

**MAHARASHTRA STATE BOARD OF VOCATIONAL EDUCATION EXAMINATION, MUMBAI**

1	Name of Syllabus	<b>C. C. IN BASIC OF PHYSICAL EDUCATION (404133)</b>					
2	Max.Nos of Student	25 Students					
3	Duration	6 Month					
4	Type	Part Time					
5	Nos Of Days / Week	6 Days					
6	Nos Of Hours /Days	4 Hrs					
7	Space Required	Workshop = 400 Sq feet <u>Class Room = 200 Sq feet</u> TOTAL = 600 Sq feet					
8	Entry Qualification	S.S.C.					
9	Objective Of Syllabus/ introduction	To provide systematic training about physical Education					
10	Employment Opportunity	Can run training institute or can work in supervisory activities					
11	Teacher's Qualification	Diploma / Certificate holder in concern Subject.					
12	Training System	<b>Training System Per Week</b>					
13	Exam. System	Theory		Practical		Total	
		6 Hours		18 Hours		24 Hours	
		Sr. No.	Paper Code	Name of Subject	TH/PR	Hours	Max. Marks
		1	<b>40413311</b>	FOUNDATION OF PHYSICAL EDUCATION	TH-I	3 hrs	100
		2	<b>40413312</b>	STRUCTURAL KINESIOLOGY AND BIO MECHANICS	TH-II	3 hrs	100
		3	<b>40413321</b>	SKILL	PR-I	3 hrs	100
		4	<b>40413322</b>	STRUCTURAL KINESIOLOGY AND BIO MECHANICS	PR-II	3 hrs	100
				Total			<b>400</b>
							<b>170</b>

## **THEORY - I - FOUNDATION OF PHYSICAL EDUCATION**

Introduction, meaning and definition, scope of Physical Education, aims and objectives of Physical Education, misconceptions about Physical Education.

Physical Education as an academic discipline, meaning of the terms—Physical Culture, Physical Training, Drill. Sports, Games, Health Education and Recreation.

\_ Philosophy of Physical Education—Philosophies of Education as applied to Physical education (Idealism Naturalism, Realism, Pragmatism and Existentialism).

\_ Biological basis of Physical Activity—Benefits of exercise, growth and development, exercise and well-being sex and age characteristics of adolescent, body types, sex differences , individual differences, use and disuse and overuse phenomenon.

\_ Psychological basis of Physical Education—Psychological factors that promote the learning motor skills Types of learning, Learning curve, Play and Play theories, general principles of growth and development, transfer of training effects.

\_ Sociological basis of Physical Education—Socialization process, social nature of men and physical activity, sports as cultural heritage of mankind, customs, traditions and sports, competition and cooperation. Leadership qualities, Implication of sociology for Physical Education and Sports.

\_ Physical Education in Ancient Greece, Rome and Contemporary Germany, Sweden, Denmark and Russia, Physical Education in U. S.A.

\_ Historical development of Ancient and Modern Olympic Games, Asian Games, SAF Games.

\_ Physical Education in India—History of Physical Education in Ancient India, Central Advisory Board of Physical Education and Recreation (CABPER), All India Council of Sports (AICS), National Physical Fitness Programme(NPFP), Netaji Subhas National Institute of Sports (NSNIS), National Cadet Corps (NCC).

\_ Sports Authority of India (SAI), National Sports Policy (NSP), National Sports Federation's (N.S.Fs), Lakshmibai National Institute of Physical Education (LNIPE, Gwalior). Indian Olympic Association (IOC), Society for the National Institute of Physical Education and Sports (SNIPES), National Awards ( Arjuna Award , Dronacharya Award, Rajiv Gandhi Khel Ratna Award, MAKA Trophy)

## **PRACTICAL - I - SKILL**

Track and Field – (Compulsory) Coaching

(1) Sprints (2) Middle and long distance

(3) Relay Races (4) Hurdles

(5) Short put (6) Discus

(7) Javelin (8) Hammer

(9) Long jump (10) High jump

(11) Triple jump (12) Pole vault

(13) Steeple Chase

Contents to be covered in Track & Field /Game

1. Historical development of the concerned game/track and field event in India, Asia, World level.

2. Main tournaments organized at national and International level.

3. Records/ Statistics of the game/ track and field event at World, Olympics, Asia, National.

4. Award in the game and list of at least ten players who got these awards.

5. Books and magazines on the Game/ Track and field listing at least five.

6. Officiating:

Play area dimensions/ track layout and marking.

Equipment specifications

Officials and their duties.

Rules of the Game/ Track and Field and their interpretation

7. Technique (Skill)

Classification of skills

Sequential explanation of skills.

Various faults in skills, their causes and corrections, types of exercises to develop and consolidate fundamental skills of the game / track and field events.

8. Tactics and strategy:

(i) Individual practice, group and team.

(ii) Offensive and defensive tactics.

(iii) System of play their practical training.

(iv) Selection of team (Selection Procedure)

(v) Analysis of Performance in competition

Swimming

Brest stroke, Butterfly, water polo, officiating of these strokes and water polo.

## THEORY - II - STRUCTURAL KINESIOLOGY AND BIO MECHANICS

The concept of Structural Kinesiology, its aims and objectives.

Academic and Professional objectives of Structural Kinesiology

Professional applications of Structural Kinesiology

The role of Kinesiology in Physical Education and Sports

The Kinesiology importance of bones, Joints and muscles

The fundamental movement of joints and their terminology

The axis and planes involved in joint movements

The structural classification of skeletal muscles and type of contractions

Classification of Muscles produced movements

The techniques of muscular analysis.

Classification of Joints- moveable, partly moveable and immovable.

The attachment and actions of muscles of following joints

a) **Shoulder Girdle and Shoulder:** Trapezius, Levator Scapula, Rhomboids, Serratus Anterior, Pectoralis Minor and Major, Deltoids, Supraspinatus, Teres Minor and Major, Infraspinatus, Subscapularis and Biceps.

b) **Elbow Joint:** Biceps Brachii, Pronator Teres, Brachioradialis, Brachialis, Triceps, Pronator, Quadratus and Supinator.

c) **Hip Joint:** Iliopsoas Minor and Major, Pectinues, Rectus Femoris, Sartorius, Tensor Fasciatae, Biceps Femoris, Semimembranosus, Semitendinosus, Gluteus Maximus, Obturator externus and internus, Adductor Magnus, Longus and Brevis.

The attachments and actions of muscles of following joints:

a) **Knee Joint**

Quadriceps- Rectus Femoris, Vastus Medialis, Vastus Lateralis, Vastus Intermedius.

Hamstring Group- Biceps Femoris, Semi Membranosus, Semi Tendinosus, Sartorius, Popliteus, Gastrocnemius

b) **Ankle and foot Joints:**

Gastrocnemius, Soleus, Tibialis anterior and Posterior, Flexor and Extensor Digitorum Longus & brevis, Extensor Hallucis Longus.

c) **Neck and Trunk Region:**

Sternomastoid, Trapezius, Splenius Capitis, Infraspinatus, Levator Scapulae, Teres Major and Minor, Serratus anterior, Splenius, Latissimus dorsi, Erector Spinal, Rectus abdominis, Obliques internus & externus.

Criteria of good posture and its importance

Causes of Poor Posture

Specific deformities- Kyphosis, Lordosis, Scoliosis, Knock knees, Bow legs and flat foot and their remedies

Introduction of Kinanthropometry and its importance.

Muscular Power, Strength and endurance

Body constitution and composition

The mobility and stability of joints.

Definition of biomechanics and its meaning

The role of Biomechanics in the field of Physical Education and Sports

Newton's Laws of Motion

Equilibrium and its types

Principles of Equilibrium and their application in sports

Lever and its types and their application in sports for mechanical efficiency.

The concept of Projectiles and fluid mechanics

The principles of aerodynamics

Biomechanical analysis of walking, Running, Jumping, throwing, catching and hurdling

The concept of centripetal and centrifugal forces.

## **PRACTICAL - II - STRUCTURAL KINESIOLOGY AND BIO MECHANICS**

Identification of various kinds of movements of joints

Measurement of range of movements of various joints with the help of goniometer or flexometer

Palpitation of superficial muscle of the body

Demonstration of Isometric, Isotonic and Isokinetic movements

Demonstration of concentric and eccentric contractions of muscles

Demonstration of Stretch reflex of muscles

Identification of kind of lever involve in the movement performed by the examiner

Demonstration of corrective exercises for Kyphosis, Lordosis, Scoliosis, Knock-Knees and Flat Foot.

The concept of Projectiles and fluid mechanics

The principles of aerodynamics

Biomechanical analysis of walking, Running, Jumping, throwing, catching and hurdling

The concept of centripetal and centrifugal forces.

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