

[LP 1019]

OCTOBER 2019

Sub. Code: 3801

**P.G. DIPLOMA IN EXERCISE PHYSIOLOGY IN
SPORTS & FITNESS EXAMS**

PAPER I – FUNDAMENTALS OF EXERCISE PHYSIOLOGY

Q.P. Code : 363801

Time : Three hours

Maximum : 100 Marks

I. Elaborate on:

(2 x 20 = 40)

1. What is skeletal muscle? Describe the sliding theory of muscle contraction. Add a note on isometric muscle contraction.
2. Explain the endocrine system delivering energy during exercise training.

II. Write notes on:

(10 x 6 = 60)

1. FIIT principle of training.
2. Heat balance during exercise.
3. Respiratory endurance.
4. Role of proprioceptors in exercise performance.
5. Neuromuscular fatigue.
6. Grading of exercise training.
7. Lactate threshold.
8. Endurance training and VO₂ max.
9. Anaerobic ATP production.
10. Skeletal muscle changes due to aging.

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

[AHS 0321]

MARCH 2021

Sub. Code: 3801

(OCTOBER 2020 EXAM SESSION)

POST GRADUATE DIPLOMA IN EXERCISE PHYSIOLOGY IN SPORTS AND FITNESS

(From 2018-2019 onwards)

PAPER I – FUNDAMENTALS OF EXERCISE PHYSIOLOGY

Q.P. Code : 363801

Time : Three hours

Answer ALL Questions

Maximum : 100 Marks

I. Elaborate notes on:

(2 x 20 = 40)

1. Define Endurance training. Explain the physiological changes in cardiovascular and respiratory system during endurance training.
2. Explain in detail about Krebs's cycle with suitable diagram and its influence on various exercise training

II. Write Short Notes on:

(10x6 = 60)

1. Principles of strength training.
2. Aerobic capacity.
3. Oxygen debt.
4. Lung adaptation to exercise training.
5. Regulation of Blood Pressure.
6. Types of muscle fibers & its adaptation during exercises.
7. Acid base regulation on exercise.
8. DOMS.
9. Lipid balance in exercise.
10. Physiological changes of ventilation in steady rate and non steady rate exercise.
