

# PHYSICAL EDUCATION, NATIONAL CADET, YOGA SYLLABUS

Note:

There will be one Question Paper which will have 50 questions out of which 40 questions need to be attempted.

# **Unit I Sociological Aspects of Physical Education**

- (i) Games and sports as man's cultural heritage.
  - An understanding that sports have been a part of our culture and tradition since time immemorial.
- (ii) Development of the individual throughgames and sports.

  Understanding how games and sports contribute in various ways towards the development of an individual.
- (iii) Role of Physical Education in promoting national integration.

  How Physical Education helps in promoting National Integration.
- (iv) Physical Education and personality development.

  The role of Physical education in development of personal qualities like an individual attitude, discipline, helpfulness, team spirit, patience, unity, friendship, etc.

# **Unit II Training Methods**

- (a) Meaning and importance of Sports Training.

  Definition of Sports Training and its importance.
- (b) Methods of training.

Methods of Training: Repetition, continuous & fartlek, and interval - Definition, purpose, advantages and procedure of each.

# Advantages of warming up, conditioning and cooling/limbering.

- (c) Isometric and Isotonic exercises.

  Meaning, advantages and examples of each.
- (d) Circuit Training.

  Meaning and advantages of circuit training; procedure of conducting circuit training.
- (e) Weight Training.

Meaning and advantages of weight training.

An understanding of how the above training methods help an individual in different sports and help develop strength, speed, stamina, skill, endurance.

# **Unit III: Career Aspects in Physical Education**

(i) Career options in Physical Education.

Professional sportsmen, sports manager, teacher/lecturer, sports coach, gym instructor, sports officials, sports events coordinators, sports journalist and commentator, sports software engineer, marketing and manufacturing of sports equipment.

# (ii) Important institutions of Physical Education in India.

Functions and objectives of Netaji Subhash National Institute of Sports (N.S.N.I.S.), Sports Authority of India (S.A.I), International Olympic Committee (I.O.C), Indian Olympic Association (IOA), YMCA College of Physical Education (Chennai), Lucknow Christian College of Physical Education (LCCPE), Luxmibai National University of Physical Education (LNUPE). Development of training facilities, coaching systems, influence of media and sponsors.

# **Unit IV: Career Aspects in Physical Education**

# (i) Tournaments and types of tournaments.

Candidates should be fully aware of:

- (a) the definition of 'tournament'.
- (b) the types of tournaments: Fixtures, Knock-out, league matches (seeding and byes).
- (c) merits and demerits of tournaments.
- (d) objectives and importance of intramural and extramural competitions.
- (e) Names of the National and International Federations/Bodies controlling the various tournaments/competitions.
- (ii) Difference between Professional and Amateur Players.

#### **Unit V: Health Education & Health Problems**

#### (a) Meaning and definition of 'Health' and 'Health Education'.

Meaning and definition of 'Health' (mental health and physical health) and 'Health Education'.

# (b) Principles and importance of Health Education. Health problems and role of Health Education in solving them.

Principles and objectives of Health Education. Importance of Health Education for adults and the younger generation through formal and non-formal channels of education. Various prevalent Health Problems: Communicable diseases – meaning, examples and common mode of spread. Epidemics – meaning and examples; Water, noise and air pollution – causes and prevention; Occupational Health Hazards – meaning and examples.

#### (c) Disability and Rehabilitation.

Causes of disability. General principles for prevention of disability; Meaning and scope of Rehabilitation; services available for rehabilitation; role of the community and government organizations in rehabilitation programmes.

#### (d) Posture

Meaning of posture.

Correct posture – meaning, importance of correct posture (standing, sitting, walking). Common postural deformities: kyphosis, scoliosis, lordosis, flat foot, knock-knees, bowlegged, hunch back, round shoulders – meaning, causes and corrective measures for each.

# (e) Personal hygiene and sleep requirements.

**Personal hygiene:** Meaning of personal hygiene, importance of personal hygiene for a healthy life style. Care of eyes, ears, feet, hair, skin, oral hygiene, nose and clothing. Foot care: causes of corns, broken nails due to tight footwear; Causes of diseases like ring worm, athletes foot due to walking in wet areas; proper care of feet.

**Sleep requirements:** Sleep requirements for different age groups. Effects of insufficient sleep on human body.

# (f) Substance Abuse.

Effects of use of alcohol and smoking on the individual and society.

Drugs: Meaning of 'drugs' and 'drug abuse'; Stimulants and Narcotics – Analgesics. Awareness of the fact that use of certain drugs has been banned by World Anti-Doping Agency (WADA) and National Anti-Doping Agency (NADA) and reasons for the same.

# **Unit VI: Sports Injuries and First Aid**

# (a) Sports related injuries.

Types of sports related injuries: Soft tissue injuries (contusion, abrasion, strain and sprain) bone injuries (fracture) and joint injuries (dislocation): cause and prevention of each

# (b) Role of a sportsperson in prevention of sports related accidents.

Types of injuries due to: sudden movement; environment (hot, cold, wet and dry); lack of preparation (warm up, cool down); inadequate clothing, body protection; not following instructions; surface and facilities, equipment being unsafe. Role of individual in prevention of sports related accidents

#### (c) First Aid.

Meaning and importance of 'First Aid'. First Aid for various sports related injuries. First Aid for cuts, grazes, strains, sprains, cramps, blisters, bruises, injuries of bone (fracture and dislocation); application of splints and Thomas splint; First Aid in drowning; Cardio Pulmonary Resuscitation (CPR) and Rest, Ice, Compression and Elevation (RICE).

# **Unit VII: Test & Measurement in Sports**

- Motor Fitness Test 50 M Standing Start, 600 M Run/Walk, Sit & Reach Partial Curl Up, Push Ups (Boys), Modified Push-Ups (Girls), Standing Broad Jump, Agility 4x10 M Shuttle Run
- General Motor Fitness Barrow three-item general motor ability (Standing Broad Jump, Zig Zag Run, Medicine Ball Put For Boys: 03 Kg & For Girls: 01 Kg)
- Measurement of Cardio-Vascular Fitness Harvard Step Test/Rockport Test Computation of Fitness Index:

Duration of the Exercise in Seconds x 1005.5 x Pulse count of 1-1.5 Min after Exercise Rikli & Jones - Senior Citizen Fitness Test

1. Chair Stand Test for lower body strength 2. Arm Curl Test for upper body strength 3. Chair Sit & Reach Test for lower body flexibility 4.Back Scratch Test for upper body flexibility5. Eight Foot Up & Go Test for agility 6. Six Minute Walk Test for Aerobic Endurance

# **Unit VIII Biomechanics & Sports**

- Meaning and Importance of Biomechanics in Sports
- Types of movements (Flexion, Extension, Abduction & Adduction)
- Newton's Law of Motion & its application in sports
- Friction & Sports

# **Unit IX Psychology & Sports**

- Personality; its definition & types Trait & Types (Sheldon & Jung Classification)
   & Big Five Theory
- Motivation, its type & techniques
- Exercise Adherence; Reasons to Exercise, Benefits of Exercise
- Strategies for Enhancing Adherence to Exercise
- Meaning, Concept & Types of Aggressions in Sports

