

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

[AHS 0423]

APRIL 2023

Sub. Code: 2813

**B.Sc. FITNESS AND LIFESTYLE MODIFICATION  
SECOND YEAR (Regulations 2017-2018 & 2019-2020 onwards)  
PAPER III – STRENGTH AND CONDITIONING FOR FITNESS  
Q.P. Code: 802813**

**Time: Three hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. What is Skill Related Fitness? Explain the Components of Skill Related Fitness in detail?
2. Define Metabolism. What is Basal Metabolic Rate? Explain Aerobic and Anaerobic Metabolism in detail.
3. What is Aerobic Training? How do you design an Aerobic Training for an individual and explain the Principles in detail?

**II. Write notes on:**

**(8 x 5 = 40)**

1. Components of Health-Related Fitness.
2. Effect of Training on Intra-abdominal and Intra Thoracic pressure.
3. Define Stretching. Write notes on Stretch Reflex.
4. What is Connective Tissue? Write notes on effects of Exercises on Connective Tissues.
5. Hormones and Exercise.
6. Adaptations of training on Respiratory System.
7. Benefits of Active and Passive Stretching.
8. Weight Reduction and Aerobic Training.

**III. Short answers on:**

**(10 x 3 = 30)**

1. What are the major benefits of exercises on Musculo Skeletal System?
2. What is Motor Unit? Role of Motor Unit in Training.
3. Classify Nervous System.
4. Effects of training on Cardiovascular system.
5. Exercise selection.
6. Cool down.
7. Equipment and Resistance Training.
8. Fartlek Training.
9. Core Exercises.
10. Benefits of training in water.

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