



भारतीय प्रौद्योगिकी संस्थान खड़गपुर

Indian Institute of Technology Kharagpur

Extra Academics Activity *Syllabus for Semester 1 (Autumn)*

1. National Cultural Appreciation (NCA-1):

DOMAIN-1 INDIAN DANCE

A brief history of dance in India; Introduction to the classical dances of India; A brief history of Kathak; The system of taal; Common terminologies for nritya and nritya aspects of Kathak; Musical accompaniments for Kathak; Training on nritya aspect of Kathak set to Teentaal – including parhant (recitation of bol), tatkaar (basic steps), basic hastak (hand movements), techniques of some pirouettes, performance of various types of bol (aamad, tora, paran, pargana) and footwork (tihayi, ladi) with their mathematical variations; Training on nritya items like vandana, and kavitta.

DOMAIN-2 INDIAN INSTRUMENTAL MUSIC

Recognition of 7 notes (ShuddhaSwar); Play them on your Instrument and try to sing the notes; Tune your Instrument; Learn to play different combinations with the 7 notes and develop Paltas of different rhythm (2,3,4); Examples of a few combinations: 12,21,121,321,1321,1231 etc.; Basic idea about the following scales: Bilawal, Kalyan; Learn one Gat (Instrumental composition) from any of the given scales; Also try to sing the composition; Knowledge of the basic syllables of Tabla; Knowledge about following Taals and recite their basic Theka with proper poetry, pronunciation and proper Tali-Khali: Dadra, Keherwa, Ektaal, Teentaal. Ability to recognize the sound and the formation of the following Instruments: Taanpura, Sitar, Sarod, Santoor, Guitar, Flute, Violin, RudraVeena, SaraswatiVeena, Sarangi, Tabla, Pakhawaj, Khol, Mridangam, Ghatam.

DOMAIN-3 INDIAN VOCAL MUSIC

Recognition of 7 notes (Shudh). Ability to sing Single swar individually only with the help of Taanpura; Basic palta/alankar (3,4chhand) (Concept of Shamapadi and Bishamapadi); 1123,1223,1233,3321, 1234,2341,3412,4123; Basic idea about about 2 scales: At least should know which are the swars used in each of the scales: Bilawal, Kalyan; One bandish from any of the given scales, and its Swar/Sur; Difference between a Bandish and any Song. (Just Concept); Difference between Swar and Sur. (Just Concept); Should be able to sing the sur of the bandish in a Sargamgeet Format; Knowledge of basic syllables of tabla, 3 taals and their basic theka: Dadra, Keherwa, Teentaal; Ability to recognise the sound and the formation of the following instruments: Sarode, Sitar, Guitar, Flute, Santoor.

DOMAIN-4 INDIAN FINE ARTS

Theory: Introduction to visual arts, Language of Art; Concept on Methods and Materials relating to painting; Concept on Methods and Materials relating to Sculpture; Concept on Methods and Materials relating to Printmaking; Chronology of Indian Art History; Early theories of art and aesthetics : NatyaSastras, SilpaSastras and Rasa Theory; Historical background and analysis on Ancient Indian art.

Practical: Working with elements of visual perception; Opaque and transparent water colour; Relief sculpture; Printmaking (Woodcut/ Linocut/ Collagraphy).

Materials required for practical class: Chat paper/Art paper; Pencil/ Eraser/ Sketch Pen/ Black Permanent Marker Pen; Artist quality water colour set; Poster colour set; Round brush (No. : 0, 2, 4, 6, 8, 12) (Sable hair); Flat brush (1/2 inch, 2 inches) (Sable Hair); Office gum; Fevicol; Plastic clay/ Clay dough (for relief sculpture); Clay modelling tools; Linoleum sheet A4 size / plywood A4 size (Printing ink and ink roller).

2. National Cadet Corps (NCC)

NCC, AW

Serial No.	Broad topic	Topic Code	Sub topics	
1	The NCC	N	Aim and objective of NCC, Organisation & Training & NCC Songs, Incentives	
2	National Integration & Awareness	NI	Religions, Culture, Traditions & Customs of India National Integration : Importance & Necessity Freedom Struggle & Nationalist Movement in India National Interests, Objectives, Threats and Opportunities	
3	Foot Drills	FD	General words of command Attention, stand at ease and stand easy Turning and inking at halt Sizing, forming up in three ranks and numbering, open and close order march and dressing Saluting at halt, getting on parade, dismissing and	

			falling out	
4	Drill with Arms	AD	<p>Attention, stand at ease and stand easy</p> <p>Getting on parade with rifle and dressing at the order</p> <p>Dismissing and falling out</p> <p>Ground/take up arms</p> <p>Present from the order and vice-versa</p>	
5	Ceremonial Drill	CD	<p>Guard Mounting</p> <p>Guard of Honour</p> <p>Instructional Practice</p>	
6	Weapon Training	WT	<p>Characteristics of a rifle/rifle ammunition & its fire power</p> <p>Stripping, assembling, care and cleaning and sight setting of .22 rifle</p> <p>Stripping, assembling, care & cleaning of 7.62mm SLR</p> <p>Loading, cocking and unloading</p> <p>The lying position and holding & Aiming-I</p> <p>Trigger control and firing a shot</p>	
7	Personality Development and Leadership		<p>Introduction to Personality Development</p> <p>Factors Influencing / Shaping Personality : Physical, Social, Psychological & Philosophical</p> <p>Self-Awareness – Known yourself / Insight</p> <p>Change your mind set</p> <p>Interpersonal relationship & communication</p> <p>Communication Skills : Group Discussions / Lecturettes</p> <p>Leadership Traits</p>	
8	Disaster Management	DM	<p>Civil Defence Org & its duties/ NDMA</p> <p>Type of Emergencies / Natural Disasters</p> <p>Fire Service & Fire Fighting</p>	

9	Social Awareness & Community Development	SA	Basic of Social Service, weaker section of our society& their needs Social / Rural development Projects: MNREGA, SGSY, NSAP etc NGOs : Role & Contribution	
10	Health & Hygiene	H	Structure and function of the human body Hygiene and sanitation (Personal & Food hygiene) Physical & Mental Health Infectious & Contagious Diseases & its prevention	
11	Adventure Training	ADV	Para Sailing	
12	Environment Awareness and Conservation	E	Natural Resources Conservation for Management	
13	Obstacle Training	OT	Obstacle Course	
14	General Service Knowledge	GSK	Armed Forces & IAF Capsule IAF Capsule	
15	Principle of Flight	PF	Principle of Flight	
16	Air Campaign	AC	Introduction	
17	Airmanship	AR	Visit to Airfield:-ATC,MET,TARMAC	
18	Navigation & Metrology	NM	Introduction to Met and Atmosphere	
19	Aero Engines & Airframes	C	Introduction and types of Engines	
20	Flight Instrument	IN	Basic Flight Instrument	
21	Aero Modelling	AM	Aeromodelling Capsule	

NCC, EME

Serial No.	Broad topic	Topic Code	Sub topics	
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1	The NCC	N	Aim and objective of NCC, Organisation & Training & NCC Songs, Incentives	
2	National Integration & Awareness	NI	Religions, Culture, Traditions & Customs of India National Integration : Importance & Necessity Freedom Struggle & Nationalist Movement in India National Interests, Objectives, Threats and Opportunities	
3	Foot Drills	FD	General words of command Attention, stand at ease and stand easy Turning and inking at halt Sizing, forming up in three ranks and numbering, open and close order march and dressing Saluting at halt, getting on parade, dismissing and falling out	
4	Drill with Arms	AD	Attention, stand at ease and stand easy Getting on parade with rifle and dressing at the order Dismissing and falling out Ground/take up arms Present from the order and vice-versa	
5	Ceremonial Drill	CD	Guard Mounting Guard of Honour Instructional Practice	
6	Weapon Training	WT	Characteristics of a rifle/rifle ammunition & its fire power Stripping, assembling, care and cleaning and sight setting of .22 rifle Stripping, assembling, care & cleaning of 7.62mm SLR Loading, cocking and unloading The lying position and holding & Aiming-I	

			Trigger control and firing a shot	
7	Personality Development and Leadership		<p>Introduction to Personality Development</p> <p>Factors Influencing / Shaping Personality : Physical, Social, Psychological & Philosophical</p> <p>Self-Awareness – Known yourself / Insight</p> <p>Change your mind set</p> <p>Interpersonal relationship & communication</p> <p>Communication Skills : Group Discussions / Lecturettes</p> <p>Leadership Traits</p>	
8	Disaster Management	DM	<p>Civil Defence Org & its duties/ NDMA</p> <p>Type of Emergencies / Natural Disasters</p> <p>Fire Service & Fire Fighting</p>	
9	Social Awareness & Community Development	SA	<p>Basic of Social Service, weaker section of our society& their needs Social / Rural development</p> <p>Projects: MNREGA, SGSY, NSAP etc</p> <p>NGOs : Role & Contribution</p>	
10	Health & Hygiene	H	<p>Structure and function of the human body</p> <p>Hygiene and sanitation (Personal & Food hygiene)</p> <p>Physical & Mental Health</p> <p>Infectious & Contagious Diseases & its prevention</p>	
11	Adventure Training	ADV	Para Sailing	
12	Environment Awareness and Conservation	E	Natural Resources Conservation for Management	
13	Obstacle Training	OT	Obstacle Course	
14	Armed Forces	AF	<p>Basic Organisation of Armed Forces</p> <p>Organisation of Army</p>	

15	Map Reading	MR	Intro to types of Maps & Conventional Signs Scales & Grid System Topographical forms & Technical terms	
16	Field Craft & Battle Craft	FC & BC	Introduction Judging Distance Description of Ground Recognition, description & indication of landmarks & targets	
17	Infantry Weapons & Equipment	INF	Characteristics of 7.62 mm SLR Rifle, ammunition, Firepower, Stripping, Assembling & Cleaning	
18	Military History	MH	Biography of renowned Generals (Carriapa / Sam Manekshaw) Indian Army War Heroes – PVCs	
19	Communication		Types of communications Characteristics of Wireless Technology (Mobile, Wi Fi etc)	

3. National Service Scheme (NSS)

Categories	Topics
Lectures (12 hours)	Basics of NSS and Motivation, Collection and analysis of Data, Preparation of Documents/Reports, Plantation, Vermicompost and Soil testing, Water Management and Sanitation, Water harvesting, Efficient Water Irrigation, Water Quality Control, Waste water management and Sanitation
Field Works in Village (24 hours)	

4. Health & Fitness

3 hours per week.

Course Orientation	Introduction of the course <ul style="list-style-type: none">• Warm-Up• Main part (aerobics, flexibility, balance)• Limbering Down
General Fitness	Endurance: Strength Endurance Flexibility: Dynamic Stretching Strength: Speed strength Speed: Speed Endurance Agility: Reflexes Agility Coordination: Synchronize All body part, Reaction Time
Recreation & On Field Management	Minor Games & First Aid
Special Lectures/Activity	<ul style="list-style-type: none">❖ Yoga and Meditation❖ Mental health / Happiness / Stress Management❖ Know your body (Skeletal/Muscular/Respiratory/Cardio-Vascular) for Health and Fitness❖ Environmental factors for health and fitness❖ General awareness about International and National sporting events

5. National Sports Organisation (NSO)

Course Objective :

- Demonstrate understanding of health principles incorporating a wide variety of aspects from forms of exercise to achieving optimum level of wellness.
- Demonstrate understanding of self-responsibility for personal health and wellness.
- Understand implications of personal and societal behavior on leading a healthy lifestyle with injury and disease prevention.

Course Outcome:-

- Students will use basic principles of physical activities for health and wellness to develop an informed, personal approach to mental and physical health.
- Students will acquire knowledge and demonstrate skills to safely engage in physical activity.
- Students will understand the principles of lifetime fitness and will incorporate fitness activities into a healthy and active lifestyle.

Scheme of Evaluation			
Continuous Assessment (03 in one Semester)			
S. No.	Components	Description of Components	Weight age (%)
1	Written test	Subjective / Objective types Question	20
2	Fitness assessment	Fitness related assessment through various fitness test batteries for specific event	40
3	Sports Skills Assessment	Administration of 3 Standardized (r =.60 or above) Skills Tests (20 Marks for each Test)	40

Note: The mean of obtained score will be considered for Grading (Marks obtained out of 300)

Scale Grading System			
Grades	Points for Credit	Performance	Marks Range (m)
EX	10	Excellent	90-100
A	9	Very Good	80-89
B	8	Good	70-79
C	7	Fair	60-69
D	6	Average	50-59
P	5	Pass	40-49
F	0	Fail	Less than 40

Subjects :- Athletics, Badminton, Basketball, Cricket, Football, Hockey, Squash, Swimming, Tennis, Table Tennis, Volleyball, Weightlifting, Yoga

Sports: -Athletics

Sl.No	COURSE CONTENT	Hour
1	Unit-I Historical background of Athletics:	1-12
	India, Olympic; Category of Athletic Events; Lay out and marking of/ for Track and field; Warming-up and limbering down - importance, principles, methods and means.	13-24
2	Unit-II Athletic Fundamentals:	
	Sprints, and Shot Put. Introduction and Brief history. Characteristics required for specific events in Athletics /for the Athletes. Technique, Errors, Reasons for errors and corrections.	25-30
3	Evaluation	31-36

Reference books and manual for Athletics Specialization (Athletics 1st year and Athletics 2nd years)

- Arthur E. Ellison (ed) (1994). Athletic Training and Sports Medicine.
- Ballisteros, J.M. (1998). Hurdles Basic Coaching Manual, IAAF.
- Bosen K.O. (1993). Teaching Athletics Skills and Technique.
- Martin, David E. Peter N. Coe (1991). Training Distance Runner.
- S.Howard (1981). Science of Track and Field Athletics.
- Briggs Graeme (1987). "Track and field coaching Manual", Australian Track and Field Coaches Association. Rothmans Foundation National Sports Division.
- I.A.A.F. Level-II (2001). Text Book on Jumping Event.
- Jarver, Jesse (1987). "The Jumps", Track and Field Coaching Manual Australia.

Sports: - Badminton

Sl.No	COURSE CONTENT	P.No.
1	Introduction / Course Orientation	1-3
2	General Fitness (All Motor Ability) Speed , Strength, Flexibility, Agility, Co ordination	4-6
3	Specific Fitness (Game Related Skills) Racket & Ball Exercise, Motor Fitness , General Motor Fitness	7-9
4	Introduction of Skills Related to Specific Sports	10-12
5	Grip -Types of Grip ,How to hold the Grip	13-15
6	Drive step in Forehand/Backhand,-Stationary Position ,With Shuttlecock	16-18
7	Net shot and recover forehand/backhand, Stationary Position ,With shuttlecock	19-21
8	High left with recovery Forehand/Backhand, Stationary Position ,With Shuttlecock	22-24
9	Push defence Forehand/Backhand-Stationary Position ,with Shuttlecock	25-27
10	Forehand Clear with Recovery -Stationary Position ,with Shuttlecock	28-30
11	Recreational Activity -Related to the Fitness	31-33
12	Evaluation	34-36

Sports: - BASKETBALL

Sl.No	COURSE CONTENT	P.No.
1	Introduction /Course orientation	1-3
2	Holding the Basketball, Ball handling, Player Stance with Basketball, Stationary Passing & Receiving Technique, Stationary Dribbling technique	4-6
3	Ball handling, Player Stance with Basketball, Stationary Passing & Receiving, Stationary Dribbling technique,	7-9
4	Various Ball handling exercises, Player Stance with Basketball, Stationary Passing & Receiving , Stationary Dribbling technique ,Shooting technique	10-12
5	Basketball handling, Player Stance with Basketball, Stationary Passing & Receiving, Stationary Dribbling technique, Shooting technique	13-15
6	Passing & Receiving Drills , Dribbling technique, Stationary Shooting technique	16-18
7	Evaluation	19-21
8	Ball handling , Passing & Receiving , Dribbling progressive, Shooting , Pivot foot practice	22-24
9	Stationary and Progressive Passing Drills Two man passing ,Three man passing, Four man Passing, Progressive Dribbling technique, Pivot foot work practice ,Shooting technique	25-27
10	Progressive Passing , Dribbling Variation Pivot foot work practice, Shooting Lay –up technique	28-30
11	Passing variation, Dribbling variation, Pivot foot practice, Shooting Lay-up technique	31-33
12	Evaluation	34-36

15 minutes General Warming –up and Specific warming up before commence with ball practice

10 minutes cool down after the practice

Reference Books :

- 1) Books: Coaching “Basketball “ John Wooden, Daily Practice
- 2)Basketball Drills, Plays, and Strategies by Clinton M. Adkins, Steven R. Bain, Edward A Dreyer,
- 3) Coaching Basketball by Jerry Krause
- 4)The Journal of Basketball Coaches Association of India by NSNIS SAI ,Patiala
- 5) Coaching Youth Basketball by John P.McCarthy,JR
- 6) Brain and Brawn Basketball by Joe Lipa

Sports: -Cricket

Sl.No	COURSE CONTENT	Hour
1	INTRODUCTION	1-3
2	Introduction Of Cricket, History, Rules And Regulation, and Physical Fitness-Speed , Strength, Flexibility, Agility,Co ordination	4-6
3	Batting Stand – Batting grip ,Back lift, Body Position Batting - Front Foot Defence , Body alignment, Bat Position	7-9
4	Front Foot Drive, Body alignment, Bat Position, Bat swing, Follow through	10-12
5	Catching, Body alignment, Hand Position	13-15
6	Basic Bowling Action – Grip, Running , Back foot landing, Loading , Follow through	16-18
7	Introduction Of Cricket, History, Rules And Regulation, and Physical Fitness	19-21
8	Batting Stand – Batting grip ,Back lift, Body Position Batting - Front Foot Defence , Body alignment, Bat Position	22-24
9	Front Foot Drive, Body alignment, Bat Position, Bat swing, Follow through	25-27
10	Catching, Body alignment, Hand Position	28-30
11	Basic Bowling Action – Grip, Running , Back foot landing, Loading , Follow through	31-33
12	Evaluation	34-36

Note : -

- Total 12 Week for One Semester
- First Class Kept reserve for Introduction / Course Orientation

Sports: - Football

Sl.No	COURSE CONTENT	P.No.
1	Introduction / Course Orientation	1-3
2	Conditioning (Motor Fitness) General,Development of endurance ,Speed ,strength ,agility	4-6
3	Conditioning (Motor Fitness) Specific ,Development of endurance ,Speed ,strength ,agility Running Ex Running Straight Ahead 2Running Hip Out 2 Running Hip In 2 Running Circling Partner 2 Running Shoulder Contact 2 Running Quick Forwards and Backwards Running Straight Ahead 2 Running Hip Out 2 Running Hip In 2 Running Circling Partner 2 Running Shoulder Contact 2 Running Quick Forwards and Backwards Running Straight Ahead 2 Running Hip Out 2	7-9

	Running Hip In 2 Running Circling Partner 2 Running Shoulder Contact 2 Running Quick Forwards and Backwards Running Straight Ahead 2 Running Hip Out 2 Running Hip In 2 Running Circling Partner 2 Running Shoulder Contact 2 Running Quick Forwards and Backwards Strength, plyometric, balance,	
4	Football specific fundamental skill Ball Control, Dribbling Skill & Passing ,Accuracy, Body Control ,Closed Space Dribbling, Cone Drill, Wall Drill, Player passing Drill	10-12
5	(Ball mastery) Inside Touch &Move, Outside Foot U, Inside Foot V cut, Outside Foot V cut, Alternate Foot V cut, L Drag U, Sole Square	13-15
6	Evaluation	16-18
7	(Ball Control) Continuous Scissors, Sole Taps, Sole Drag, Football Dance, Triple Sole Drag, Sole drag (R)Inside Push (L),Sole drag (L)Inside Push (R),Sole drag (R)Outside Push (R)	19-21
8	(Ball Control) Sole drag (l)Outside Push (L),The V inside, The V Outside, Pull Push Instep- Right Foot, Pull Push Instep- Left Foot, Pull & Push – Both Feet, Triple pull & Push Both feet	22-24
9	(Controlling Aerial Ball & Move) Inside, Cut Strong Foot, Inside cut Weak Foot, Outside Cut Strong Foot, Outside Cut Weak Foot, Cruft on volley Strong Foot, Cruft on volley Weak Foot	25-27
10	(Controlling Aerial Ball & Passing) Control Inside Of Foot & Pass, Lace & Sole Control & Pass, Thigh Control & pass, Chest Control & Pass	28-30
11	(Improving 1st Touch On Ball) Pull Spin Turn, step Over Turn, Inside Chop Turn, Inside Touch Turn Sole Stop, Turn Open Inside Touch, Turn Open Outside Touch, Inside Stop, Step On Pull Turn, Shuffle Turn	31-33
12	Evaluation	34-36

Reference-

1. FIFA coaching Manual
2. Small sided game and integrating physical preparation-FIFA
4. Power Training in football- Jan's bangs Bo
- 5.Soccer Skills: The Essential Guide to Technique, Training, and Tacticsby Clive Gifford

Sports: - Hockey

Sl.No	COURSE CONTENT	P.No.
1	General Fitness (All Motor Ability), Speed , Strength, Flexibility, Agility , Co ordination	1-3
2	Specific Fitness (Game Related Skills) , Stick & Ball Exercise, Motor Fitness , General Motor Fitness	4-6
3	Scoop Stationary Position, With Ball	7-9
4	Reverse Scope Stationary Position, With Ball	10-12
5	Flick Stationary Position, With Ball	13-15
6	Reverse Flick Stationary Position, With Ball	16-18
7	Recreational Activity Related to the fitness	19-21
8	Drag Flick Stationary Position, With Ball	22-24
9	Deception Stationary Position, With Ball	25-27
10	Flat Stick Tackling Stationary Position, With Ball	28-30
11	Poke & Jab Tackle Stationary Position,With Ball	31-33
12	Evaluation	34-36

Sports: - Lawn Tennis

Sl.No	COURSE CONTENT	P.No.
1	Introduction / Course Orientation – Brief History of Tennis	1-3
2	General Fitness (All Motor Ability) Speed , Strength, Flexibility, Agility, Co ordination	4-6
3	Specific Fitness (Game Related Skills) Ball Sense Exercise with racquet and without racquet, Motor Fitness , Specific on court Fitness	7-9
4	Introduction of Skills Related to Specific Sports	10-12
5	Grip -Types of Grip ,How to hold the Grip	13-15
6	Forehand/Backhand,- Shadow Practice withStatic Position/Dynamic	16-18
7	Forehand/backhand, Drop feed, Hand feed	19-21
8	Forehand/Backhand, With Movement from Service Line	22-24
9	Forehand/Backhand- With movement from No man's land	25-27
10	Forehand/Backhand- With movement from base line	28-30
11	Fun Game Activity -Related to the Fitness/Tennis	31-33
12	Evaluation	34-36

Sports: - Squash

SLNo	COURSE CONTENT	P.No.
1	Introduction / Course Orientation	1-3
2	General Fitness (All Motor Ability), Speed ,0 Strength, Flexibility, Agility Co ordination	4-6
3	Specific Fitness (Game Related Skills) , Racket & Ball Exercise , Motor Fitness General Motor Fitness	7-9
4	Introduction of Skills, Related to Specific Sports	10-12
5	Grip , Types of Grip , How to hold the Grip	13-15
6	Passing the Ball , Stationary Position, With Ball	16-18
7	Forehand Drive, Stationary Position, With Ball	19-21
8	Backhand Drive , Stationary Position, With Ball	22-24
9	Recreational Activity , Related to the fitness	25-27
10	Forehand Drop, Stationary Position, With Ball	28-30
11	Backhand Drop, Stationary Position, With Ball	31-33
12	Evaluation	34-36

Sports: - Swimming

SL No	BROAD TOPICS	Hour
1	Introduction / Course Orientation	1-3
2	Discussion on equipments needed for class	4-6
3	Water adjustment with survival float and checking swimmer abilities	7-9
4	Basic technique of the Front crawl stroke	10-12
5	Progressing through floating, kicking, pulling, and breathing.	13-15
6	Coordinating the arm action with kick and breathing technique.	16-18
7	Advance technique of the Front crawl stroke.	19-21
8	Stroke Drill	22-24
9	Starting technique of the Front crawl stroke.	25-27
10	Turning technique of the Front crawl stroke.	28-30
11	Finishing technique of the Front crawl stroke.	31-33
12	Evaluation	34-36

SL No	Reference
1	https://www.fina.org/swimming/rules
2	The Complete Book Swimming by Dr. James E. Counsilman

Sports: - Table Tennis

SL No	BROAD TOPICS	Hour
1	Introduction / Course Orientation	1-3
2	General Fitness (All Motor Ability), Speed ,0 Strength, Flexibility, Agility Co ordination	4-6
3	Specific Fitness (Game Related Skills) ,Racket & Ball Exercise , Motor Fitness General Motor Fitness	7-9
4	Introduction of Skills Related to Specific Sports	10-12
5	Grip Types of Grip How to hold the Grip	13-15
6	Passing the ball Stationary Position, With Ball	16-18
7	Push : - Forehand Push Stationary Position, With Ball	19-21
8	Push : - Backhand Push Stationary Position, With Ball	22-24
9	Recreational Activity Related to the Fitness	25-27
10	Drop : - Forehand Drop Stationary Position, With Ball	28-30
11	Drop : - Backhand Drop Stationary Position, With Ball	31-33
12	Evaluation	34-36

Sports: - Volleyball

SL No	BROAD TOPICS	Hour
1	Introduction / Course Orientation	1-3
2	General Fitness (All Motor Ability), Speed ,0 Strength, Flexibility, Agility Co ordination	4-6
3	Specific Fitness (Game Related Skills) ,Racket & Ball Exercise , Motor Fitness General Motor Fitness	7-9
4	Introduction of Skills Related to Specific Sports	10-12
5	Passing the ball Stationary Position, With Ball	13-15
6	Underarm Service Stationary Position, With Ball	16-18
7	Tennis Service Stationary Position, With Ball	19-21
8	Jump Service Stationary Position, With Ball	22-24
9	Recreational Activity Related to the fitness	25-27
10	Jump & Flot Service Stationary Position, With Ball	28-30
11	Shadow Practice Dig Pass Stationary Position, With Ball	31-33
12	Evaluation	34-36

Sports: - Weightlifting

S N	Course Content	P No
1	Course Orientation: Brief introduction to the discipline Basic rules & Regulations, Dietary Requirement, Energy Balance, Nutrition and Balance Diet, Safety Measures, Self evaluation Techniques. <ul style="list-style-type: none"> Curriculum & Mode of Conduct of classes. Evaluation/Grading Techniques. Pattern of Warming Up (General & Specific) and Limbering Down Pre Evaluation For Talent Identification and Segregation 	1-2
2	Warming Up & Limbering Down: General Warm Up & its Benefits: Low intensity Cardio & Neuromuscular Activation exercise: Jogging and Basic Stretches (Calf to Neck Stretches, Rotation Exercises, Spot jogging/High Knee Action, Stair Step jump, Jumping Jacks and their Variations) Specific Warm Up & its Benefits: Specific Muscle Activation Exercise, Joint Mobility Exercise. Limbering Down & its Benefits: Static, Dynamic	3-4
3	Safety, Risk Management and Injury Prevention: Trainers' Right & Responsibilities, Athletes' Right & Responsibilities, Pre-evaluation, Warming-up & limbering Down, Balance Diet and Nutrition.	5-6
4	Rules and their interpretations: Equipments, Layout of Platform and Arena with all its specifications.	7
5	Preparatory Exercises (Conditioning): Conditioning (Full Body): Very Low Intensity (30% to 40%) Resistance Training exercises, Load @ 30% of 1 RM (Set of 12 Exercises, 1 Set each, 8 Reps for Small Group of Muscles, 10 Reps for Big Group of Muscles with 60 Second rest between two sets), Monthly Increase in Load @ 5% till 45%, Administration of Critical Load @ 2 Times a month. (Sequence of exercises: Leg Press, Lying Leg Curl, Seated Cable Curl, Flat Bench Press, Dumbbell Press, Dumbbell Shrug, Triceps Pushdown, Barbell Curl, Back Extension, Standing Calf Raise, Barbell Wrist Curl & Crunches) Conditioning (Upper Body) Low Intensity (40% to 50%) Resistance Training exercises, Load @ 40% of 1 RM (Set of 10 Exercises, 2 Sets each and 1 Set at select cases, 08 Reps for Small Group of Muscles, 10 Reps for Big Group of Muscles with 90 Second rest between two sets) Monthly Increase in Load @ 5% till 55%, Administration of Critical Load @ 2 Times a month. (Sequence of exercises: Flat Dumbbell Press, Pec Deck Fly, Single Arm Dumbbell Row, Seated Cable Row, Seated Dumbbell Press, Dumbbell Lateral Raise, Dumbbell Shrug, Triceps Push Down, Barbell Curl, Barbell Wrist Curl) Conditioning (Lower Body) Low Intensity (40% to 50%) Resistance Training exercises, Load @ 40% of 1 RM (Set of 7 Exercises, 2 Sets each and 1 Set at select cases, 15 Reps for Small Group of Muscles, 20 Reps for Big Group of Muscles with 90 Second rest between two sets) Monthly Increase in Load @ 5% till 55%, Administration of Critical Load @ 2 Times a month. (Sequence of exercises: Smith Machine Squats, Leg Extension, Lying Leg Curl, Back Extension, Standing Calf Raise with Resistance, Crunches, Reverse Crunch)	8-15
6	Workout Plans: Techniques Involved & their relation with Muscles and Joints, Muscle Energy Technique (MET), Fundamental Principles Involved in Exercise Selection and Execution of Training, Basic Periodization of Training.	16-17

7	Foundation Skills/Moves: Core & Auxiliary Exercises: Shadow Practice, Basic Barbell Training.	18-21
8	Fundamental Skills: Snatch: Stance (Jump, Landing, Stance Drills), Grip (Hook grip), Position (Barbell Position Overhead, Active Shoulders) Fundamental Skill Execution without weight. Clean & Jerk: Stance, Grip and Position. Fundamental Skill Execution without weight.	22-31
9	Bench Coaching & Control of Sports Training: Systematic approach, distribution of training loads in relation to training/competition goals & defined structure for progress.	32-33
10	Self Evaluation Techniques: Motor Fitness Test: (Strength Endurance, Maximal Strength, Cardio Vascular Endurance) Psychological Tests: (Motivation) Performance Test: Snatch, Clean & Jerk	34-36

Discipline: - Yoga

SL No	BROAD TOPICS	Hour
1	Introduction / Course Orientation Yoga and Yogic practices	1-3
2	Warming up and its importance Concept, types , procedure,	4-6
3	Stretching exercises for yogic practice Types of stretching, exercises to do various stretches, static , dynamic , developing stretching	7-9
4	Cool down – exercises for limbering down and procedure	10-12
5	Pranayama- Introduction , types , various types of breathing	13-15
6	Breathing- Natural Breathing, Basic Abdominal breathing, Yogic breathing, Deep breathing with ratios, Fast breathing	16-18
7	Viloma – Interrupted Breathing, Anulom Vilom – Alternate Nostril Breathing, Cooling Breath - Sheetali, Sitkari, Kaki mudra, Ujjayi – Victorious Breath	19-21
8	Bhramari – Humming Bee Breath, Bhastrika – Bellow's Breath, Surya Bhedan – Right Nostril Breathing	22-24
9	Asanas – Introduction to asana , types of asanas ,	25-27
10	Preparations for Asanas , care and prevention for doing asanas	28-30
11	Vajrasana - Procedure – dos and don'ts Utkatasana - Procedure – dos and don'ts Vakrasana- Procedure – dos and don'ts Paścimottānāsana - Procedure – dos and don'ts	31-33
12	Evaluation	34-36