



NS NIS PATIALA

SYLLABUS FOR DIPLOMA IN SPORTS COACHING

DISCIPLINE: WEIGHTLIFTING

COURSE CODE: WT 21



Total Credits: 24	Semester - I	L	Assignment	P/FW	SW	TOTAL CREDIT UNITS
		80	20	300	30	12
		(L-Lecture, P-Practical,SW-Self Work, FW-Field Work)				
	Semester - II	L	Assignment	P/FW	SW	TOTAL CREDIT UNITS
		80	20	300	30	12
		(L-Lecture, P-Practical,SW-Self Work, FW-Field Work)				

COURSE OBJECTIVES:

- To impart knowledge and develop the concept of coaching skills to the diploma students.
- To enrich the performance skills of demonstration and explanation of techniques to the students and bring these techniques into practice.
- To educate diploma students about the Technical Rules and regulation and its implication in weightlifting.
- To educate diploma students about the equipment required and its maintenance in weightlifting.
- To educate diploma students about the domestic and international competitions and to organize the events following the Rules and Regulation.
- To educate the students about the qualities required by a weightlifter (male and female) and how to identify talent in the respective sport.
- To enable the students to design a training programme for their weightlifter as per the individual requirement and to achieve top form for participation in the competition.
- To teach students related to important performance factors of weightlifter (male/female), Motor qualities, Techniques and Tactics.

- To teach them about the monitoring and assessing the performance of the weightlifters

LEARNING OUTCOMES:

- It will enable the students to understand the basic concept of coaching and its philosophy to be a successful coach.
- It will enable the students to learn the proper basic and advance weightlifting techniques and mechanism behind each elements and phase of technique.
- It will enhance the student's skills to design training program, develop motor qualities, techniques and tactics.
- Awareness of various weightlifting terminologies used world wide

SKILLS DEVELOPED:

- Leadership skill
- Critical thinking
- Decision making
- Effective communication
- Problem solving
- Interpersonal relationship
- Team work
- Work ethics
- Management abilities

DETAILED SYLLABUS - SEMESTER I

THEORY I

(Total Credit: 4)

Unit No.	Description/Topics Covered	Teaching Method	No. of Hours (Period)	Online / Class room	Faculty
1.	Weightlifting History, Development and its organization:				
	(i) Significant dates and events in the development of Weightlifting Modern Olympic games. (ii) Commonwealth Games and Championship. (iii) Asian Games and Championship. (iv) Youth Olympic Games. (v) National Games and Championship. (vi) Structure and Functions of controlling bodies of Indian weightlifting federation and international weightlifting federation.	L	4	online	Sh.Harishankar Sharma
2.	Organization and Management of Weightlifting Competitions: -				
	(i) Olympic Games and World Championship. (ii) Continental Games and Championship. (iii) Domestic Competitions in India. (iv) Olympic qualifying systems.	L	4	online	Sh.Vijay kumar / Sh.Pal Singh Sandhu
3.	Methods of Teaching and Coaching applied for Weightlifters training:				
	Methods and Procedures for Weightlifters Pedagogic training: a) Class Organization. b) Class Control. c) Class Management. d) Teaching Lesson. (Introductory, Main and Concluding). e) Coaching Lesson. (Introductory, Main Part and Concluding Part).	L	8	Online	Sh. T G Pandian

	f) Means of Weightlifting Training.				
4.	Coaching Skills: -				
	(i) Methods of training, their merits and demerits. (ii) Methods of weightlifting training. (Loading procedures, volume, intensity repetitions, sets, average weight, average intensity, intensity co-efficient etc). (iii) Methods of power lifting and body building training. (iv) Teaching aids and coaching aids for successful training.	L	8	online	Sh.Vijaya kumar
5.	Methods of evaluation:				
	a) Tests. b) Application of statistics. c) Observation. d) Training note Book. e) Theory note Book.	L	8	online	Sh.Harishankar sharma
6.	Required Facilities for Weightlifting training and competitions equipment's and their management				
	a) Designing of Modern Weightlifting training and Competition hall. b) Construction and Maintenance of the re-in forced Weightlifting competition and training platform. c) Specifications of Weightlifting training equipment's: - Squat Racks, Box's, Mini platform, Super Power Racks, Multipurpose Bench for Bench Press, Gymnasium bench, Dumbbells, Multigym, Parallel Bar, Horizontal Bar, , Hurdles ,Wall Bars, training and competition platform and swing bells.	L	4	online	Sh.Vijaya kumar
7.	Technical Rules, their interpretations and Regulations:				
	a) TCRR Weightlifting b) Terminology of Weightlifting c) Para-Olympics	L	10	online	Sh.Vijaya kumar/ Sh.Pal Singh Sandhu

8.	Requisite of weightlifter (Male & Female):-				
	a) Physical. b) Motor and Coordinative abilities. c) Psychological. d) Understanding the technical and tactical abilities.	L	8	online	Sh. T G Pandian
9.	Techniques of snatch, clean and jerk and their development:-				
	a) Introduction, importance and classification of classical lifts. b) Stages, Phases and Elements of Classical lifts. c) Static and dynamic starting position of snatch and clean. d) Involvement of Muscles and joints at different phases and elements of classical lifts. e) The Rational Trajectory of the bar during the execution of classical lifts. f) Teaching and learning of rational weightlifting technique at different countries (Russia, Bulgaria, Cuba, Romania, China and India). g) Fundamental, Assistance/ supplementary exercises for snatch, and clean and jerk. h) Faults, causes and necessary corrections of snatch and clean & jerk. i) Perception of individual technique until automatization, adaptation during the training and competitions: -	L	12	online	Sh. T G Pandian / Guest lecture / Guest faculty
10	Warming up and Limbering down for Weightlifters: -				
	a) Principles. b) Advantages and Disadvantages. c) Types of Warming up and Limbering down: - (i) General (ii) Specific (iii) Special/Competition d) Warming up for the Training & Warming up for the Competition. (Pre and During the competition, warming up for snatch and clean & jerk).	L	8	online	Sh.Harishankar sharma

	e) Warming up during different environmental conditions. f) Means and Methods. g) Specific Warm up for supplementary and assistance exercises				
11	Common Weightlifting injuries and their Management:				
	a) Understanding the specific kinds of weightlifting injuries during the training and competition (open injuries, closed injuries, injuries to cartilage, Nerve injuries, contusion, fractures, dislocations, tendinitis and related condition, Bursitis, Myofascial pain and Syncope). b) Dealing with injuries (First Aid for dislocation, sprain, strains, Soreness, Training and around exercise). c) Common injury sites (wrist, fingers, elbow, shoulder, hip, knee groin pull, Patrice bruise, abraded skins, ankle and foot). d) Massage, physiotherapy, spinal and joint manipulation, cryotherapy, Thermotherapy, Electro therapy, Naturopathy, acupressure & acupuncture etc for preventive measures.	L	4	online	Sh. T G Pandian
12	Tactics and Strategy				Sh.Harishankar sharma/ Guest faculty
	a) Definition and classification. b) Developmental trends. c) Phases of teaching tactics.	L	4	online	

PRACTICAL I

Total Credit:8

Unit No.	Description/Topics Covered	Teaching Method	No. of Hours (Period)	Online/ Class room	Faculty
1.	Teaching and Learning the proper movements and methods with good posture.				
	a. Walking. B. Jogging. c. Running. D. Jumping. e. Squat. f. Sitting with Snatch grip and clean position. g. Various class formations (single line, double line, parallel line semi- circle, circle etc. h. Commanding the group (attention, stand-at ease, right turn left turn, about turn and right wheel quick march etc.	P	20	classroom	Sh.Harishankar sharma
2.	General warming up exercises – A) Teaching of juggling, running, Sprinting, Standing, Bounding, Jumping and combined exercises, exercises with own body weight towards various ways, and various paces and various durations and various repetitions as required. B) Teaching callisthenic and exercises for various parts of body (joints, Muscles) including rotations, Swinging, pulling, Pushing, throwing, thrusting movements and partner exercises. C) Teaching the various stretching exercises (individual, partner, passive and ballistic movements) Polymeric exercises. D) Exercises with different sports equipment's with different weights .Gymnastic sticks, Gymnastic benches, parallel bar, Horizontal Bar, Wall Bar, medicine Ball, Hurdles, dumbbells, Kettle bells, dummy barbells, boxes, medicine	P	70	classroom	Sh.Harishankar sharma

	<p>balls own body weight and partners body weight etc.</p> <p>Specific Warm-up and special warm-up-:</p> <p>a) Specific warm-up exercises according to the skill/task.</p> <p>b) Specific warm-up for particular muscle groups, involve joints movement direction and demand.</p> <p>c) Competition warm-up for Snatch and up to competition first attempt.</p> <p>d) Competition warm-up for Clean & Jerk up to competition first attempt.</p> <p>e) Cooling down exercises during the training and competition.</p>				
3.	<p>Teaching the technique of classical lifts. a) Rational technique of two hands Snatch and two hands Clean & Jerk</p> <p>b) Static and dynamic start of two hands Snatch and two hands Clean & Jerk.</p> <p>c) Path of the bar during execution of classical lifts.</p> <p>d) Teaching and learning stages of weigh lifts at different countries (Russia, Romania, Bulgaria, Cuba German, China and India.</p> <p>e) Faults causes and its correction for two hands Snatch and Clean & Jerk.</p> <p>f) Involvements of muscles and range of joints during the execution of classical, semi classical, assistance, and supplementary weight exercises.</p> <p>g) Perception of individual technique until automatization, adoption & mastery during the training and competition.</p> <p>Teaching and training the fundamental exercises of Weightlifting,</p> <p>a) Classical lifts of Olympic Weightlifting (Semi classical, assistance, supplementary, Power and general under</p>	P	60	classroom	Sh.T.G.Pandian

	<p>two hands Snatch. Semi classical, assistant, supplementary, Power and general under two hands Clean and jerk)</p> <p>b) Teaching of squat, Bench press, Deadlift and Para Olympic lifters.</p> <p>c) Teaching of muscle building exercises for Legs, arms, back and abdominals.</p> <p>d) Stages, Phases and elements of two hand Snatch and two hands clean & jerk.</p>					
4.	<p>Evaluation of training & performance through tests.</p> <p>Physiological tests</p> <p>Biomechanical tests</p> <p>Physical/motor tests</p> <p>Performance tests.</p> <p>Application of statistics, Graphic presentation of training and performance indicators.</p>	P	30	Class room	Sh.Vijaya kumar	
5.	<p>Familiar with Weightlifting training and competition equipment's -:</p> <p>a) Specification, Standard manufacturing firms and maintenance of Weightlifting training equipment's. Such as IWF approved Weightlifting barbell sets, Boxes, Squat Stand, Training platform and weightlifting electronic equipment's.</p> <p>b) Improvisation of Weightlifting training and competition equipment's.</p> <p>c) Manufacturing and installation of re-in forced competition and training permanent and portable Weightlifting platforms.</p> <p>d) Weightlifting testing equipment's – physiological, Biomechanical, Anthropometrical, psychological.</p> <p>e) Arrangement, placement and installation of Weightlifting training and competition equipment's under Weightlifting training hall and competition venue.</p> <p>f) Specification standard IWF approved competition equipment's, firms and their maintenance.</p>	P	20	Online and class room	Sh.Vijaya kumar	

6.	Method and procedure of weightlifters pedagogical training (teaching, coaching) a) Class organization, Class control, and class management, class formations, single line, double line, semi- circle, circular Pyramid. b) Teaching lesson plan (introductory, main, concluding part) c) Coaching lesson plan (introductory, main, concluding part) d) Process of Introduction, demonstration, explanation, observation, correction, Recreation, Feedback and self-feedback etc during teaching and coaching. e) Circuit training.	P	20	class room	Sh.T G Pandian
7.	Tactics and strategy Tactical movements during pre-competition, Tactical movements during the course of competition Assessment - Training diary, Intensity, Average intensity, Intensity co -efficient ,Volume, Intensity zones, Average weight.	P & T	20	Class room	Sh.Harishankar sharma
8.	Trials and weightlifting officiating a) To perform the duties & responsibilities of referee. b) To perform the duties & responsibilities of jury. c) To perform the duties & responsibilities of announcer. d) To perform the duties & responsibilities of marshal & technical director. e) To perform the duties & responsibilities of score sheet, score board & familiar with official and competition documents	P & FW	40	Online and class room	Sh.Vijay Kumar

9.	Common Weightlifting injuries and its management, prevention and rehabilitation 1.Complete knowledge of First-aid 2. Rehabilitation through therapeutic means of recovery. 3. Prevention of injuries through core group development, pre safety precaution and optimum balance between motor factors	P & FW	20	Class room	Sh.T G Pandian
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DETAILED SYLLABUS - SEMESTER II

THEORY II

(Total Credit: 4)

Unit No.	Description/Topics Covered	Teaching Method	No. of Hours (Period)	Online/ Class room	Faculty
1.	Motor Abilities:				
	a) Requirement for weightlifter's: A general view. b) Bio-motor abilities and the methodology of their development. c) Mechanical, physiological characteristics of different motor parts. d) Means and methods of developing the required abilities. e) Means of an evaluation and analysis in relation to performance of weightlifters.	L	10	Class room	Sh.T G Pandian
2	Talent Identification in weightlifting and their Development:				
	a) Principles, methods and criteria used for weightlifting talent identification. b) Procedure and phases of talent identification. c) Various tests used for talent identification & their interpretation. d) Talent identification in Russia, Bulgaria, Germany, Cuba, USA and India. d) Sources of talent identification in India and its procedure.	L	10	Class room	Sh.Vijay Kumar/ Guest faculty

3	Regulation of body weight:				
	a) Means and methods for decreasing and increasing the body weight. b) Scientific basis for identifying suitable weight category for better result over the competition. c) Performance evaluation and control of body weight. d) Nutrition during pre-body weight weigh-in, pre-competition, during the competition and post competition. e) Nutrition during competitive week for training as well as competition	L	5	Class room	Sh.Harishankar sharma/ Guest faculty
4	Principles of weightlifting training for different age groups:: a) Weightlifting and children (Growth and maturation). b) Weightlifting training for beginners and novices. c) Weightlifting training for 12 years age group. d) Weightlifting training for 14 years age group. e) Weightlifting training for 16 years age group. f) Weightlifting training for 18 years age group. g) Weightlifting training for 20 years age group. h) Weightlifting training for above 20 years age group. i) Weightlifting training for National level weightlifters. j) Weightlifting training for International level weightlifters. k) Weightlifting training for physical handicapped/para Olympic lifters. training of weightlifters - Shot-term.	L	12	Class room	Sh.T G Pandian /Guest faculty

	-Long-term. - Pre, during and post competition preparation Tactics and Strategies a. Characteristics, various situations b. Individual & Team c. Advantages and disadvantages d. Psychological Preparation				
5	Recovery in weightlifting training:				
	a) Theoretical pre-requisites of modernization of restorative means. b) Medico-Biological restorative measures for weightlifters. c) Rational diet including vitaminization. d) Hydro procedures. e) Balneology. f) Physiotherapy. g) Treatment at health resorts. h) Natural means of restoration.	L	5	Class room	Sh.Harishankar sharma/ Guest faculty
6	Training of Women Weightlifters:				
	a) Women and weightlifting a great match. b) Physical and physiological differences between male and female weightlifters. c) Strength, speed and endurance differences between male and female weightlifters. d) Psychological and social conditions that can influence on women who are weightlifters. e) Weightlifting and mature weightlifters. i) Loss of physiological functioning with aging. ii) Training and mature weightlifters. Training and competition performance evaluation of weightlifters:	L	8	Class room	Sh.Harishankar sharma

	Training and competition performance analysis. Recording the performance in the competition, Application of statistics for weightlifting training and competition				
7	Methods and procedure for selection of weightlifter's for high performance:				
	a) Present weightlifting performance and their related sub- performance of weightlifters. b) Current classical performance and anticipated upcoming competition performance. c) Rate of growth of classical and semi-classical performances. d) Consistency of performance. e) Stages of selection of elite weightlifter Principle and guidelines for finalizing the selection of weightlifting team: a) Relation of body weight and performance of lifters. b) Suitability of individual and team classification with consistency. c) Age and experience of individual lifter. d) Physiological and psychological parameters. e) Group dynamics of individual lifter. f) Personality traits of individual lifters.	L	8	Class room	Sh.Vijay Kumar
8	Preparation of the weightlifter's for main competition to perform their best:				
	a) Building the mind of a weightlifting champion. b) Philosophical and theoretical issues relating to mental attitude. c) Pre-contest phase: i) Understanding the primary conditions of the competition.	L	6	Class room	Sh.Vijay Kumar

	ii) Getting to know the lifter. iii) Making weight and preparing for during testing. iv) Dietary consideration before the competition. v) Packing the competition bag, travelling and adopting to competition Environment. vi) Pre-competition head games. d) The actual competition: i) Determining the optimum number of warm up attempts and sets. ii) Physical and emotional warm up & their timings. lii) Planning the jumps in between attempts. iv) Selection of poundage's for 1st, 2nd and 3rd attempts.				
9	Development of specific required strength, power and flexibility for top performance:				
	a) Specific strength, power and flexibility and their importance in weightlifting. b) The major methods of exercise. c) Application of degree of difficulties in weightlifting training. d) Developing flexibility for weightlifters.	L	4	Class room	Sh.Vijay Kumar
10	Planning and periodization of Weightlifter's Training:				
	a) Creating the training plan. b) The essence of planning. c) Integrating long and short-term planning. d) The workout plans. e) Periodization of weightlifting (Soviet style, Bulgarian, Cuban and Indian methods), (micro, meso, macro, Olympic cycle and quadrennial plan). f) Peaking method, fatigue and overtraining.	L	12	Class room	Sh.T G Pandian

	g) Single, double and multiple periodization.				
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RACTICAL II

Total Credit: 8

Unit No.	Description/Topics Covered	Teaching Method	No. of Hours (period)	Online/ Class room	Faculty
1.	General and specific warm-up exercises with different equipment's.				
	<ul style="list-style-type: none"> ➤ General and specific warm-up exercises for snatch and snatch group of exercises. ➤ General and specific warm-up exercises for Clean and Clean group of exercises. ➤ General and specific warm-up exercises for Jerk and Jerk group of exercises. ➤ General and specific warm-up exercises for strength developing training. ➤ General and specific warm-up exercises for speed developing training. ➤ General and specific warm-up exercises for endurance & circuit developing training. ➤ General and specific warm-up exercises for flexibility developing training. ➤ General and specific warm-up exercises for co-ordination & balancing developing training. 	P	20	Class room	Sh.Harishankar sharma

2.	Development of weightlifter's motor abilities.				
	<p>a) Methods of loading-: Progressive, Regressive, Bucket.</p> <p>b) Methods of training for the development of strength of all body parts explosive strength maximum strength and strength endurance.</p> <p>c) Means & methods of development of speed of all body parts.</p> <p>d) Means & methods of development of flexibility with strength of all body joints.</p> <p>e) Training related to development of co-ordination of all motor aspects of weightlifters.</p> <p>Method of loading</p> <p>f) 1 RM pyramid, double pyramid, flat pyramid, wave like increase load and load increase steps.</p> <p>g) Station training, set training, circuit training, constant resistant and constant reps, increasing</p>	P	30	Class room	Sh. T G Pandian
3.	Talent identification and their development-				
	<p>(i) Visual observation and assessment of physical development, clinical investigation, and anthropometry along with general assessment of development with growth.</p> <p>(ii.) Examination of CNS, vegetative nerve system, muscular nerve system and muscles, cardio vascular system and respiratory system.</p> <p>(iii). Functional tests of physical development working capacity and training condition, Harvard step test, PWC Test.</p>	P	10	Class room	Sh.Vijay Kumar
4.	Planning and periodization:-		30	class room	Sh. T G Pandian

	<ul style="list-style-type: none"> ➤ Load, training load, super compensation, judgment of load, fatigue, overload. ➤ Volume, intensity, sets, repetition, average weight, average intensity, and intensity co-efficient. ➤ Intensity, volume, sets, repetitions exercise and sequence of exercises at preparatory period. ➤ Intensity, volume, sets, repetitions exercise and sequence of exercises at competition period. ➤ Intensity, volume, sets, repetitions exercise and sequence of exercises at transitional period. 	P			
5	Comparison between Training and competition performance analysis & evaluation of Weightlifters.				
	a) Present training and competition performance with past and future. b) Comparison of co-ordination with performance, sub performance and motor performance by using cardiogram. c) Recording the performance in the competition individual, opponent, category and teams. d) Fixation of the optimum target for training and competition performance.	P	20	Class room	Sh.Vijay Kumar
6	Training of women weightlifters.				
	<ul style="list-style-type: none"> ➤ Physical, Physiological, Psychological, and social differences, between the men and women weightlifters for training prospects. ➤ Strength, Speed, Endurance, Flexibility, Balance, and co- 	P	20	Class room	Sh.Harishankar sharma

	<p>ordination, differences between male and female weightlifters.</p> <ul style="list-style-type: none"> ➤ Training differences between lower and upper category women weightlifters. ➤ Women Weightlifters training and volume and intensity at pre during and menstrual cycle. ➤ Women weightlifting training at injury post injury a prolonged training gap. ➤ Optimum women's weightlifting training in relation with training volume, intensity, exercises, Sequences of exercises, sets and repetition with effective training intensity training zone. 				
7.	Weightlifting training for beginners & and different age groups.				
	<p>Determination of growth and maturation & development level of individual lifters according to biological age, calendar age and training age of various age groups and genders.</p> <p>The training program for first 1st three years of training.</p> <p>The training program for 3rd, 4th, 5th and 6th year of training including stage of preparatory, pre competition, competition and stage of translation preparation</p>	P	20	class room	Sh. T G Pandian
8	Psychological training of Weightlifters for training and competition performance.				
	<ul style="list-style-type: none"> ➤ Training and competition performance anxiety and its control. (Trait& state) 	P	20	Class room	Sh.Harishankar sharma

	<ul style="list-style-type: none"> ➤ Motivation, Controlling emotion optimal goal setting ➤ Psycho regulation during competition and training venue ➤ Psycho therapeutic methods & auto genius training. 				
9	Recovery Process of Weightlifters training.				
	Pedagogical means of recovery <ul style="list-style-type: none"> ➤ Therapeutic means of recovery ➤ Natural means of recovery ➤ Nutritional & balance diet with proper routine ➤ Application of yoga, meditation and recreational means 	P	20	Class room	Sh.Harishankar sharma
10	Weight training for weightlifters and for other games and sports.				
	<ul style="list-style-type: none"> ➤ Weight training according to prime movers and synergetic, smaller V/s bigger ,agnostics, antagonistic, isometric, V/S isotonic muscular development of weightlifters. ➤ Weight training for team games :- forward back spikes, blockers, mid- fielders ➤ Weight training for throwers& jumpers, sprinters etc. ➤ Weight training for combative sports persons. ➤ Weight training for racket concern sports person.- ➤ Weight training for injured sports persons. 	P	30	Class room	Sh. T G Pandian

11	Preparation of Weightlifters for the main competition.				
	<ul style="list-style-type: none"> ➤ Building the mind of competitive weightlifters relating to the mental attitude. ➤ Understanding the primary condition and getting to know the lifters. ➤ Dietary consideration, pre competition head games and determining the optimum no. of warm-up attempt and sets 	P	20	Class room	Sh.Vijay Kumar
12	Teaching lesson practices				
	<ul style="list-style-type: none"> ➤ Introduction, command, turn-out, reporting, general warm-up, specific warm-up. ➤ Division of skill whole-part whole method ➤ Demonstration, explanation, observation, correction, ➤ Adequate recreation, rewards and punishments and removal of doubts ➤ double progressive system, flushing and functional isometric ➤ Triangle program system, light to heavy, heavy to light system, multi poundage system, negative system, super overload system, priority system, rest pause system, blitz program isolated exercise system, Super pump system super setting system and super slow system. 	P	30	Class room	Sh. T G Pandian

13	Coaching lesson practice				
	<ul style="list-style-type: none"> ➤ Introduction, command turn-out, reporting, general warm-up, specific warm up and ground formalities ➤ Demonstration, explanation, observation, correction and practice. ➤ Judgment of load, volume, exercises, sets, repetition intensity, average weight average intensity and zone of intensity. ➤ Optimum cooling down exercises removal of doubts and hints about upcoming session. ➤ resistant and constant reps, change resistant and change reps, decreasing resistant and constant reps and contrast method. 	P & FW	30	Class room	Sh. T G Pandian

Training Books, Journals, Online Resources Prescribed for Trainees

1. Dr.A.N.Vorobyev-A Text book on weightlifting.1978.
2. Dr.Tamas Ajjan.-weightlifting fitness for all sports.1988.
3. R.Roman- Managing the training of weightlifters.1982.
4. R.Roman-The training of the weightlifter.1988.
5. R.Roman-The Snatch,Clean& Jerk.1982.
- 6.Arthur Drechsler.The weightlifting Encyclopedia.1998.
- 7 .M.Sinhasane- Weightlifting Reach your Zenith.2008.
8. David Webster-preparing for competition weightlifting.1986.
9. Tamas Feher-Olympic weightlifting-Comprehensive hand book for coaches and athletes.
10. Dr.A.S.Medvedyev-A programme of multi-year training in weightlifting.1995.
- 11 .Andrew Charniga-Weightlifting training and technique.
12. G.Popplewell- Modern weightlifting and power lifting.1978.
13. G.F.Schold- The lost past.1992.
14. Dr.H.Singh.Sience of sports training.1991.
15. T.O.Bompa-Theory and methodology of training.
- 16.1974- Weightlifting Year book.
- 17.1980. Weightlifting Year book.
- 18.1981. Weightlifting Year book.
- 19.1982. Weightlifting Year book.
- 20.1983. Weightlifting Year book.
- 21.1984. Weightlifting Year book.
- 22.1985. Weightlifting Year book.
23. Dr.A.S.Medvedyev-System of multi-year training in weightlifting.1989.

24. I.W.F.Coaching and Medical Seminar, Varna.1983.

25. Proceeding of the Weightlifting Symposium, Hungary.1989.

26. Proceeding of the Weightlifting Symposium, Greece.1993.

IWF Documents:

- IWF Technical and Competition rules & Regulation
- IWF Anti-Doping Rules
- IWF By laws
- IWF Code of Ethics

ASSESSMENT			
	Semester 1	Semester 2	Internal/External %
Theory Monthly Assessments	<p>Monthly Assessment using Online Testing Tools with Multiple Choice & Descriptive questions of covered topics during the month</p> <p>Total – 4 Assessments</p>	<p>Monthly Assessment using Online Testing Tools with Multiple Choice & Descriptive questions of covered topics during the month</p> <p>Total – 4 Assessments</p>	<p>30 % marks of internal assessment will be done on the basis of the marks scored in monthly assessment by adding all the score</p> <p>Test data will be recorded for reference</p>
Monthly Practical/Lab/Field	<p>Monthly Assessment Practical demonstration & Execution of learnt techniques</p> <p>Total – 5 Assessments</p>	<p>Monthly Assessment Practical demonstration & Execution of learnt techniques</p> <p>Total – 5 Assessments</p>	<p>30 % marks of internal assessment will be done on the basis of the marks scored in monthly assessment by adding all the scores.</p> <p>Test data will be recorded for reference</p>
Monthly Quiz/Assignments	<p>1 Assignment per month</p> <p>Total – 4 Assignments</p>	<p>1 Assignment per month</p> <p>Total – 4 Assignments</p>	<p>30 % marks of internal assessment will be done on the basis of the marks scored in monthly assessment by adding all the scores.</p> <p>Test data will be recorded for reference</p>

Theory Exam	At the end of semester – I	At the end of semester – II	70 % of total score in Theory
Practical Exam	At the end of semester – I	At the end of semester – II	70 % of total Score in Practical