

Department of Physical Education

Faculty Member of the Department

<u>Sl. No.</u>	<u>Name of Teacher's</u>	<u>Qualification</u>	<u>Designation</u>
1.	Md Nasiruddin Pandit	M.P.Ed.	SACT
2.	Md Shamim Akhter	M.P.Ed.	SACT

SEMESTER- 3

CORE PAPER- 3: Anatomy, Physiology and Exercise Physiology

Course Code- CC1C

Marks Distribution

3rd Semester	40 Marks	Unit-1	Introduction	
		Unit-2	Musculo-Skeletal System	
		Unit-3	Circulatory System	
		Unit-4	Respiratory System	
	20 Marks	Lab Practical	1. Assessments of BMI and WHR (Waist-to-hip ratio).	
			2. Assessment of Heart rate, Blood Pressure, Respiratory Rate, and Pick Flow Rate (any two).	
15 Marks	Internal			

SEMESTER- 3

Track and Field

Course code: SEC 1

<u>SEC 1</u> 50 Marks	40 Marks	1. Track Events	
		2. Field events (any two) Long jump, High jump, Shot put, Discus throw, Javelin throw.	
	10 Marks	Internal	

SEMESTER- 3

CORE PAPER- 3: Anatomy, Physiology and Exercise Physiology

Course Code- CC1C

Total number of classes - 60

Unit-I: Introduction

- 1.1. Meaning and Definition of Anatomy, Physiology and Exercise Physiology.
- 1.2. Importance of Anatomy, Physiology and Exercise Physiology in Physical Education.
- 1.3. Human Cell- Structure and function.
- 1.4. Tissue- Types and functions.

Unit-II: Musculo-Skeletal System

- 2.1. Skeletal System- Structure of Skeletal System. Classification and location of bones and joints. Anatomical differences between males and females.
- 2.2. Muscular System- Types of Muscles. Location, Structure and Function of Skeletal Muscle.
- 2.3. Types of muscular contraction.
- 2.4. Effect of exercise and training on the muscular system.

Unit-III: Circulatory System

- 3.1. Blood- Composition and function.
- 3.2 Heart- Structure and functions. Mechanism of blood circulation through the heart.
- 3.3 Blood Pressure, Athletic Heart and Bradycardia.
- 3.4 Effect of Exercise and Training on the circulatory system.

Unit-IV: Respiratory System

- 4.1 Structure and Function of Respiratory Organs.
- 4.2 Mechanism of Respiration.
- 4.3 Vital Capacity, O₂ Debt and Second Wind.
- 4.4 Effect of Exercise and Training on the respiratory system.

LAB PRACTICAL

1. Assessments of BMI and WHR (Waist-to-hip ratio).
2. Assessment of Heart rate, Blood Pressure, Respiratory Rate, and Pick Flow Rate (any two).

SEMESTER- 3

Track and Field

Course code: SEC 1

1. Track Events

- 1.1. *Starting Techniques: Standing start and Crouch start (its variations) use of Starting Block.*
- 1.2. *Acceleration with proper running techniques.*
- 1.3. *Finishing technique: Run Through, Forward Lunging and Shoulder Shrug.*
- 1.4. *Relay Race: Starting, Baton Holding/Carrying, Baton Exchange in between zone, and finishing.*

2. Field events (any two)

- 2.1 *Long Jump: Approach Run, Take-off, Flight in the air (Hang Style/Hitch Kick) and Landing.*
- 2.2 *High jump: Approach Run, Take-off, Bar Clearance (Straddle) and Landing.*
- 2.3 *Shot put: Holding the Shot, Placement, Initial Stance, Glide, Delivery Stance and Recovery*
- 2.4 *Discus Throw: Holding the Discus, Initial Stance, Primary Swing, Turn, Release and Recovery (Rotation in the circle).*
- 2.5 *Javelin throw: Grip, Carry, Release and Recovery (3/5 Impulse stride)*

SEMESTER- 3

CORE PAPER- 3: Anatomy, Physiology and Exercise Physiology

Course Code- CC1C

Theoretical 40 Marks

Syllabus Distribution

<u>Name of Teacher</u>	<u>Assigned Unit / Topic</u>
<i>Md Nasiruddin Pandit</i>	<u>Unit- I: Introduction</u> <i>1.1. Meaning and definition of Anatomy, Physiology and Exercise Physiology. 1.2. Importance of Anatomy, Physiology and Exercise Physiology in Physical Education. 1.3. Human Cell- Structure and function. 1.4. Tissue- Types and functions.</i>
<i>Md Shamim Akhter</i>	<u>Unit-II: Musculo-skeletal System</u> <i>2.1. Skeletal System- Structure of Skeletal System. Classification and location of bones and joints. Anatomical differences between male and female. 2.2. Muscular System- Types of Muscles. Location, Structure and function of Skeletal muscle. 2.3. Types of muscular contraction. 2.4. Effect of exercise and training on muscular system.</i>
<i>Md Nasiruddin Pandit</i>	<u>Unit-III: Circulatory System</u> <i>3.1. Blood- Composition and function. 3.2 Heart- Structure and functions. Mechanism of blood circulation through heart. 3.3 Blood Pressure, Athletic Heart and Bradycardia. 3.4 Effect of exercise and training on circulatory system.</i>
<i>Md Shamim Akhter</i>	<u>Unit-IV: Respiratory System</u> <i>4.1 Structure and function of Respiratory organs. 4.2 Mechanism of Respiration. 4.3 Vital Capacity, O₂ Debt and Second Wind. 4.4 Effect of exercise and training on respiratory system.</i>

SEMESTER- 3

Track and Field

Course code: SEC 1

Practical 40 marks

Syllabus Distribution

<u>Name of Teacher</u>	<u>Assigned Unit / Topic</u>
<i>Md Nasiruddin Pandit</i>	1. Track Events <i>1.1 Starting Techniques: Standing start and Crouch start (its variations) use of Starting Block.</i> <i>1.2 Acceleration with proper running techniques.</i> <i>1.3 Finishing technique: Run Through, Forward Lunging and Shoulder Shrug.</i> <i>1.4 Relay Race: Starting, Baton Holding/Carrying, Baton Exchange in-between zone, and finishing.</i>
<i>Md Shamim Akhter</i>	2. Field events (any two) <i>2.1 Long Jump: Approach Run, Take-off, Flight in the air (Hang Style/Hitch Kick) and Landing.</i> <i>2.2 High jump: Approach Run, Take-off, Bar Clearance (Straddle) and Landing.</i> <i>2.3 Shot put: Holding the Shot, Placement, Initial Stance, Glide, Delivery Stance and Recovery</i> <i>2.4 Discus Throw: Holding the Discus, Initial Stance, Primary Swing, Turn, Release and Recovery (Rotation in the circle).</i> <i>2.5 Javelin throw: Grip, Carry, Release and Recovery (3/5 Impulse stride)</i>