

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

[AHS 0321]

**MARCH 2021**

**Sub. Code: 2102**

**(OCTOBER 2020 EXAM SESSION)**

**M.Sc. SPORTS AND FITNESS PSYCHOLOGY**

**FIRST YEAR (From 2018-2019 onwards)**

**PAPER II – EXERCISE PHYSIOLOGY FOR SPORTS AND FITNESS**

*Q.P. Code : 282102*

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Write in detail about the structure, the mechanism of excitation –contraction coupling mechanisms with a neat labeled diagram. Add a note on muscle atrophy.
2. Describe in elaborate the circulatory and respiratory changes during exercise. Add a note on heart rate in trained athletes.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Metabolic responses during and recovery from exercises.
2. Negative feedback in homeostasis.
3. Reflex arc.
4. Functions of cerebellum.
5. Factors regulating arterial blood pressure.
6. Importance of acid-base regulation during exercise.
7. Glucose homeostasis.
8. Body temperature regulation.
9. Endurance training.
10. Pulmonary volumes and capacities.

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

[AHS 0222]

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

**Sub. Code: 2102**

**M.Sc. SPORTS AND FITNESS PSYCHOLOGY  
FIRST YEAR (Candidates admitted from 2018-2019 & 2020-2021 onwards)  
PAPER II – EXERCISE PHYSIOLOGY FOR SPORTS AND FITNESS  
*Q.P. Code : 282102***

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate notes on:**

**(2 x 20 = 40)**

1. Write in detail about the transport of oxygen in human body .Add a note on oxygen debt.
2. Describe in elaborate the cardiorespiratory changes during exercise. Add a note on VO2 Max.

**II. Write Short Notes on:**

**(10x6 = 60)**

1. Energy utilization during and recovery from exercises.
2. Positive feedback in homeostasis.
3. Reflex action.
4. Functions of Vestibular apparatus.
5. Regulation of local blood flow during exercise.
6. Muscle Atrophy.
7. Physiological actions of thyroid hormones.
8. Cold acclimitazation.
9. Extracellular Buffers.
10. Types of skeletal muscle fibers.

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