

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

**[LR 1220]**

**DECEMBER 2020  
(AUGUST 2020 EXAM SESSION)**

**Sub. Code: 2823**

**BACHELOR IN FITNESS AND LIFESTYLE MODIFICATION  
THIRD YEAR – (Regulations from 2017-2018 & 2019-2020)  
PAPER III – STRENGTH AND CONDITIONING FOR SPORTS  
*Q.P. Code: 802823***

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. What are the Skill related Fitness Components? - What are the components of Sprinting? Write in detail about training modalities in Sprint/Speed training.
2. Periodisation - Definition. What is a Macro-cycle, meso-cycle, micro-cycle? Write about the 3 basic models of Periodisation.
3. Describe on components of post Rehabilitation Program.

**II. Write notes on:**

**(8 x 5 = 40)**

1. How to improve Speed endurance?
2. Write notes on HIIT - High Intensity Interval training.
3. What are the effects of Aerobic training in hot environments?
4. What is anaerobic threshold?
5. Write notes on the procedure and effects of Resisted Sprint training.
6. Write notes on Plyometrics.
7. Explain about specificity of training.
8. Explain conditioning drills for basket ball.

**III. Short answers on:**

**(10 x 3 = 30)**

1. What is Stride length & Stride rate/frequency?
2. Define Agility.
3. Define Balance.
4. Write notes on 40 – YARD Sprint?
5. Explain adult jump.
6. Explain zig-zag cutting.
7. Write notes on chest press?
8. Explain cross over ability.
9. Write notes on Body Posture in Agility.
10. Write notes on squats?

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

**[AHS 0922]**

**SEPTEMBER 2022**

**Sub. Code: 2823**

**(FEBRUARY 2022 & AUGUST 2022 EXAM SESSIONS)**

**B.Sc. FITNESS AND LIFESTYLE MODIFICATION  
THIRD YEAR – (Regulations from 2017-2018 & 2019-2020)  
PAPER III – STRENGTH AND CONDITIONING FOR SPORTS  
Q.P. Code: 802823**

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. What is peaking (Peak Performance) in Periodisation? Explain in detail that how to design periodised training programs for sports like athletic track events.
2. Discuss in detail about Sprint and Agility training.
3. Define Altitude Training. Explain about the principles and mechanisms of altitude training.

**II. Write notes on:**

**(8 x 5 = 40)**

1. How to restore sports performance after a recovery period from an injury?
2. How to incorporate Sports Specific Skills into conditioning for sports in basketball?
3. Define Functional Training. What are the advantages of Functional Training?
4. Discuss in detail about the Assessment for Balance and Core Stability for baseline sports fitness.
5. Define Plyometric Training and its relationship with Athletic Performance.
6. SAID Principle.
7. What are the Steps to establish a Solid Fitness Base?
8. Explain about the Physiology of Plyometric Training.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Types of Jumps in plyometric training and explain in detail about Broad Jumps.
2. Explain about Live High/Train Low (LHTL) training.
3. What are the equipments used for Agility Training?
4. Overuse Injuries.
5. Explain about the Non-linear model of Periodisation.
6. Explain about the Aerobic training given for Anaerobic athletes.
7. Define Reaction Ability and types of reaction ability.
8. Explain Depth push up to Explosive Rebound in plyometrics.
9. How Acceleration and Speed is being assessed for a baseline sports fitness test?
10. What are all the types of plyometric exercise that can be done with a Medicine ball?

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

**[AHS 0423]**

**APRIL 2023**

**Sub. Code: 2823**

**B.Sc. FITNESS AND LIFESTYLE MODIFICATION  
THIRD YEAR – (Regulations 2017-2018 & 2019-2020 onwards)  
PAPER III – STRENGTH AND CONDITIONING FOR SPORTS  
*Q.P. Code: 802823***

**Time: Three Hours**

**Answer ALL Questions**

**Maximum: 100 Marks**

**I. Elaborate on:**

**(3 x 10 = 30)**

1. Compatibility between High Intensity Aerobic and Anaerobic exercises. Also explain about the Aerobic Endurance Training in hot and cold environments.
2. Define Plyometric training, its components and add a note on designing a Plyometric program to basketball players.
3. Define Periodization and its basic models with examples.

**II. Write notes on:**

**(8 x 5 = 40)**

1. Baseline sports fitness testing.
2. Types of Plyometric exercises.
3. Speed endurance training.
4. Exercise selection in Plyometrics.
5. Tapering in Periodization.
6. Periodization for a power athlete in a team sport.
7. Difference between depth and clap push-ups in Plyometrics.
8. Overspeed training.

**III. Short answers on:**

**(10 x 3 = 30)**

1. Macrocycles in Periodization.
2. Define Agility.
3. Define Stamina.
4. Foot contact in Plyometric training.
5. Periodization of aerobic endurance training.
6. Sand bag thrusts.
7. Define speed and how it is measured?
8. Types of hops in Plyometrics.
9. Sprinting mechanics.
10. Symptoms of hot and cold stress.

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