of cerebrum.
- 3. Difference between artery and vein.
- 4. Functions of lymph.
- 5. Define erythropoiesis.
- 6. Functions of saliva.
- 7. Draw a neat labelled diagram of neuron.
- 8. Heart sounds.
- 9. Taste buds.
- 10. Define blood pressure.