



छत्रपति शाहू जी महाराज विश्वविद्यालय, कानपुर

CHHATRAPATI SHAHU JI MAHARAJ UNIVERSITY, KANPUR

(पूर्ववर्ती कानपुर विश्वविद्यालय कानपुर)

Formerly Kanpur University, Kanpur – 208024

A Documentary Support

For

Metric No. – 1.1.1

Programme Outcomes & Course Outcomes

Under the

Criteria - I

(Curriculum Design and Development)

Key Indicator - 1.1

In

Metric No. – 1.1.1

Bachelor of Physical Education & Sports


Co-ordinator
Internal Quality Assurance Cell
CSJM University, Kanpur


(Registrar)
C.S.J.M. University
Kanpur
REGISTRAR
C.S.J.M. UNIVERSITY
KANPUR

Syllabus
For
B.P.E.S Programme Choice Based Credit System (CBCS)
Based on UGC-LOCF

**DEPARTMENT OF PHYSICAL EDUCATION AND
SPORTS**

B.P.E.S. (THREE YEAR DEGREE PROGRAM):

PROGRAM OUTCOMES (PO'S) : The students will be able to-

1. Interpret the models of teaching and the theories of learning for teaching exercise, nutrition and sport in physical education.
2. Explain the foundational concepts related to physical education philosophy in the context of historical developments.
3. Measure health, fitness and sport performance/skills status of the people engaged in physical education, fitness and sport.
4. Advocate research-based practices in teaching, training, and counselling in physical education, fitness and sport.
5. Promote recommended physical activity with the ways of adopting a balanced nutritional diet for healthy living in society.
6. Attend as the First-Aider in the condition of the injuries or emergencies expected in the events of physical activities, fitness training and sport.
7. Display 21st century and EduTech related competencies in all the professional and personal aspects of life.

PROGRAMME SPECIFIC OUTCOMES (PSOS): The learning and abilities or skills that a student would have developed by the end of two-year

PSO-1	Remembering and Understanding the concepts, theories, functions, structures, terminology and skills of physical education and sports sciences.
PSO-2	Applying and demonstrating various concepts, theories, procedures and skills in different sports situations.
PSO-3	Analysing and relating various tests and skills.
PSO-4	Evaluating and measuring health and fitness issues.
PSO-5	Creating and designing research problem, training sessions, diet plans, lessons plans and periodizations.

The students will be able to-

Review the historical, psychological, sociological and developmental concepts and events related to physical education and sport at the International and National levels.

1. Apply the behaviorist, cognitivist, and constructivist approaches in the teaching of physical education at the school level.
2. Perform cardiovascular, personality, 2D motion and gait analysis, fitness and sports skill tests to determine the performance status of an individual in health, fitness and sports.
3. Design the training schedule and diet chart to promote regular physical activity and healthy living in schools, fitness clubs, sports academies, and society at large.
4. Enhance the skills of qualitative and quantitative research techniques applicable in the context of physical education teaching, fitness training, coaching and sport.
5. Demonstrate the CPR and designing, emergency calls, reporting, supporting, explaining and recording skills related to First-Aid at school level for physical activity and sport.
6. Display skills related to communication, collaboration, critical thinking, creativity, leadership, EdTech hard and software usages in the personal and professional aspects of physical education, fitness and sport.

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S) :The learner will be expected to –

1. Recognize the foundational theories, central ideas, and issues related to exercise, nutrition and health in physical education, fitness and sport.
2. Apply the theories, law and principles of exercise, nutrition, and training in physical education, fitness and sport in varied professional settings with scientific vigour and professionalism.
3. Practice research-based aptitude in decision making, problem-solving, and innovation in the professional sphere of physical education, fitness and sport.
4. Advocate the importance of physical activity and healthy eating as a lifelong goal for everyone in society.
5. Perform First-Aid in the state of medical emergencies expected to occur in the events of physical activities, fitness training and sport.
6. Display the 21st-century competencies and skills related to physical education, fitness and sport at the end of the programme.
7. Demonstrate good technological proficiency in the assignments (tasks) related to physical education, fitness and sport after the completion of the programme.

Semester-wise Distribution of Credits and LTP

Certificate in Physical Education & Sports								
Year	Semester	Course Code	Paper Title	Lecture	Practical	Tutorial	Credit	
Year First	SEM-I	DSC-1	Foundation of Physical Education	5	-	1	6	
		DSC-2	Anatomy & Physiology	5	1	-	6	
		DSC-3*	Game of Specialization*	4	2	-	6	
			*List of Games/Sports					
			(Athletics (ii) Badminton (iii) Basketball (iv) Cricket (v) Football (vi) Gymnastic (vii) Handball (viii) Hockey (ix) Judo (x) Kabaddi (xi) Kho-Kho (xii) Volleyball (xiii) Yoga)					
		AECC-1	Environmental Science, (English/Hindi/ MIL Communication),	4	-	-	4	
	Total Credits						22	
	SEM-II							
		DSC-4	Health Education	5	-	1	6	
		DSC-5	Yoga	4	2	-	6	
		DSC-6	Gymnastics	4	2	-	6	
AECC-2		(English/Hindi/ MIL Communication), Environmental Science	4	-	-	4		
Total Credits						22		

Diploma in Physical Education & Sports							
Year	Semester	Course Code	Paper Title	Lecture	Practical	Tutorial	Credit
Year Second	SEM-III	DSC-7	Exercise Physiology	5	1	-	6
		DSC-8	Sports Psychology and Sociology	5	-	1	6
		DSC-9*	Game of Specialization*	4	2	-	6
			*List of Games/Sports (Athletics (ii) Badminton (iii) Basketball (iv) Cricket (v) Football (vi) Gymnastic (vii) Handball (viii) Hockey (ix) Judo (x) Kabaddi (xi) Kho-Kho (xii) Volleyball (xiii) Yoga)				
			(The sport selected for DSC – 3 will be continued in this semester, with different syllabus of study.)				
SEC-1	Select any one option: i. English (Technical writing) ii. Hindi (Social Media) iii. Growth and Development iv. Adapted Physical Education v. Sports Management vi. Methods in Physical Education vii. Exercise Prescription viii. Sports for All	4	-	-	4		
		Total Credits					22

	SEM-IV	DSC-10	Test, Measurement & Evaluation in Physical Education	5	1	-	6
		DSC-11	Track & Field	4	2	-	6
		DSC-12	Fundamentals of Sports Training	5	-	1	6
		SEC-2	Select any one option: i. Introduction to MS Excel and SPSS ii. Weight Management iii. Wellness Lifestyle iv. Posture and Athletic Care. v. Olympic Education vi. Sports and Exercise Nutrition. vii. Stress Management viii. Personality development	4	-	-	4
Total Credits							22

Degree of Bachelor in Physical Education & Sports							
Year	Semester	Course Code	Paper Title	Lecture	Practical	Tutorial	Credit
Year Third	SEM-V	DSE-1**	<u>Sports Proficiency – 1**</u> Note: A student must select different game/sport other than DSC – 3/ DSC – 9 (Game of specialization) to be studied in DSE-1 from out of the below listed games/sports:- List of Games/Sports (i)Badminton (ii) Basketball (iii) Cricket (iv) Football (v) Handball (vi) Hockey (vii) Judo (viii) Kabaddi (ix) Kho-Kho (x) Volleyball	4	2	-	6
		DSE-2	<u>Kinesiology and Biomechanics</u>	5	1	-	6
		DSE-3	<u>Research Methodology</u>	5	-	1	6
		SEC-3	<u>Select any one option other than SEC -1:</u> i. English (Technical writing) ii. Hindi (Social Media) iii. Growth and Development iv. Adapted Physical Education v. Sports Management vi. Method of Education vii. Exercise Prescription viii. Sports for All	4	-	-	4
		Total Credits					

	SEM-VI	DSE-4***	<p><u>Sports Proficiency – 2***</u></p> <p>Note: A student must select different game/sport other than DSC – 3/ DSC – 9 (Game of specialization) and DSE-1 to be studied in DSE-4 from out of the below listed games/sports:-</p> <p><u>List of Games/Sports</u> Badminton (ii) Basketball (iii) Cricket (iv) Football (v) Handball (vi) Hockey (vii) Judo (viii) Kabaddi (ix) Kho-Kho (x) Volleyball</p>	4	2	-	6
		DSE-5	<u>Sports Specific Skill Enhancement</u>	4	2	-	6
		DSE-6	<p><u>Project Work / Dissertation</u> (OR) <u>Select any ONE option</u> i. Computer Application ii. Fitness and Exercise Management iii. Gym Operation iv. Sports Journalism</p>	5	1	-	6
		SEC-4	<p><u>Select any one option other than SEC 2:</u> i. Introduction to MS Excel and SPSS ii. Weight Management iii. Wellness Lifestyle iv. Posture and Athletic Care. v. Olympic Education vi. Sports and Exercise Nutrition. vii. Stress Management viii. Personality development</p>	4	-	-	4
Total Credits							22

Semester–I

S.No.	Paper No.	Title	Credit
			Theory/ Practical/Tutorial
1	DSC-1	Foundation of Physical Education	6 (5 THz +1Tut)
2	DSC-2	Anatomy & Physiology	6 (5 THz +1 P)
3	DSC-3*	Game of Specialization*	6 (4Th + 2 P)
4	AECC-1	(English/Hindi/ MIL Communication), Environmental Science	4 (4 THz)
		Total Credits	22

Note:

- ☐ THz = Theory
☐ P = Practical
☐ Tut = Tutorial

***List of Games/Sports for DSC - 3**

Athletics (ii) Badminton (iii) Basketball (iv) Cricket (v) Football (vi) Gymnastic (vii)
 Handball (viii) Hockey (ix) Judo (x) Kabaddi (xi) Kho-Kho (xii) Volleyball (xiii) Yoga

SEMESTER -I
DSC -1 FOUNDATIONS OF PHYSICAL EDUCATION

L –T - P = 5 -1 -0

Max. Marks=100

Time: 3Hrs.

Objective: -To provide the knowledge of historical development of Physical Education & Sports and to familiarize the students with foundations of Physical Education & Sports in reference to biological, psychological, sociological and other foundations.

COURSE OUTCOME: -Students acquire the knowledge of history & foundations of Physical Education and understand the purpose & development of physical education & sports

THEORY SYLLABUS

60 Credits

UNIT-I

- Meaning, Definitions, Scope, importance of physical education in society. **10 lectures**
- Aim and Objectives of Physical Education and their relation with education.

UNIT-II

- Foundations of Physical, Education:-
- Biological foundation – Introduction, Growth and Development and Body types. **15 lectures**
- Psychological Foundation – Introduction, Learning process and theories.
- Sociological Foundation – Introduction, Socialization process.

UNIT-III

- Meaning & concepts of movement, qualities of the movements, fundamentals movements, Need and importance of movement in educational programs **15 lectures**
- Concept and role of wellness movement.

UNIT-IV

- Modern and Ancient Historical perspectives of Physical Education: Greece, Rome and India.
- Olympic movement and Olympic Games (Ancient and Modern) **20 lectures**
- Professional preparation in Physical education-YMCA, LNIPE, IGIPES, SAI, NSNIS, Programme – NSO, NCC, NSS.
- Sports Career Avenues, National Sports awards and Honors.

Tutorial: One Tutorial period is equal to 1 credit of 1 hour duration.

12 Credits

SUGGESTED READINGS:

1. Gupta, Rakesh (2013), Health and Physical Education, Pinnacle India Education Publisher, New Delhi.
2. Kamlesh ML (2013). Physical Education and Exercise Sciences: An Objective Approach. Friends Publication. Delhi.
3. Lumpkin, A. (2007). Introduction to Physical Education, Excises Science and Sports Studies, McGraw Hill. New York, USA.
4. Uppal AK & Gautam GP (2008). Health and Physical Education. Friends Publication. New Delhi.
5. Vanaik A. & Tyagi, Sarita (2018). Encyclopedia of Olympic Movement, Friends Publication. New Delhi
6. Vanaik A. (2005) Sharirik Shiksha ke Maulik Adhar, Friends Publication. New Delhi
7. Wuest DA and Bucher CA (2003). Foundations of Physical Education Exercise Science and Sports. McGraw Hill Companies, Inc., New York, USA
8. Zeigler EF (2007). History and Status of Physical Education and Educational Sports. Sports Education. New Delhi.

DSC– 2 ANATOMY AND PHYSIOLOGY

L –T - P = 5 -0 -1

Max. Marks=150**Time: 3Hrs.****Objective:** -To provide students with the basic knowledge of anatomical structures & functions of human body.**COURSE OUTCOME:** -Student will acquire the basic knowledge of the anatomy of the human body. They will develop understanding about the functions of each system of the body. Such core knowledge and skill will help to create a strong foundation to engage human subject of all ages, sex, ability.**THEORY SYLLABUS****60 Credits****Unit-I****(10 lecture)**

- Definition of Anatomy & Physiology, Cell-microscopic structure & functions of its organelle.
- Tissue-classification & functions.
- Organs, systems of the body, Bone- classification and structure, joints-classification, Structure of synovial joints. Movements at various joints.

Unit-II**(15 lecture)**

- Muscular System -Classification, Structure, functions & properties of Skeletal Muscle, Smooth Muscle & Cardiac Muscle.
- Types of muscular contractions, Name of various muscles acting on various joints.
- Cardio-vascular system Structure of heart, cardiac cycle, blood pressure, cardiac output, composition & function of blood, Athlete's heart.

Unit-III**(15 lecture)**

- Respiratory system-structure and function, second wind, oxygen debt.
- Digestive system-structure & function, balanced diet, metabolism & maintenance of body temperature.

Unit-IV**(20 lecture)**

- Nervous system-structure of brain, spinal cord, Autonomic nervous system, reflex action.
- Endocrine system- role of various endocrine glands, Structure & function of human eye & ear.
- Excretory system-structure & function, including structure & function of skin.
- Reproductive system- structure & function of male & female Reproductive system.

Practical: -**12 Credits**

- Counting of pulse rate
- Measurement of blood pressure
- Study of various bones of human body
- Study of different body system with the help of models
- Study of various movements of the joints.

SUGGESTED READINGS:

1. Jain AK (2002). Anatomy & Physiology for Nurses. Arya Publishers, Delhi.
2. Moried EN (2007). Essential of Human Anatomy & Physiology. Ed. 8th Dorling Kindersley, India.
3. Prives M and Others (2004). Human Anatomy Vol.I & II Paragon, Delhi.
4. Seeley & Others (2008). Anatomy & Physiology. McGraw Hill, Boston.
5. Tortora (2003). Principles of Anatomy & Physiology, New York: John Willy & Sons,
6. William CS (2000). Essentials of Human Anatomy & Physiology, Benjamin
7. Wilson and Waugh (1996). Anatomy & Physiology in Health & Illness. Churchill Livingstone

DSC-3(i) GAME OF SPECIALIZATION- ATHLETICS**L -T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student will attain knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I**

- Historical Development and Modern Trends (National and International Level) **(09 lectures)**
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II

- Rules and their interpretation of the sport. **(13 lectures)**
- Warming up and psychological basis of Warming up.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match competition Coaching.

Unit-III

- Basic skills and techniques of the Sports/Game- – sprint races, middle and long distance races, hurdles races, jumping event- long jump, throwing events- shot put, hammer throw. **(13 lectures)**
- Motor Fitness Components Testing
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility. **(13 lectures)**
Track marking and marking of different arenas for selected events in unit-III.

Practical -**24 Credits**

- Learning and demonstrating various skills/techniques of sports- sprint races, middle and long distance races, hurdles races, jumping event- long jump, throwing events- shot put.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.
Track marking and marking of different arenas for selected events in unit-III.

SUGGESTED READINGS:

1. Chauhan VS (1999). Khel Jagat Mein Athletics. A.P. Pub, Jalandhar.
2. Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
3. Evans DA (1984). Teaching Athletics. Hodder, London.
4. Fox EL (1998). Physiological Basis of Physical Education and Athletics Brown Pub.
5. Gothi E (2004). Teaching & Coaching Athletics. Sport Pub., New Delhi.
6. Gupta R. (2004). Layout & Marking of Track & Field. Friends Publications. India. New Delhi.
7. Herb Amato, DA ATC et al (2002). Practical Exam Preparation Guide of Clinical Skills of Athletic Training. Slack Incorporated. 1st ed., USA.
8. Kumar, Pardeep. (2008). Historical Development of Track & Field. Friends Publication. New Delhi
9. Maughan, R. and Gluson, M. (2004). The Biomechanical Basics of Athletic Performance. Oxford University Press, U.K.
10. Prentice, W. and Arnheim, D. (2005). Arnheim's Principles of Athletic Training 12th Ed. McGraw Hill. in place of Knight (1988).
11. Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
12. Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.

DSC-3(ii) GAME OF SPECIALIZATION (BADMINTON)**L –T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**60 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical -**24 Credit**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS:

- Bloss, M.V. et al (2000). Badminton. McGraw Hill, USA.
- Bompa O Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Brahms Bernd-Voler. (2010). Badminton Handbook. Mayer & Mayer Sports: UK. Unit-II, III & IV-p-9-14.
- Downey J (1990). How to Coach Badminton. Collins Pub. London.
- Golds, M. (2002). Badminton: Skills of the Game. Growood Press, USA.
- Grice, T. (2007). Badminton: Steps to Success. 2nd Ed. Human Kinetics, USA.
- Gupta R. Kumar P. and Tyagi S. (2008). Textbook on Teaching Skill and Prowess (Part-I & II). Friends Publication. New Delhi.
- Hoeger, W.W. Kand & Hoeger, S.A. (1997). Principles and Labs for physical fitness. (2nd Edi.). Morton Publishing Company. USA. Unit- II- p-127, 178-187, Unit- p-10-194.
- Singh, Hardayal. (1991). Science of Sport Training. D.V.S Pub. Delhi.
- Singh, MK. (2007). Comprehensive Badminton. Friends Pub. New Delhi.
- Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi.
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.

Semester I
DSC-3(iii) GAME OF SPECIALIZATION (BASKETBALL)

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS

60 Credits

Unit-I

(09 lectures)

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II

(13 lectures)

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III

(13 lectures)

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV

(13 lectures)

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical

24 Credits

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Drewett, J. (2007). How to Improve at Basketball. Crabtree Publishing Co., USA.
- Goldstein, S. (1998). Basketball Fundamentals. 2nd Ed. Golden Aura Publishing, USA.
- Jain Naveen (2003). Play and Learn Basket Ball. Khel Sahitya Kendra. New Delhi.
- Nat BB (1997). Conditioning Coaches Association. NBA Power Conditioning. Human Kinetics.
- Sharma OP (2003). Basket Ball Skills and Rules. Khel Sahitya Kendra, Delhi.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Wilmore & Costill (2004). Physiology of Sports & Exercise. Human Kinetics, US.

DSC-3(iv) GAME OF SPECIALIZATION (CRICKET)**L –T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical**24 Credits**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Amarnath M. (1996). Learn to Play Good Cricket. UBS Publishers. New Delhi.
- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Boycott, G. (2010). Play Cricket the Right Way. Great Northern Books Limited, U.K.
- Cricket (2008). Sports Skills: Cricket Fielding (Know the Game). A & C Black Publishers.
- Gupta, K. (2006). How to Play Cricket. Goodwill Publishing House, New Delhi.
- Hobbs, J. (2008). The Game of Cricket As it should be played. Jepson Press, USA.
- Jain R. (2003). Fielding Drills in Cricket. Khel Sahitya Kendra. New Delhi.
- Rachna (2002). Coaching Successfully: Cricket. Khel Sahitya Kendra. New Delhi.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Sharma P. (2003). Cricket. Shyam Parkashan. Jaipur.
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

DSC-3(v) GAME OF SPECIALIZATION (FOOTBALL)**L –T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical**24 Credits**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- American Football Coaches Association (2002). The Football Coaching Bible. 1st Ed., Human Kinetics, USA.
- Bompa O. Tudor and Half G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Carling, C., Williams, M. and Reilling, T. (2006). Handbook of Soccer Match Analysis: A Systematic Approach to Improving Performance. Routledge Publishers, USA.
- Long, H. and Czarnecki, J. (2007). Football for Dummies. For Dummies Publisher, USA.
- N Kumar (2003). Play and Learn Football. K.S.K. New Delhi.
- Reilly, T. (2006). The Science Training Soccer: A Scientific Approach to Developing Strength, Speed and Endurance. Routledge Publisher, USA.
- Reilly, T. and J.C.D. Arau (2008). Science and Football V: The Proceedings of the 5th World Congress on Sports Science and Football, Volume5.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Sharma OP (2001). Teaching and Coaching –Football. Khel S.K.Delhi.
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

DSC-3(vi) GAME OF SPECIALIZATION (GYMNASTICS)**L –T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical**24 Credits**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Brown (2009). How to Improve at Gymnastics. Crabtree Publishing Co., USA.
- Chakraborty S and Sharma L (1995). Fundamental of Gymnastics. D.V.S. Pub. New Delhi.
- Chakraborty S (1995). Fundamental of Gymnastics. DVS Pub. New Delhi.
- Chakraborty S (1998). Women's Gymnastics. Friends Pub.Delhi.
- Code of Points Trampoline Gymnastics (2005). Federation Int. DE Gymnastics
- Federation International Gymnastics (2006). Federation Int. DE Gymnastics
- Harvey FJ (1998). Physical Exercises & Gymnastics. Khel Sahitya. New Delhi.
- Jain R (2005). Play and Learn Gymnastics. Khel SahitayaKendra
- Mitchell, D., Davis, B. and Lopez, R. (2002). Teaching Fundamental Gymnastics Skills. Human Kinetics, USA.
- Price, R.G. (2006). The Ultimate Guide to Weight Training for Gymnastics. 2ndEd. Sportsworkout.com.
- Schlegel, E. and Dunn, CR. (2001). The Gymnastics Book: The Young Performer's Guide to Gymnastics. Firefly Books, USA.
- Smither Graham (1980). Behing the Science of Gymnastics. London.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Stickland, L.R. (2008). Gender Gymnastics. Trans Pacific Press, Japan.
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

DSC-3(vii) GAME OF SPECIALIZATION (HANDBALL)**L –T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical**24 Credits**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Jain D (2003). Play & Learn Handball. Khel Sahitya Kendra. New Delhi.
- Kleinman, I. (2009). Complete Physical Education Plans. 2nd Ed. Human Kinetics, USA.
- Page, J. (2000). Ball Games. Lerner Sports Publisher, USA.
- Phillips, B.E. (2009). Fundamental Handball. Kessinger Publishers, USA.
- Schmottlach N Mcmanama J (1997). Physical Education Handbook. 9th Edition. Allyn & Bacon.London.
- Schmottlach, N. and McManama (2005). Physical Education Activity Handbook. Benjamin Cummings, USA.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Surhone, L.M. et al (2010). Team Handball. Betascript Publishing, USA
- Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester I
DSC-3(viii) GAME OF SPECIALIZATION (HOCKEY)

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II

(13 lectures)

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III

(13 lectures)

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV

(13 lectures)

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical

24 Credits

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Bompa O. Tudor and Half G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- International Hockey Federation, Rules of the Game of Hockey with Guidance for Players and Umpires. International Hockey Federation.
- Jain D (2003). Hockey Skills & Rules. khel Sahitya Kendra . New Delhi.
- Narang P (2003). Play & Learn Hockey. Khel Sahitya Kendra. New Delhi.
- Pecknold, R. and Foeste, A. (2009). Hockey : Essential Skills. McGraw Hills,USA.
- Rossiter, S. (2003). Hockey the NHL Way : Goaltending Illustrated Edition. Sterling Publishers,USA.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Walter, R. and Johnson, M. (2009). Hockey Plays and Strategies. Human Kinetics,USA.
- Weekes, D. (2003). The Biggest Book of Hockey Trivia. Greystone Books,USA.
- Wukovits, J.F. (2000). History of Hockey 1st Ed. Lucent Books,USA.
- Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

DSC-3(ix) GAME OF SPECIALIZATION (JUDO)**L - T - P = 4 - 0 - 2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME: The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical**24 Credits**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Diago, T. (2005). Kodokan Judo Throwing Techniques. Kodansha International Publishers, Japan.
- Harrison EJ (2002). Coaching Successfully Judo. Sports. Delhi.
- Jain D (2003). Play and Learn Judo. Khel Sahitaya Kendra. New Delhi.
- Law, M. (2009). Falling Hard : A Journey into the World of Judo. Trumpeter Publisher, Japan.
- Putin, V., Shestakov, V. ad Levitsky, A. (2004). Judo : History, Theory and Practice. Blue Snake Books, Moscow.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Takahashi, M. (2005). Mastering Judo. Human Kinetics, USA.

DSC-3(x) GAME OF SPECIALIZATION (KABADDI)**L -T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:- The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical**24 Credits**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Kumar, Dharmander. (2018). Kabaddi and It's Playing Techniques. Writers Choice, New Delhi.
- Mishra , S.C. (2007). Teach Yourself Kabaddi. Sports Publications, New Delhi.
- Rao CV (1983). Kabaddi. Native Indian Sports. NSNIS. Patiala Publisher
- Rao EP (1994). Modern Coaching in Kabaddi.D.V.S.Pub
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Syal, M. (2004). Kabaddi Teaching. Prerna Parkashan, New Delhi.
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME: The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II**(13 lectures)**

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III**(13 lectures)**

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV**(13 lectures)**

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical**24 Credits**

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- Chakrabarty G (2002). Kho - Kho Aveloken. Khel Sahitya Kendra.Delhi.
- Panday L (1982). Kho - Kho Sarvaswa. Metropolitan. New Delhi
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester I
DSC-3(xii) GAME OF SPECIALIZATION (VOLLEYBALL)

L -T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

- Historical Development and Modern Trends (National and International Level)
- Organisational Structure (State, National and International Level)
- Playfield Technology – Marking and Construction of the playfields.

Unit-II

(13 lectures)

- Rules and their interpretation.
- Warming up and physiological basis of Warming up and its effect on performance.
- Cooling down and its effect.
- Techniques of Coaching – Pep talk, Pre, during and Post match coaching.

Unit-III

(13 lectures)

- Basic skills and techniques of the Sports/Game.
- Skill/Technique Evaluation
- Evaluation of Player's Performance.

Unit-IV

(13 lectures)

- Introduction to Physical and Motor Fitness components: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.
- Motor Fitness Components Testing of above components.

Practical

24 Credits

- Learning and demonstrating various skills/techniques of sports.
- Learning to demonstrate various tests to evaluate motor components as listed in unit IV above.

SUGGESTED READINGS

- American Volleyball Coaches Association (2005). Volleyball : Skills & Drills. Human Kinetics,USA.
- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
- FIVB (1996). Backcourt Spiking in Modern Volley Ball. FIVB.Chennai.
- Kenny, B. and Gregory, C. (2006). Volleyball : Steps to Success. Human Kinetics,USA.
- Saggar SK (1994). Cosco Skills Statics - Volley Ball. Sport Publication. Delhi.
- Scates AE (1993). Winning Volley Ball. WC Brown.USA.
- Scates, A. and Linn, M. (2002). Complete Conditioning for Volleyball. Human Kinetics,USA.
- Shondell, D. and Reynaud, C. (2002). The Volleyball Coaching Bible. Human Kinetics,USA.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- The National Alliance for Youth Sports (2009). Coaching Volleyball. For Dummies Publishers,USA.
- Volleyball, USA (2009). Volleyball : Systems and Strategies. Human Kinetics,USA.
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Objective: - The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

- Origin of yoga, definition and scope of yoga, limitations and misconceptions of Yoga
- Importance of yoga in physical education and other fields
- Yoga asana competition at:- State, National, International, SGFI, AIU etc.

UNIT-II**(13 lectures)**

- Philosophical aspects of yoga-Pre-Vedic, Vedic period; Buddhism, Upanishad period, Jainism & tantra
- Qualifications, qualities and responsibilities of a coach,
- Duties/responsibilities of technical official, Scoring system and judgment criteria,
- Protocols for referees, judges and officials.

UNIT-III**(13 lectures)**

- Meaning, techniques, precautions & effects of the following:-
- Asanas : padmasana, vajrasana, sidhasana, paschimottanasa, halasana, sarvangasana, shalabhasana, ardh-matsyendrasana, bhujangasana, tadasana, vrikshasana, matsyasana, gomukhasana, ushtrasana, shavasana, makarasana, vrishchikasana, dhanurasana, purna matsyendrasana, chakrasana, ek pad sikandasana, bakasana, mayurasana, shirshasana
- Pranayama : anulom-vilom, bhastrika, suryabhedhen pranayama, sheetali, sheetkari, bhramari, ujjayi
- Shatkarma : neti, dhauti, nauli, basti, kunjla, kapal bhati, shankh prakshalana
- Bandhas : jalandhar, uddyana, mool bandha

UNIT-IV**(13 lectures)**

- Disease wise treatment through yoga therapy- Asthma, high & low B.P, diabetes, obesity, heart disease, insomnia, arthritis, backache & female disease
- Diet & Nutrition, components of nutrition, water, natural diet, balanced diet, fasting-its benefits, types & preparation, importance of vegetarianism in yogic diet.

PRACTICALS**24 Credits**

- Prayer
- Asanas, pranayama, shatkarma, bandha (as mentioned in theory)
- Yoga-nidra/relaxation techniques
- Visit to yoga centers/institutes

SUGGESTED READINGS

- Anand Omprakash (2001). Yog Dawra Kaya Kalp, Kanpur. Sewasth Sahitya Perkashan
- Iyengar, B.K.S. (1995). Light on Yoga : The Bible of Modern Yoga. Schocken Publishers, USA.
- Kaminoff, L. et al (2007). Yoga Anatomy. Human Kinetics, USA.
- Kirk, M. (2005). The Hatha Yoga Illustrated. Human Kinetics, USA.
- Sharma JP and Ganesh S(2007). Yog Kala Ek Prichya. Friends Publication. New Delhi
- Sharma J. P. (2007). Manav jeevan evam yoga. Friends Publication. New Delhi.

- Sharma Jai Prakash And Sehgal Madhu(2006). Yog-Shiksha. Friends Publication. Delhi.
- Sharma Jai Prakash and Rathore Bhupender Singh (2007). Yoga Ke Tatva. Friends Publication. Delhi
- Mukerji, A.P. (2010). The Doctorine and Practice of Yoga. General Books, LLC, New Delhi.
- Norton, W.W. (2010). Yoga for Osteoporosis : The Complete Guide. W.W. Norton & Company, USA.
- Sarin N (2003). Yoga Dawara Rogoon Ka Upchhar. Khel Sahitya Kendra
- Sri Swami Rama, (2001). Breathing. Rishikesh Sadhana Mandir Trust.
- Swami Ram (2000). Yoga & Married Life. Rishikesh Sadhana Mandir Trust
- Swami Swatma Ram: Patanjali Yoga Sutra
- Swami Veda Bharti (2000). Yoga Polity. Economy and Family. Rishikesh Sadhana Mandir Trust
- Text Book Hath Yoga Pradipika
- Text Book Patanjali Yoga Sutra

Semester I**Ability Enhancement Compulsory Course (AECC-1)****(English/Hindi/ MIL Communication) Environmental Science (4 credits)****48 Credits**

The syllabus contents of the English will be provided by the Department of English, C.S.J.M.U., Kanpur.

The syllabus contents of the Hindi will be provided by the Department of Hindi, C.S.J.M.U., Kanpur.

The common syllabus contents of the Environmental Science will be provided by the C.S.J.M.U., Kanpur.

Note: (a) One Theory period is equal to 1 credit of 1 hour duration.

Marking Scheme: Maximum Marks- 100 marks

Theory Examination - 75 Marks

Internal Assessment - 25 Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks

Project/Assignment/Seminar - 10 Marks

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

Question Paper will be divided into two parts A and B. The Examiner is required to set 5 questions for Part-A and 5 questions for Part-B setting at least one question from each unit from each of the four units of the syllabus. The questions of Part-A shall carry 5 marks each and questions for Part-B shall carry 15 marks each. A student is required to attempt any 3 questions from Part-A and 4 questions from Part-B. It is mandatory for an examiner to set two sets of question papers (English Version as well as Hindi Version).

Semester- II

S.No.	Paper No.	Title	Credit
			Theory/Practical/Tutorial
1	DSC-4	Health Education	6 (5 THz + 1 Tut)
2	DSC-5	Yoga	6 (4 THz + 2 P)
3	DSC-6	Gymnastics	6 (4 THz + 2 P)
4	AECC-2	(English/Hindi/ MIL Communication), Environmental Science	4 (4 THz)
		Total Credits	22

Note

- ☐ THz = Theory
- ☐ P = Practical
- ☐ Tut = Tutorial

Semester II
DSC-4 HEALTH EDUCATION

L -T - P = 5 -1 -0

Max. Marks=100

Time: 3Hrs

Objective: -To acquaint the students with basic aspects of Health, Nutrition, First Aid and rehabilitation.

COURSE OUTCOME: -The Students will be able to adopt knowledge and practices to lead a healthy life and promote and maintain healthy practices and assist the practices of preventive medicine. Such core knowledge and skill will help to create a strong foundation to engage human subject of all ages, sex, and ability.

THEORY SYLLABUS

60 Credits

Unit-I

(15 lectures)

Health-meaning, dimensions of health and their interrelationships, importance of health for individual, family, community and nation; factors influencing health, spectrum of health, concept and components of wellness. Health Education- meaning, scope, aims and objectives, principles, methods and media used in health education. Hygiene- personal hygiene, food hygiene, environmental hygiene-meaning, need and importance; associated practices related to maintenance and promotion of health

Unit-II

(15 lectures)

Foods and Nutrition- Misconceptions about food, essential body nutrients- functions, food sources, balanced diet, diet prescription, Communicable and Non-communicable diseases-Distinction between communicable and non-communicable diseases. Communicable diseases-Definition, mode of spread and prevention, Cause, Mode of spread and prevention of diarrhea diseases, typhoid, malaria, STD Respiratory disease; non-communicable diseases-- Meaning, causes and prevention of diabetes, CVD, cancers, renal diseases and respiratory diseases.

Unit-III

(15 lectures)

Contemporary health problems of college youth- Alcohol, drugs, tobacco (chewing, sniffing, smoking)- their harmful effects substance abuse management
Population education- importance of small family, methods of controlling conception, signs and symptoms of pregnancy, home and hospital delivery, care of the infant, importance of breast feeding, immunization, oral rehydration therapy

Unit-IV

(15 lectures)

Definition of first aid, DRABCH of first aid, CPR, first aid for, hemorrhage, fractures, sprain and strain (PRICER), Drowning snake bite, poisoning, heat stroke and heat exhaustion.
Internationals health agencies- WHO, UNICEF, Red Cross- their constitution and role in promoting health.
School Health Service, Components of school health.
Rehabilitation – definition, physical and mental rehabilitation.
Rehabilitation Modalities – cold, heat, water, radiation, Hydrotherapy, cryotherapy, thermotherapy – superficial heat – I R Lamp, Wax bath, deep heat- short wave diathermy, microwave diathermy, u/s therapy, inferential therapy, TENS, nerve muscle stimulator.

Tutorial: One Tutorial period is equal to 1 credit of 1 hour duration.

12 Credits

SUGGESTED READINGS

- Anspaugh DJ Ezell G and Goodman KN (2006). Teaching Today's Health. Mosby Publishers. Chicago. USA.
- Balayan D (2007). Swasthya Shiksha Evam Prathmik Chikitsa. Khel Sahitya. Delhi.
- Chopra D and D Simon (2001). Grow Younger, Live Longer: 10 Steps to Reverse Aging. Three Rivers Press. New York. USA.
- Dewan AP (1996). School Health Manual. Nature Cure and Yoga Health Centre. New Delhi.
- Dixit Suresh (2006). Swasthya Shiksha. Sports Publication. Delhi.
- Donatelle RJ (2005). Health the Basics. Sixth Edition. Oregon State University.

- Floyd PA SE Mimms and C Yeilding (2003). Personal Health: Perspectives and Lifestyles. Thomson Wadsworth. Belmont. California. USA.
- Hales D (2005). An Invitation to Health. Thomson-Wadsworth, Belmont. California. USA.
- Park K (2007). Park's Text Book of Preventive & Social Medicine. Banarsi Das Bhanot & Company. Delhi.
- Snehlata (2006). Shareer, Vigyan Evam Swasthya Raksha. Discovery Pub. House s. New Delhi.
- Uppal AK & Gautam GP (2008). Health & Physical Education. Friends Publication. New Delhi.

Semester II

DSC-5 YOGA

L -T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective: To provide the knowledge of Yoga including the various Asanas and pranayama and their effects. Student will also be given the knowledge about the yogic diet.

COURSE OUTCOME: - The students will learn about various Yoga Asanas, Satkarmas, Pranayams, Bandhas and yogic diet. This will help the students to lead a happy and satisfied life.

THEORY SYLLABUS**48 Credits****UNIT- I****(09 lectures)**

Origin of yoga, definition and scope of yoga, limitations and misconceptions, importance of yoga in physical education and other fields

UNIT- II**(13 lectures)**

Historical development of yoga in India.

Types of Yoga:-Hatha yoga, laya yoga, mantra yoga, bhakti yoga, karma yoga, jnana yoga, raj yoga

UNIT- III**(13 lectures)**

Patanjali yoga sutras- Yama, niyama, asana, pranayama Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, dharma, dhyana, Samadhi & their psychological impact.

Shatkarm/cleansing process/ yogic methods and personal hygiene.

UNIT- IV**(13 lectures)**

Asanas: Types, importance of Asanas in special reference to Physical Education & Sports.

Differentiate between Asanas and exercise.

Pranayama and importance of pranayama in special reference to Physiological effects.

Importance of vegetarianism in yogic diet. Bandhas, mudras and their physiological effects.

PRACTICAL**24 Credits**

Practice of Shatkarma : neti, dhauti, nauli, basti, kunjla, and kapal bhati.

Practice of Pranayam : anulom-vilom, bhastrika, naddi shodhan, sheetali, sheetkari, bhramari, ujjayi

Practice of Bandhas : jalandhar, uddyana, mool bandha

SUGGESTED READINGS

- Day P.(1986). Yoga Illustrated Dictionary. Jaico Pub. House. New Delhi.
- Debnath M(2007). Basic Core Fitness Through Yoga And Naturopathy. Sports Publication. New Delhi.
- Kumar ER (1988). Heal Yourself With Yoga: Specific Disease. Taraporevala.Bombay.
- Pande P. K. and Pramanik Tarak Nath
- Sharma Jai Prakash and Rathore Bhupender Singh (2007). Yoga Ke Tatva. Friends Publication. Delhi
- Shanti KY(1987). The Science of Yogic Breuthiay (Pranayana). D.B.Bombay.
- Sharma JP and Ganesh S(2007). Yog Kala Ek Prichya. Friends Publication. New Delhi
- Sharma JP(2007). Manav jeevan evam yoga. Friends Publication. New Delhi.
- Sharma Jai Prakash And Sehgal Madhu(2006). Yog-Shiksha. Friends Publication. Delhi.
- Singh MK And Jain P (2008). Yoga aur manoranjan. Khel Sahitya Kendra. New Delhi.
- Vyas SK(2005). Yog Shiksha Khel Sahitya Kendra.Delhi.

Semester II
DSC-6 GYMNASTICS

L -T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-To teach all the students the Game of Gymnastics which includes various type of Exercise on various equipment and floor. It also teaches the Students about various National and International Level of Gymnastics competitions.

COURSE OUTCOME:-After studying this subject, the students will learn the Theoretical and Practical aspects of various exercises in Gymnastics and able to understand the process of organizing and evaluating various National and International Competition.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Brief history of gymnastics with special reference to India. Fundamental skills:- Floor exercises

Men Floor exercise

Forward roll
Backward roll
Handstand
Cartwheel
Hand stand to forward roll

Women Floor exercise

Forward roll
Backward roll,
Handstand
Cartwheel
Leg Split

Unit-II

(13 lectures)

Fundamental skills using parallel bar/balancing beam

Parallel Bars (Men)

Under Arms swing Upper Arms Support Position
Perfect swing
Shoulder stand to roll forward

Front or backward swing to the side(dismount)

Balancing Beam (Women)

Turning movement on the beam (90° Turn, 180° Turn & 360° Turn)
Cat jump, Tuck Jump, Stretch Jump, Pike Jump
Different kinds of scales (forward, Backward and sideward)
Mount (1/4 turn to cross sitting)

Dismount (Jump from the end of the beam with leg straddle in the air) and landing on ground with legs together

Table Vault

Squat Vault/stoop vault
Squat vault

Table Vault

Straddle vault/ Stoop Vault
Straddle vault

Unit-III

(13 lectures)

Roman Rings

Perfect swings
Back Up rise
In location with bent body
Shoulder stand
Straddle Dismount
and backward Hip circle forward

Uneven Parallel Bars

different kinds of grips
back turn over (Mount)
Fraddle Dismount
straddle circle forward and backward
Back hip circle forward

Horizontal Bar

Perfect swing on horizontal bar Back Turn
 over to Mount Back Hip circle
 Hip Circle Forward
 Fraddle dismount

Pommel Horse

Shifting of Grips
 Swing
 Scissor (forward)
 Single Leg Circle
 Single leg circle from uneven support to dismount
 sideways.

Unit-IV**(13 lectures)****Men & Women-** Important competitions at National, International levels,

- Evaluation of 20 points in Artistic.
- Duties and Functions of Gymnastics.
- Regulation, Duties and –Right of Gymnastic.
- Type of Gymnastics
- Types of Competition.

Practical**24 Credits**

Exercises:

Floor exercise
 Parallel Bars
 Balancing Beam
 Vaulting Horse

SUGGESTED READINGS

- Brown and Wardell (1980). Teaching and Coaching Gymnastics for Men & Women. John Wiley & Sons.
- Chakraborty S (1995). Fundamental of Gymnastics. DVS Pub. New Delhi.
- Chakraborty S (1998). Women's Gymnastics. Friends Pub. Delhi.
- Chakraborty S and Sharma L (1995). Fundamental of Gymnastics. D.V.S. Pub. New Delhi.
- Code of Points Trampoline Gymnastics (2005). Federation Int. De Gymnastics
- Debby Mitchell, Ed.D, Raim Lopez, MA, Barbara Davis. (2002). Teaching Fundamental Skills. Human Kinetics.
- Derry G (1988). Personal Best Gymnastics. Willionm Colliv. London.
- Federation International Gymnastics (2006). Federation Int. De Gymnastics
- Harvey FJ (1998). Physical Exercises & Gymnastics. Khel Sahitya. New Delhi.
- Jain R (2003). Play and Learn Gymnastics. Khel Sahitaya Kendra. New Delhi.
- Jain R (2005). Play and Learn Gymnastics. Khel Sahitaya Kendra, New Delhi
- Pearson D (1991). Play The Game Gymnastics. Ward Lock. Britain.
- Smither Graham (1980). Behind The Science of Gymnastics. London.
- Turoff Fred (1991). Artistic Gymnastics. C. Brown. U.S.A.

Semester- III

S.No.	Paper No.	Title	Credit
			Theory/Tutorial/Practical
1	DSC-7	Exercise Physiology	6 (5 THz + 1 P)
2	DSC-8	Sports Psychology and Sociology	6 (5 THz + 1 Tut)
3	DSC-9*	Game of Specialization*	6 (4 THz + 2 P)
4	SEC-1	SEC-1 -4 credits (4Th) Select any one option: i. English (Technical writing) ii. Hindi iii. Growth and Development iv. Adapted Physical Education v. Sports Management vi. Methods in Physical Education vii. Exercise Prescription viii. Sports for All	4 (4 THz)
		Total Credits	22

Note

- ☐ THz = Theory
☐ P = Practical
☐ Tut = Tutorial

***List of Games/Sports for DSC – 9 (The sport selected for DSC – 3 will be continued in this semester, with different syllabus of study.)**

Athletics (ii) Badminton (iii) Basketball (iv) Cricket (v) Football (vi) Gymnastic (vii) Handball (viii) Hockey (ix) Judo (x) Kabaddi (xi) Kho-Kho (xii) Volleyball (xiii) Yoga

Semester-III
DSC-7 -EXERCISE PHYSIOLOGY

L -T - P = 5 -0 -1

Max. Marks=150

Time: 3Hrs

Objective: -To provide students with the knowledge of alterations and adaptations in physiological processes of the body that occurs in Exercise& training.

COURSE OUTCOME: -Student will learn changes/adaptations in body systems in response to Exercise& training. Such core knowledge and skill will help to create a strong foundation to engage human subject of all ages, sex.

THEORY SYLLABUS

60 Credits

UNIT 1: Fundamentals and Neuromuscular Function(09 lectures)

The Focus of Exercise Physiology: Definition, Concept & it Significance in the field of Physical Education & Sports, Acute Physiological Response, Chronic Physiological Adaptation.

The Nature Of Skeletal Muscles: Gross & Microscopic Structure of Skeletal Muscle,, Sliding Filament Theory , Muscle fiber types, Acute Response & Chronic Adaptation and the muscular system .

UNIT 2: Energy & Hormonal Regulation

(13 lectures)

Bio-energetics: Aerobic & Anaerobic Systems & Energy Production, Fat and Protein Metabolism, Basal Metabolic Rate.

Hormonal Regulation in Exercise & Training: The Endocrine Glands and their hormones, Acute Response and Chronic Adaptation.

UNIT 3: Cardiorespiratory System and Training Adaptation

(13 lectures)

Cardiovascular Function during Exercise and Training: Structure & Function of the Heart, Cardiovascular Response to Exercise and Chronic Adaptation.

Respiratory Function during Exercise and Training: Respiratory Parameters, Second Wind, Acute Response and Chronic Adaptation.

UNIT 4: Body Composition

(13 lectures)

Understanding Body Composition, Obesity and its causes.

Weight Management, Various methods of Assessing Body Composition, BMI, and WHR.

Practical

12 Credits

Assessment of Resting Heart Rate

Assessment of Blood Pressure

Administering the Harvard Step test

To measure vital capacity using Spirometer

To assess the Body Mass Index of the subjects

To assess the Waist Hip Ratio of the subjects

Methods of assessing Body Composition

Assessment of BMR of the subjects

REFERENCES:

Camaione, David N. (1993). Fitness Management.WCB Brown & Benchmark.

Jakson, Allen W and James R. Morrow (1999) Physical Activity for Health & fitness. Human Kinetics Publication.

Katch F.L and Mc Ardle W.D (2010) Nutrition, Weight Control and Exercise .Philadelphia, Lea & Febiger.

Tiwari, Sandhya, (1999).Exercise Physiology. Sports Publications, New Delhi.

Wilmore Jack. H and David L. Costill (1994).Physiology of Sport and Exercise .Human Kinetics.

G.Gregory Half. (2012). Laboratory Manual for Exercise Physiology. USA. Human Kinetics,

W.Larry Kenney, Jack H. Wilmore, Devid L.Costil.(2015). Physiology of Sports and Exercise, Second Edition. USA.Human Kinetics.

Christophe. Hausswirth, Inigo Mujika. (2013). Recovery for Performance in Sports, USA, Human Kinetics.

Inigo Mujika.(2009). Tapering and Peaking For Optimal Performance. USA. Human Kinetics

Per-Olf .Astrand, Kaare.Rodahl. (2003). Text Book of Work Physiology: Physiological Bases of Exercise. Fourth Edition.USA.Human Kinetics.

Jonathan K.Ehrman, Dennis Kerrigan, et.al. (2017). Advance Exercise Physiology: Essential Concepts and Applications.USA. Human Kinetics.

DSC-8 SPORTS PSYCHOLOGY AND SOCIOLOGY**L –T - P = 5 -1 -0**

Max. Marks=100

Time: 3Hrs

Objective: - The student is provided with the knowledge of psychological aspects which determining/impact sports performance.

COURSE OUTCOME: - The student learns the psychological aspects to apply to improve the performance in sports. Such core knowledge and skill helps to create a strong foundation to engage human subject of all ages, sex, and ability

THEORY SYLLABUS**60 Credits****UNIT-I: Introduction to Sports and Exercise Psychology and understanding participants. (15 lectures)**

Sports and Exercise Psychology: Concept, Scope, role of sports and exercise psychologist and importance of Sports and exercise psychology, Historical development and future of Sports and Exercise Psychology,

Motivation: guidelines for building motivation, achievement motivation.

Arousal and Anxiety: Types, phenomena of Anxiety in relation to performance – Drive Theory, Inverted U Theory and IZOF.

Personality: approaches to personality – Trait, types and psychodynamic theories, determinants of personality, assessment of personality.

UNIT-II: Group and Performance enhancement (15 lectures)

Team Cohesion: a conceptual model of Cohesion, assessment of Cohesion, relationship of Cohesion with performance.

Aggression in sports: types, phenomena of Aggression – Instinct Theory and Social Learning Theory, Assessment of Aggression and Leadership in Sports

Psychological preparation – Long term and short term psychological preparation, Goal setting and self confidence

UNIT-III Introduction to Sports Sociology (15 lectures)

Concept of Sociology and Sports Sociology

Importance of sports sociology

Sports as a Social Phenomena

Sociological perspectives and sports (Functionalism, conflict & interactionism)

Women participation in sports

Alternative sports programmers for women

Commercialization in Sports

UNIT- IV Culture and Socialization in Relation to sports (15 lectures)

Concept of sports culture

Characteristics of sports culture

Elements of Culture in relation to Sports

Club Culture and Sports

Concepts of Sports Socialization

Types of Sports Socialization

Agents of sports socialization

Tutorial: One Tutorial period is equal to 1 credit of 1 hour duration.

12 Credits

SUGGESTED READINGS:

- Coakley, J.J. (2009). Sporting Sociology, Issues and controversies, McGraw Hill International (Unit-1,3,4&5) Dixit S (2006). Khel- Manovigyan. Sports Publications. Delhi
- Cohen RJ and Swerdlik ME (2002). Psychological testing and Assessment: An Introduction to Tests and Measurement. McGraw Hill. New York. U.S.A.
- Cox RH (2002). Sport Psychology. McGraw Hill. London.
- Liukkonen JED (2007). Psychology for Physical Educators. Human Kinetics. U.S.A. Mortin GL (2003). Sports Psychology, Sports Science. Press. USA.
- Sahni SP (2005). Psychology and Its Application in Sports. D.V.S. Delhi. Shaw D and Other (2005). Sport & Exercise Psychology. Bios. U.K.
- Verma V (1999). Sport Psychology & All Round Development. Sport Pub. New Delhi.
- Wann DL (1997). Sport Psychology. Prentice Hall. New Jersey.

Semester III**DSC –9 (i): GAME OF SPECIALIZATION – ATHLETICS****L –T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II**(13 lectures)**

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III**(13 lectures)**

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV**(13 lectures)**

Duties and responsibilities of Technical Official in the Sports.
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of – jumping event- triple jump, pole vault, throwing events- discus throw, hammer throw, relay races-4X100m, 4X400m., race walking, combine events.
Tactical aspect of selected events.

Practical –**24 Credits**

Officiating a match/event/competition.
Learning and perfecting drills for various skill/techniques- triple jump, discus throw, relay races and race walking.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result in selected events.
Demonstration and practice of Tactical Pattern in selected events.

SUGGESTED READINGS

- Chauhan VS (1999). Khel Jagat Mein Athletics. A.P. Pub, Jalandhar.
- Bompa O. Tudor and Halff G. Gregory. (2009) “Periodization Theory and Methodology of Training” Human kinetics. NY.
- Evans DA (1984). Teaching Athletics. Hodder, London.
- Fox EL (1998). Physiological Basis of Physical Education and Athletics Brown Pub.
- Gothi E (2004). Teaching & Coaching Athletics. Sport Pub., New Delhi.
- Gupta R. (2004). Layout & Marking of Track & Field. Friends Publications. India. New Delhi.
- Handbook-Rules and Regulation. International Athletic Federation (2010).
- Herb Amato, DA ATC et al (2002). Practical Exam Preparation Guide of Clinical Skills of Athletic Training. Slack Incorporated. 1st ed., USA.
- Kumar, Pardeep. (2008). Historical Development of Track & Field. Friends Publication. New Delhi
- Maughan, R. and Gluson, M. (2004). The Biomechanical Basics of Athletic Performance. Oxford University Press, U.K.
- Prentice, W. and Arnheim, D. (2005). Arnheim’s Principles of Athletic Training 12th Ed. McGraw Hill. in place of Knight (1988).
- Renwick GR (2001). Play Better Athletics. Sports Pub, Delhi.
- Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
- Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.

Semester III**DSC –9 (ii): GAME OF SPECIALIZATION-BADMINTON****L –T - P = 4 -0 -2**

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II**(13 lectures)**

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III**(13 lectures)**

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV**(13 lectures)**

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -**24 Credits**

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Bloss, M.V. et al (2000). Badminton. McGraw Hill,USA.

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.

Bompa. T.O. (1994). Theory and Methods of Training-A Key to Athletic Performance (3rd Ed.). Kandwall Hunt Publication Co.

Downey J (1990). How to Coach Badminton. Collins Pub.London.

Golds, M. (2002). Badminton: Skills of the Game. Growood Press,USA.

Grice, T. (2007). Badminton: Steps to Success. 2nd Ed. Human Kinetics,USA.

GuptaR.KumarP.andTyagiS.(2008).TextbookonTeachingSkillandProwess(Part-I&II). Friends Publication. New Delhi.

Jain D (2001). Teaching and Coaching –Badminton. Khel S.K. Delhi

Kumar A (2003). Badminton. Discovery, New Delhi.

Singh Hardayal (1991). Science of Sport Training. D.V.S Pub. Delhi.

Singh MK (2007). Comprehensive Badminton. Friends Pub. New Delhi.

Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi.

Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.

Semester III
DSC –9 (iii): GAME OF SPECIALIZATION-BASKETBALL

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.

Drewett, J. (2007). How to Improve at Basketball. Crabtree Publishing Co.,USA.

Goldstein, S. (1998). Basketball Fundamentals. 2nd Ed. Golden Aura Publishing,USA.

Jain Naveen (2003). Play and Learn Basket Ball. Khel Sahitya Kendra. New Delhi.

Nat BB (1997). Conditioning Coaches Association. NBA Power Conditioning. Human Kinetics.

Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.

Sharma OP (2003). Basket Ball Skills and Rules. Khel Sahitya Kendra,Delhi.

Wilmore & Costill (2004).Physiology of Sports & Exercise. Human Kinetics, US.

Semester III
DSC – 9 (iv): GAME OF SPECIALIZATION-CRICKET

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Amarnath M. (1996). Learn to Play Good Cricket. UBS Publishers. New Delhi.

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.

Boycott, G. (2010). Play Cricket the Right Way. Great Northern Books Limited,U.K.

Cricket (2008). Sports Skills: Cricket Fielding (Know the Game). A & C Black Publishers.

Gupta, K. (2006). How to Play Cricket. Goodwill Publishing House, New Delhi.

Hobbs, J. (2008). The Game of Cricket As it should be Played. Jepson Press,USA.

Jain R. (2003). Fielding Drills in Cricket. Khel Sahitya Kendra. New Delhi.

Rachna (2002). Coaching Successfully: Cricket. Khel Sahitya Kendra. New Delhi.

Sharma P. (2003). Cricket. Shyam Parkashan. Jaipur.

Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.

Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester III
DSC –9 (v): GAME OF SPECIALIZATION –FOOTBALL

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

American Football Coaches Association (2002). The Football Coaching Bible. 1st Ed., Human Kinetics, USA

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.

Carling, C., Williams, M. and Reilling, T. (2006). Handbook of Soccer Match Analysis : A Systematic Approach to Improving Performance. Routledge Publishers,USA.

Long, H. and Czarnecki, J. (2007). Football for Dummies. For Dummies Publisher,USA.

N Kumar (2003). Play and Learn Football. K.S.K. New Delhi.

Reilly, T. (2006). The Science Training Soccer : A Scientific Approach to Developing Strength, Speed and Endurance. Routledge Publisher,USA.

Reilly, T. and J.C.D. Arau (2008). Science and Football V : The Proceedings of the 5th World Congress on Sports Science and Football, Volume5.

Sharma OP (2001). Teaching and Coaching –Football. Khel S.K.Delhi.

Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.

Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

DSC – 9(vi): GAME OF SPECIALIZATION - GYMNASTICS

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
Brown (2009). How to Improve at Gymnastics. Crabtree Publishing Co.,USA.

Chakraborty S and Sharma L (1995). Fundamental of Gymnastics. D.V.S. Pub. New Delhi.
Chakraborty S (1995). Fundamental of Gymnastics. DVS Pub. New Delhi.
Chakraborty S (1998). Women's Gymnastics. Friends Pub.Delhi.

Code of Points Trampoline Gymnastics (2005). Federation Int. DE Gymnastics

Federation International Gymnastics (2006). Federation Int. DE Gymnastics

Harvey FJ (1998). Physical Exercises & Gymnastics. Khel Sahitya. New Delhi.

Jain R (2005). Play and Learn Gymnastics. Khel SahitayaKendra

Mitchell, D., Davis, B. and Lopez, R. (2002). Teaching Fundamental Gymnastics Skills. Human Kinetics, USA.

Price, R.G. (2006). The Ultimate Guide to Weight Training for Gymnastics. 2ndEd. Sportsworlout.com.

Schlegel, E. and Dunn, CR. (2001). The Gymnastics Book : The Young Performer's Guide to Gymnastics. Firefly Books,USA.

Smither Graham (1980). Behing The Science of Gymnastics. London.

Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.

Stickland, L.R. (2008). Gender Gymnastics. Trans Pacific Press,Japan.

Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

DSC – 9 (vii): GAME OF SPECIALIZATION HANDBALL

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.

Jain D (2003). Play & Learn Handball. Khel Sahitya Kendra. New Delhi.

Kleinman, I. (2009). Complete Physical Education Plans. 2nd Ed. Human Kinetics,USA.

Page, J. (2000). Ball Games. Lerner Sports Publisher,USA.

Phillips, B.E. (2009). Fundamental Handball. Kessinger Publishers,USA.

Schmottlach N Mcmanama J (1997). Physical Education Handbook. 9th Edition. Allyn & Bacon.London.

Schmottlach, N. and McManama (2005). Physical Education Activity Handbook. Benjamin Cummings, USA.

Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.

Surhone, L.M. et al (2010). Team Handball. Betascript Publishing,USA

Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi

Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.

DSC – 9(viii): GAME OF SPECIALIZATION HOCKEY

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II**(13 lectures)**

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III**(13 lectures)**

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV**(13 lectures)**

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -**24 Credits**

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
International Hockey Federation (2003). Rules of the Game of Hockey with Guidance for Players and Umpires. International Hockey Federation. India.

Jain D (2003). Hockey Skills & Rules. khel Sahitya Kendra . New Delhi.
Narang P (2003). Play & Learn Hockey. Khel Sahitya Kendra. New Delhi.
Pecknold, R. and Foeste, A. (2009). Hockey : Essential Skills. McGraw Hills,USA.
Rossiter, S. (2003). Hockey the NHL Way : Goaltending Illustrated Edition. Sterling Publishers,USA.
Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
Walter, R. and Johnson, M. (2009). Hockey Plays and Strategies. Human Kinetics,USA.
Weekes, D. (2003). The Biggest Book of Hockey Trivia. Greystone Books,USA.
Wukovits, J.F. (2000). History of Hockey 1st Ed. Lucent Books,USA.
Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester III
DSC – 9 (ix): GAME OF SPECIALIZATION – JUDO

L -T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

- Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
Diago, T. (2005). Kodokan Judo Throwing Techniques. Kodansha International Publisher, Japan.

Harrison EJ (2002). Coaching Successfully Judo. Sports.Delhi.
Jain D (2003). Play and Learn Judo. Khel Sahitaya Kendra. New Delhi.
Law, M. (2009). Falling Hard : A Journey into the World of Judo. Trumpeter Publisher,Japan.
Putin, V., Shestakov, V. ad Levitsky, A. (2004). Judo : History, Theory and
Practice. Blue Snake Books, Moscow.
Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
Takahashi, M. (2005). Mastering Judo. Human Kinetics,USA.

DSC – 9 (x): GAME OF SPECIALIZATION - KABBADI

L -T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.
Kumar, Dharmander. (2018). Kabaddi and Its Playing Techniques. Writers Choice, New Delhi.

Mishra , S.C. (2007). Teach Yourself Kabaddi. Sports Publications, New Delhi.
Rao CV (1983). Kabaddi. Native Indian Sports. NSNIS. Patiala Publisher
Rao EP (1994). Modern Coaching in Kabaddi.D.V.S.Pub
Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.
Syal, M. (2004). Kabaddi Teaching. Prerna Parkashan, New Delhi.
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi.

DSC – 9 (xi): GAME OF SPECIALIZATION - KHO-KHO

L –T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(09 lectures)

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II

(13 lectures)

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III

(13 lectures)

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV

(13 lectures)

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -

24 Credits

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

Bompa O. Tudor and Halff G. Gregory. (2009) "Periodization Theory and Methodology of Training" Human kinetics. NY.

Chakrabarty G (2002). Kho - Kho Aveloken. Khel Sahitya Kendra.Delhi.

Panday L (1982). Kho - Kho Sarvaswa. Metropolitan. New Delhi

Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.

Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi

Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester III

DSC – 9 (xii): GAME OF SPECIALIZATION - VOLLEYBALL

L -T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS**48 Credits****Unit-I****(09 lectures)**

Common injuries related to sports.
Sprain, Strain, Contusion, Abrasion and Dislocation
Rehabilitation of injured player/athletes.

Unit-II**(13 lectures)**

Training Means and Methods for development of motor components.
Interval Training, Circuit Training, Weight Training, Continuous method of training, Fartlek Training, plyometric Training, Sand Training, hill training.
Use of Tere Bands, Weights, Medicine Ball and Massage manipulation and Sauna Bath.
Talent Identification and Development in sports.

Unit-III**(13 lectures)**

Anatomical Consideration in a Sport.
Physiological basis to performance in a Sport.
Biomechanical analysis of skills/techniques.
Psychological basis to performance.

Unit-IV**(13 lectures)**

Duties and responsibilities of Technical Officials in the Sports. (20 lectures)
Qualification of Officials, Score sheet and Record Keeping.
Organisational aspects in sport:
 Selection of Team
 Conduct of Coaching Camps
 Planning and Organisation for Competitions
 Report Writing of a Competition/Tournament.
Development drills/supplementary exercises.
Drills for perfection of skills/techniques of the sport.
Tactical Aspect of sports.

Practical -**24 Credits**

Officiating a match/event/competition.
Learning and perfecting drills for various skill/tech.
Learning and demonstrating the rehabilitation process of injured player.
Learning and demonstrating the process of scoring and recording competition result.
Demonstration and practice of Tactical Pattern.

SUGGESTED READINGS

American Volleyball Coaches Association (2005). Volleyball : Skills & Drills. Human Kinetics,USA.

Bompa O. Tudor and Halff G. Gregory. (2009) “Periodization Theory and Methodology of Training” Human kinetics. NY.

FIVB (1996). Backcourt Spiking in Modern Volley Ball. FIVB.Chennai.

Kenny, B. and Gregory, C. (2006). Volleyball : Steps to Success. Human Kinetics,USA.

Saggar SK (1994). Cosco Skills Statics - Volley Ball. Sport Publication. Delhi.

Scates AE (1993). Winning Volley Ball. WC Brown.USA.

Scates, A. and Linn, M. (2002). Complete Conditioning for Volleyball. Human Kinetics,USA.

Shondell, D. and Reynaud, C. (2002). The Volleyball Coaching Bible. Human Kinetics,USA.

Singh, Hardayal. (1919). Science of Sports Training. DVS Publication, N. Delhi.

The National Alliance for Youth Sports (2009). Coaching Volleyball. For Dummies Publishers,USA.

Volleyball, USA (2009). Volleyball : Systems and Strategies. Human Kinetics,USA.

Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester III
DSC – 9 (xiii): GAME OF SPECIALIZATION - YOGA

L – T - P = 4 -0 -2

Max. Marks=150

Time: 3Hrs

Objective:-The Students will acquire knowledge and understanding of a specific sport in which an individual wishes to excel.

COURSE OUTCOME:-The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS:**48 Credits****UNIT-I****(09 lectures)**

Types of Yoga:- Hatha yoga, laya yoga, mantra yoga, bhakti yoga, karma yoga, jnana yoga, raj yoga

UNIT-II**(13 lectures)**

Patanjali yoga sutras- Yama, niyama, asana, pranayama

Pratyahar- Benefits & utilities of these. Astanga yoga- Definition, objectives, dharma, dhyana, Samadhi & their psychological impact.

UNIT-III**(13 lectures)**

According to yoga concept of normality, according to modern psychology, concept of personality & its development, yogic management of psycho-somatic ailments: frustration, anxiety, depression

Structure and organisation of yoga competition, Preparation, execution and closing of the competition, Protocols and ceremonies

UNIT-IV**(13 lectures)**

Corporate yoga, Yoga for healthy lifestyle, yoga & sports, education value of yoga, relevance of yoga in

21st century Different techniques of meditation and their practice prekha, vipashyana and different chakras

Yoga – teaching methodology, Teaching practice, techniques and modules, preparing teaching lessons in yoga,

Guidelines for preparing coaching lessons in Yoga, Preparation of coaching lesson-plans, Use of teaching aids.

PRACTICALS**24 Credits**

Tests of flexibility, concentration, VO₂ max., balance

Observing and assessing the video/tournament recording/movie and preparing a report

Planning for a Yoga competition

Organisation of a Yoga competition

Project in Yoga

Officiating in Yoga competitions

SUGGESTED READINGS

Anand Omprakash (2001). Yog Dawra Kaya Kalp, Kanpur. Sewasth Sahitya Perkashan

Iyengar, B.K.S. (1995). Light on Yoga : The Bible of Modern Yoga. Schocken Publishers, USA.

Kaminoff, L. et al (2007). Yoga Anatomy. Human Kinetics, USA.

Kirk, M. (2005). The Hatha Yoga Illustrated. Human Kinetics, USA.

Mukerji, A.P. (2010). The Doctorine and Practice of Yoga. General Books, LLC, New Delhi.

Norton, W.W. (2010). Yoga for Osteoporosis : The Complete Guide. W.W. Norton & Company, USA.

Sarin N (2003). Yoga Dawara Ragoon Ka Upchhar. Khel Sahitya Kendra

Sharma JP and Ganesh S(2007). Yog Kala Ek Prichya. Friends Publication. New Delhi

Sharma JP(2007). Manav jeevan evam yoga. Friends Publication. New Delhi.

Sharma Jai Prakash And Sehgal Madhu(2006). Yog-Shiksha. Friends Publication. Delhi.

Sri Swami Rama, (2001). Breathing. Rishikesh Sadhana Mandir Trust.

Swami Ram (2000). Yoga & Married Life. Rishikesh Sadhana Mandir Trust

Swami Swatma Ram: Patanjali Yoga Sutra

Swami Veda Bharti (2000). Yoga Polity. Economy and Family. Rishikesh Sadhana Mandir Trust
Text Book Hath Yoga Pradipika
Text Book Patanjali Yoga Sutra

Semester III**L -T - P = 4 -0 -0****SEC-1 (i) English (Technical Writing)**

The syllabus contents of the English will be provided by the Department of English, C.S.J.M.U., Kanpur

Note: (a) One Theory period is equal to 1 credit of 1 hour duration.

48 Credits

Marking Scheme: Maximum Marks -100 marks

Theory Examination -75 Marks

Internal Assessment -25 Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks

Project/Assignment/Seminar - 10 Marks

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

Question Paper will be divided into two parts A and B. The Examiner is required to set 5 questions for Part-A and 5 questions for Part-B setting at least one question from each unit from each of the four units of the syllabus. The questions of Part-A shall carry 5 marks each and questions for Part-B shall carry 15 marks each. A student is required to attempt any 3 questions from Part-A and 4 questions from Part-B. It is mandatory for an examiner to set two sets of question papers (English Version as well as Hindi Version).

Semester III

L -T - P = 4 -0 -0

SEC-1 (ii) Hindi (Social Media)

The syllabus contents of the Hindi will be provided by the Department of Hindi, C.S.J.M.U., Kanpur

Note: (a) One Theory period is equal to 1 credit of 1 hour duration.

48 Credits

Marking Scheme: Maximum Marks -100 marks

Theory Examination -75 Marks

Internal Assessment -25 Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks

Project/Assignment/Seminar - 10 Marks

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

Question Paper will be divided into two parts A and B. The Examiner is required to set 5 questions for Part-A and 5 questions for Part-B setting at least one question from each unit from each of the four units of the syllabus. The questions of Part-A shall carry 5 marks each and questions for Part-B shall carry 15 marks each. A student is required to attempt any 3 questions from Part-A and 4 questions from Part-B. It is mandatory for an examiner to set two sets of question papers (English Version as well as Hindi Version).

Semester III
SEC-1 (iii) Growth and Development

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:- Students will be educated with the knowledge and importance of physical growth & development

COURSE OUTCOME:- Students learn various factors affecting the physical growth & development.

Theory of Syllabus: **48 Credits**

Unit-I **12 Lectures**

Introduction-Meaning and definition of growth, development, difference between the growth and development, factors affecting growth and development .Stages of growth & development:-Pre-natal and Post natal growth and development

Unit-II **12 Lectures**

Physical growth, Cognitive (mental) growth, emotional development and Psychological Development, relationship between physical growth of brain and intellectual ability

Unit-III **12 Lectures**

Adolescent growth & development. Distance & Velocity Curves

Unit-IV **12 Lectures**

Introduction to Motor Development and body physiques.

Suggested Readings:

Day, J AP. (1986). Perspectives in Kianthropometry. The 1984 Olympic Scientific Congress Proceedings. Volume I. Human Kinetics Publisher. Champaign. Illinois. USA.

Gallahue DL and JC Ozmun. (1998).Understanding Motor Development- Infants, Children, Adolescents and Adults McGraw Hill Company Boston.USA.

Gallahue DL. (1993). Developmental Physical Education for Today's Children WCB. Brown & Benchmark. Dubuque Indiana. USA.

Harrison GA, JS Weiner JM Tanner and NA Barnicot. (1984) Human Biology Clarendon Press. Oxford. London.

ICMR. (1989). Growth and Physical Development of Indian Infants and Children. Indian Council of Medical Research. New Delhi.

Kansal DK (2008). Textbook of Applied Measurement Evaluation and Sports Selection. Sports and Spiritual Science Publications. New Delhi.

SEC-1 (iv) ADAPTED PHYSICAL EDUCATION

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:- Students will be educated with the knowledge and importance of adapted physical education with the help of Physical exercises and Sporting activities, which will be beneficial for abled person.

COURSE OUTCOME:- Students learn various ways and means for adapted physical education with the help of Physical exercises and Sporting activities, which will be beneficial for abled person.

THEORY SYLLABUS:**48 Credits****UNIT-I INTRODUCTION TO A DAPTED PHYSICAL EDUCATION****12 Lectures**

Meaning, definitions, Aims and objectives, Need and importance. Role of physical education in adapted physical education. Brief historical review of adapted physical education.

UNIT-II CLASSIFICATION OF DISABILITY**12 Lectures**

Changing concept of disability handicaps, retardation, physically and mentally challenged.

Physical disability, Characteristics and Category. Functional limitation, General causes.

Mental retardation and learning disability, Characteristics, Category, Functional limitation, General causes, Hearing and speech impairment. Characteristics, Category, Functional limitation, General causes, Visual impairment, Characteristics, Category, Functional limitation, General causes.

Other disabled conditions. Behavioral problems associated with disability, Adjustment problem, Emotional problem, Personality problem, Social problems, Social stigma, Discrimination and Social rejection

UNIT-III ADAPTED PHYSICAL EDUCATION PROGRAMMES**12 Lectures**

Guiding principles for adapted physical education programme (AAHPER Principle).

Physical education programme for disabled of - Elementary school, Middle school, High school.

Special adapted programme for various types and categories of physical disability. Regular physical activity Informal games and special activity, Informal and formal competitions.

Special adapted programme for hearing and speech impairment, visual impairment, mental retardation and learning impairment. Regular physical activity, Informal games and special activity, Informal and formal competitions.

UNIT-IV ACTIVITIES FOR DISABLED**12 Lectures**

Co-curricular activities for disabled, outdoor programs for disabled, and adventure based outdoor programme

Creative development and hobby & culture development programme. Aquatic activity programme for disabled Importance of activity for disabled.

Nature of aquatic activity programme based on types of various disabilities and rehabilitative role and importance of aquatic activity Rehabilitation, aims and objectives of rehabilitation, meaning of functional and occupational rehabilitation Importance of adapted programme in rehabilitation. Functional rehabilitation, Psychological rehabilitation – adjustment, environmental and personality development and legislative approach

SUGGESTED READINGS:

C, Blauwet, (2007). Promoting the Health and Human Rights of Individuals with a Disability through the Paralympic Movement. (ICSSPE,) at 21. (Blauwet- Promoting the Health).

Barton, L. (1993) „Disability, empowerment and physical education“, in J. Evans (ed.), Equality, Education and Physical Education. London: The Falmer Press.

Guttmann, L. (1976) Textbook of Sport for the Disabled. Oxford: HM & M Publishers.

K, DePauw & S. Gavron, (2005). Disability and Sport. (2nd Ed) Illinois: Human Kinetics.

R, Metts. (2000). Disability Issues, Trends and Recommendations for the World Bank (Washington D.C.: World Bank,).

Oliver, M. (1990). The Politics of Disablement. Basingstoke: Macmillan.

Sport England (2000) Young People with a Disability and Sport. London: Sport England.

Semester III
SEC-1(v)-SPORTS MANAGEMENT

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:- To acquaint students with knowledge of management and planning of Sports Competitions & Tournaments.

COURSE OUTCOME:- The student learns to plan, organize & execute sports events.

THEORY SYLLABUS:

48 Credits

Unit-I

12 Lectures

Meaning, concept and definition of sports management , Historical perspective of sports management in India
Nature and scope of sports management, Aims and objectives of sports management, skills of sports management.

Unit - II

12 Lectures

Guiding principles of sports management , Leaderships, Identification of resources
Process or function of Sports Management (Planning, Organizing, Personnel / Staffing, Direction, Controlling, Coordination)

Unit –III

12 Lectures

Definition and meaning of planning, Need and importance of planning, Principle of planning, Steps involved in planning process. Organization and conduct of competition at various levels (State level competition , Inter college competition, National level Competition)
Techniques of supervision in sports management, Methods of supervision / Role of a coach/manager.

Unit – IV

12 Lectures

Job specification of sports manager in professional and state regulated sports bodies, managers, physical educational professional, career avenues and professional preparation, Tournaments/Competitions, Types of Tournaments, Fixture, Seeding, Structure and functions of S.A.I., University Sports Council and A.I.U.
Purchase: List of Consumable and Non- Consumable sports goods and equipment in the Department of physical education, Procedure to purchase sports goods and equipment in the department of physical education, stock entry, storing and distribution.

Suggested Readings

- Allen, L.A. (1988) Management & Organization. Kogakusha Co. Tokyo.
Hert, Renis(1961) New Patterns of Management, McGraw Hill,.
Sandhu, K. Sports Dynamics: Psychology, Sociology and Management
Sivia, G.S (1991). Sports Management in Universities, New Delhi: A.I.U. Deen Dayal Upadhyaya Marg.

Semester III**SEC-1(vi) - METHODS IN PHYSICAL EDUCATION****L -T - P = 4 -0 -0**

Max. Marks =100

Time: 3Hrs

Objective: - To acquaint students with theoretical & practical knowledge of methods of teaching, coaching & officiating in Physical Education & Sports.

COURSE OUTCOME:-Students will understand the use of various methods in teaching & coaching in the field of physical education & sports. They will also learn the officiating in various sports events.

THEORY SYLLABUS**48 Credits****UNIT I****12 Lectures**

Meaning, Definition, Scope and importance of Organisation and Administration.

Meaning of teaching, coaching, officiating and as a career in Physical Education & Sports.

Meaning and need for methods, factors influencing teaching method.

UNIT II**12 Lectures**

Teaching methods: command, demonstration, imitation, discussion, part- whole, whole- part-whole, explanation and recitation

Class management: techniques, formations, command (types and techniques) factors effecting class management

Lesson Plan: Need, construction, Introduction development, skill/recreation

Unit-III**12 Lectures**

Leadership in Physical Education and Sports: Meaning, Definition, Scope and importance; qualities and qualification of Physical Education Teachers.

Reports and records; Meaning, Definition and essence of writing different reports. Records maintaining of Physical Education and Sports for future reference.

Unit-IV**12 Lectures**

Tournaments/Competitions and types, Fixture, types of fixture and seeding, Time table: Meaning, concept, importance and principles of construction of time-table and Factors affecting construction of Time-table.

SUGGESTED READINGS

Alliance, A. (1999). Physical Best Activity Guide, New Delhi,

Capel, S. et al Editors (2006). A Practical Guide to Teaching Physical Education. Routledge Publishers, USA.

Dheer, S. and Radhika. (1991). Organisation and Administration of Physical Edu., ND: Friends Pub.

Frost, R.B. and Others. (1992). Administration of Physical Education and Athletics, Delhi: Universal Book.

Gangwar, B.R. (1999). Organisation Admn. & Methods of Physical education, Jalandhar: A.P. Pub.

Gangwar, B.R. (1999). Sharirik Shiksha Ka Prabandh Prashashan Avam Vidhiya, Jalandhar: A.P. Pub.

Gupta R. Kumar P. & Sharma D.P. (1999). Lesson Plan in Physical Education & Sports. R.D.P.

Publication. New Delhi.

Gupta R. Kumar P. & Sharma. D.P.S. (2004). Sharirik Shiksha Mein Path Yojna. Sahyog Prakashan. New Delhi.

Gupta R. Kumar P. & Tyagi S. (2008) Textbook on Teaching Skill & Prowess. Part I & II. Friends Publication. India. New Delhi.

Kamlesh ML (2005). Methods in Physical Education. Friends Publication. Delhi.

Kamlesh ML (2005). Sharirik Shiksha Ki Vidiyan. Friends Publication. Delhi.

Panday Laxmikant (1996). Sharririk Shiksha Ki Shiksha Padati. Metropolitan Book. New Delhi.

Shaw D & Kaushik S (2001). Lesson Planning- Teaching Methods and Classman in Physical Education. K.S.K. Delhi.

Semester III
SEC - 1(vii) - Exercise Prescription

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: - Students will be educated with the knowledge and importance of Exercise Prescription with the help of Physical Exercises and Sports activities in systematic and scientific procedure.

COURSE OUTCOME: - Students learn various ways, means and methods to exercise prescription the better fitness and lead a healthy life style.

Theory of Syllabus

48Credits

Unit I

12Lectures

Meaning and definition of Exercise and Physical Activity, difference between Exercise and Physical Activity, types of exercises, exercise, lifestyle and physical fitness, exercise and health, health benefits of exercise and exercise recommendations for health.

Unit II

12 Lectures

Basis for exercise prescription for general population, background of exercise prescription in regard to interest, attitude, habits and physical capability, exercise for sportsperson, their fitness, wellness and competition.

Unit III

12 Lectures

Health benefits of exercise, Exercise as proactive care, prevention of heart diseases, osteoporosis, diabetes, hypertension, obesity etc.

Necessity of Exercise Prescription for sedentary population and sportsperson, self-responsibilities and behaviour change stages for exercise regularity.

Unit IV

12 Lectures

Steps for exercise prescription, Stress test, and physical fitness test, understanding the acronyms FITT (Frequency, intensity, time), type (mode of exercise) and GO SIR (Progression-Gradual increase, overload, specificity, individualization, recovery and regularity).

Suggested Reading:

American college of sports Medicine (2005). ACSM's Health-Related Physical Fitness Assessment Manual. London, Lippincott.

Anspaugh, D. J. & Others (2003), Wellness. Boston: McGraw Hills.

Corbin C.B, G.J. Welk, W.R. Corbin and K.A. Welk (2008). Fitness & Wellness Concepts.

Corbin, C.B. & Others, (2006) Concepts of Fitness And Wellness, Boston, McGraw Hill.

Edward A. Taub, F. Murad and Oliphant D. (2007). The Wellness Solution.

Hoeger, W.K. And Hoeger S.A, (2006) Principles And Labs For Physical Fitness And Wellness, Australia: Thomson,

Kennedy, Carol, A. & Yoke, M.M. (2008) Methods of Group Exercise Instruction N.Y. Human Kinetics.

Lang, Annette , Morning Strength Workouts, U.S. Human kinetic, 2007

Robin, J. (2005). The Great Physicians Rx for Health & Wellness: Seen Keys to Unlocking Your Health Potential. Nelson Books, Thomson Nelson Publishers, Nashville, Tennessee, USA.

Savard, M. and C. Svec (2005). The body Shape Solution to Weight Loss and Wellness. Atria Books, Sydney, Australia.

Taub, E.A., F. Murad and D. Oliphant (2007). The Wellness Solution based on Nobel Prize Science. World Almanac Library Publishers, Milwaukee, Wisconsin, USA.

Tomkinson, G.R. & Olds, T.S. (ED.), Pediatric Fitness, London Karger, 2007.

Trudeau, K. (2007). The Weight – Loss Cure. Alliance Publishing Group, Inc., Elk Grove Village, Illinois, USA.

Uppal and Gautam. (2008). Health and Physical Education, Friends Publication,

**Semester III
SEC - 1 (viii) SPORTS FOR ALL****L -T - P = 4 -0 -0**

Max. Marks =100

Time: 3Hrs

Objective: To impart the knowledge about the sports, play, recreation, games and motivational factors towards sports, their fitness components and health.

COURSE OUTCOME: Students will learn about the sports and recreation, and their health benefits for normal and challenged population.

THEORY SYLLABUS:**48 Credits****UNIT-I****12 Lectures**

INTRODUCTION: Meaning and definition of Sports, Play, Games, Recreation, Pleasure, Happiness, Comforts;
Motivation towards Sports; Introduction to Sports for fitness, fun and, competitions. (10 Lectures)

UNIT-II**12 Lectures**

SPORTS FOR FITNESS: Meaning and definition; Components of health related Physical Fitness.
Measurement of Health Related Physical Fitness (HRPF); Development and Maintenance of Health Related Fitness

UNIT-III**12 Lectures**

SPORTS FOR FUN: Meaning & Definition of fun, Minor games, Games Festival; Organization and guidelines for Games Festival; Games Festival Facility; Sports Clubs.
SPORTS FOR COMPITITIONS: Meaning & Definition of Competition; Sports Selections; Sports participation and sports competitions. (10 Lectures)

UNIT-IV**12 Lectures**

SPORTS FOR HEALTH: Meaning and Definition of Health;, Preventive health measures and sports;
SPORTS FOR
SPORTS FOR CHALLENGED POPULATIONS: Introduction, Meaning and definitions of different challenged populations: Visually Challenged, Auditory Challenged, and Physical Challenged. Modified Sports for above categories of challenged populations.
SPORTS FOR FIGURE & PERSONALITY: Meaning, concept and definition of Figure, general appearance,
Personality measures; overweight and it's disfigure effects; weight control, exercise and Sports.

SUGGESTED READINGS-

- Bhatnagar DP. SK Verma and R. Mokha (1999). Human Growth. Exercise Science Publications Society. Department of Sports Sciences, Punjabi University, Patiala-147 002, Punjab.
Corbin et.al. (2006). Fitness & Wellness-Concepts. McGraw Hill. Publishers. New York.U.S.A.
Gopalan GB Sastri VR and. Balasubramanian SC (2004). Nutritive Value of Indian Foods. National Institute of Nutrition (ICMR). Hyderabad-500 007.
Jensen C. and Naylor J. (2005). Opportunities in Recreation and Leisure Sports. McGraw Hill. Publishers. New York.U.S.A.
Kansal DK (2008). Text book of Applied Measurement, Evaluation & Sports Selection, Sports & Spiritual Science Publications, New Delhi.
Singh S.P.S. and Malhotra P (2003). Anthropometry. Human Biology Department. Punjabi University. Patiala-147 002 (India).

Semester- IV

S.No.	Paper No.	Title	Credit
			Theory/Practical/Tutorial
1	DSC-10	Test, Measurement & Evaluation in Physical Education	6 (5 THz + 1 P)
2	DSC-11	Track & Field	6 (4 THz + 2 P)
3	DSC-12	Fundamentals of Sports Training	6 (5 THz + 1 Tut)
4	SEC-2	SEC-2- 4 credits (4 THz) Select any one option: i. Introduction to MS Excel and SPSS ii. Weight Management iii. Wellness Lifestyle iv. Posture and Athletic Care. v. Olympic Education vi. Sports and Exercise Nutrition. vii. Stress Management viii. Personality development	4 (4h)
Total Credits			22

Note:

- ☐ THz = Theory
☐ P = Practical
☐ Tut = Tutorial

DSC – 10 - TESTS, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION**L – T - P = 5 - 0 - 1**

Max. Marks = 150

Time: 3Hrs

Objective: - Students will acquire the knowledge (theoretical and practical) and importance of Test Measurement & Evaluation in Physical Education and Sports.

COURSE OUTCOME: - Students will learn various ways and means to assess fitness in Sports & Exercise. Such core knowledge and skill will help to create a strong foundation to engage human subject of all ages, sex, and ability.

THEORY SYLLABUS 60 Credits**UNIT-I****(10 lectures)**

Introduction to Test, Measurement and evaluation and its importance in the field of physical education Test constructions: - a) general consideration b) physical fitness/ efficiency test

UNIT-II**(15 lectures)**

Physical fitness testing: components of physical fitness

Strength test: - Kraus Weber strength test, Cardio-respiratory Fitness test: 1 Mile Rockport Test, Muscular Endurance Test: Bent-Knee Sit Ups.

UNIT-III**(15 lectures)**

Anthropometric Measurements: - Weight, height, sitting height, chest circumference, thigh circumference, calf circumference, skin fold measurement (biceps, triceps, sub scapular and supra iliac).

Sports Skill Test-Johnson badminton test, Brady volleyball test, McDonald soccer test, Cornish Handball test, Hockey skill test- SAI hockey Test

UNIT-IV**(20 lectures)**

Administration of Senior Fitness Test: Chair Stand Test for lower body strength, Chair Sit and Reach Test for lower body flexibility, Back Scratch Test for upper body flexibility, Eight foot up and go test for Agility, Six minute walk test

Note: Question Paper will be divided into two parts A and B. The Examiner is required to set 5 questions for Part-A and 5 questions for Part-B taking one question for each part from each of the five units of the syllabus. The questions of Part-A shall carry 5 marks each and questions for Part-B shall carry 15 marks each. The student is required to attempt any 3 questions from Part-A and any 4 questions from Part-B.

Practical**12 Credits**

Administration 1 Mile Rock Port Test

Administration of Fitness Test

Measurement of sports skills included in theory course.

SUGGESTED READINGS

ACSM (2001). Guidelines for Exercise Testing and Prescription by American College of Sports Medicine Human kinetics USA.

Balyan Sunita (2006). Sharirk Shiksha main Parikshan evmn maapan. Khel Sahitya. Delhi.

Barrow H.M. and McGee R. (1979). A Practical Approach to Measurement in Physical Education. Lea & Febiger, Philadelphia. U.S.A.

Baumgartner TA Jackson AS Mahar MT and Rowe DA (2007). Measurement for Evaluation in Physical Education. The McGraw Hill Companies. Inc. New York. USA.

Kansal DK (2012). A practical approach to Measurement Evaluation in Physical Education & Sports selection. Sports & Spiritual Science Publications, New Delhi.

Miller David K (2006). Measurement by the Physical Educator: Why and How. McGraw-Hill. Boston, U.S.A.

Mishra Sharad Chandra (2005). Tests And Measurement in physical education. Sports. Delhi

Sharma JP (2006). Test and measurements in physical education. khel sahitya. Delhi

Srivastava AK (2006). Sharirik Shhiksha Evam Khel Main Maapan Evam Mullyakan. Sport pub. Delhi.

Tritschler K. Barrow & McGee's (2000). Practical Measurement and Assessment. Lippincott Williams &

Wilkins. Philadelphia. U.S.A.

Semester IV
DSC-11-TRACK & FIELD

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: - To provide knowledge and skill of various Track & Field events in Athletics. They will also be equipped with technical and tactical knowledge of all Athletics events.

COURSE OUTCOME: - The Students will be able to learn and perform all Athletics events.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Introduction of track & field and historical review with special reference to India.
 Training Methods- Weight Training, Circuit Training, Cross-Country, Sand Running.
 Calculations of staggers, straight and radius of standard athletics tracks of 200m and 400m distance.

Unit-II

(12 lectures)

Long Jump- Measuring of run way and fixing of check marks, various techniques used in broad jump
 Sprinting- fixing of the starting blocks, various finishing techniques used in sprints

Unit-III

(12 lectures)

Relays- hold of the baton, various types of baton exchange (visual and non-visual), and Fixing Up runners for different relay races.

Unit-IV

(12 lectures)

Triple Jump:

Approach run, takeoff and landing for hop, step and jump, flying phase, landing and follow up action.
 Discus throw: Hand hold, initial stance, preliminary swings, turn, delivery stance, delivery action, reverse action
 Long distance running: Correct running style emphasizing on proper body position and foot placement, proper arm and leg action, running tactics etc.

Practical

24 Credits

Various types of Crouch Start
 Finishing Techniques in Track Event
 Baton Exchange in Relay event
 Long Jump, Triple Jump, Discus Throw, Technique

SUGGESTED READINGS

- Chauhan VS (1999). Khel Jagat Mein Athletics. A.P. Pub, Jalandhar.
 Fox EL (1998). Physiological Basis of Physical Education and Athletics Brown Pub.
 Gothi E (2004). Teaching & Coaching Athletics. Sport Pub., New Delhi.
 Gupta R. (2004). Layout & Marking of Track & Field. Friends Publications. India. New Delhi.
 Handbook- Rules and Regulation. International Athletic Federation (2018-19 / latest whenever published).
 Herb Amato, DA ATC et al (2002). Practical Exam Preparation Guide of Clinical Skills of Athletic Training. Slack Incorporated. 1st ed., USA.
 Kumar, Pardeep. (2008). Historical Development of Track & Field. Friends Publication. New Delhi
 Maughan, R. and Gluson, M. (2004). The Biomechanical Basics of Athletic Performance. Oxford University Press, U.K.
 Prentice, W. and Arnheim, D. (2005). Arnheim's Principles of Athletic Training 12th Ed. McGraw Hill. in place of Knight (1988).
 Renwick GR (2001). Play Better Athletics. Sports Pub, Delhi.
 Shrivastav AK. Abhay Kumar (1997). Athletics. S & S Parkashan.
 Singh Granth (1998). Track and Field Athletics. Ashoka, Delhi.
 Thani Lokesh (1995). Skills and Tactics-Track Athletics. Sports Pub. Delhi.

Semester IV
DSC- 12- FUNDAMENTALS OF SPORTS TRAINING

L –T - P = 4 -0 -2

Max. Marks =100

Time: 3Hrs

Objective: - To acquaint students with the knowledge of training principles and their application in enhancing the sports performance.

COURSE OUTCOME: - The Students will be able to apply training principles in developing various exercise programme and improving sports performances.

THEORY SYLLABUS:

60 Credits

Unit-I

10 Lectures

Importance, definition, Aim and objectives, Characteristics and Principles of Sports training
TRAINING LOAD, ADAPTATION AND RECOVERY: Concept of load & Adaptation and Factors affecting of load & adaptation

Unit-II

15 Lectures

STRENGTH: Types of strength (maximum strength; explosive strength and Strength endurance etc.) &
Determining Factors affecting strength performance and Methods of strength training
ENDURANCE: Definition and significance of endurance, forms of endurance and Methods to develop endurance

Unit-III

15 Lectures

SPEED: Definition, types factors determining speed, Methods to develop speed abilities
FLEXIBILITY: Definition, Factors affecting flexibility; Methods used to develop flexibility

Unit-IV

20 Lectures

TECHNICAL PREPARATION: Definition and meaning of technique, skill and style
Technique training & its implication in various phases;
Tactics and its aim, Principal of Tactical Preparation.
Periodization: Need & types of periodization
Competition: Preparation for competition, number & frequency, competition preparation.

Note: (a) One Theory period is equal to 1 credit of 1 hour duration.

(b) One Tutorial period is equal to 1 credit of 1 hour duration.

12 Credits

SUGGESTED READINGS

- Baechle T R & Earle R W (2000). Essentials of strength training and conditioning. Human Kinetics. USA.
Bompa. T.O. (1994). Theory and Methods of Training-A Key to Athletic Performance (3rd Ed.). Kandwall
Hunt Publication Co.
Bompa. T.O. and G. Gregory Hett. (2009) Periodization: Theory and Methodology of Training.
Dick FW (1999). Sport training Principles. A and C Black. London.
Newton H (2006). Explosive lifting for sports. Human Kinetics. US.
Singh Hardayal (1991). Science of Sport Training. D.V.S Pub. Delhi.

Semester IV
SEC-2(i) -INTRODUCTION TO MS-EXCEL AND SPSS

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:-The student will develop and gain knowledge about MS-Excel and SPSS

COURSE OUTCOME:-The Students will be able to apply the knowledge in the field of physical education and sports research as well as evaluating the sports performance.

After the Completion of First Month:

The Students will develop the understanding and knowledge of Introduction, Entering, Editing and Formatting of Data, Formatting Number and Understanding Formulas, Auto sum, mean, median, mode, average, sort, Auto fill and custom list.

After the Completion of Second Month:

The Students will develop the understanding and knowledge of Table, pivot table, Data Tool, Referencing Formula, lookups, Conditional Logics, Outline, sort, Filter and subtotal, pivot Table, Protecting Data and collaboration, Analysis Toolkit and Hands on Practice

After the Completion of Third Month:

The Students will develop the understanding and knowledge regarding Introductions to Graph & charts, Chart Type, Instant Chart, Update Chart, Column Chart, Picture Fill, Adjust Chart Size, Line Chart, Scatter Chart, Histogram, Boxplots, Graphing Means (Bar Charts and error bars), Line Charts, Scatterplot, Editing Graph and Hand on Practice

After the Completion of Fourth Month:

The student will learn SPSS Statistics Environment: Entering Data into the data editor, The variable View, Missing values, Importing data, SPSS viewer, Exporting SPSS output, Syntax Editor, Saving Files, Retrieving a File. The student will also gain knowledge of Non-parametric Model: General Procedure of Non parametric tests in SPSS, Comparing two independent conditions, Comparing two related conditions Hands on Practice and data analysis on SPSS.

THEORY SYLLABUS

48 Credits

UNIT-I Introduction to Excel

12 Lectures

Introduction, Entering, Editing and Formatting of Data and Formatting Number.
Understanding Formulas, Auto sum, mean, median, mode, average, sort, Auto fill and custom list

UNIT-II Introduction of Analysis tool in Excel

12 Lectures

Table, pivot table, Data Tool, Referencing Formula, lookups, Conditional Logics
Outline, sort, Filter and subtotal, pivot Table, Protecting Data and collaboration.
Analysis Toolkit
Hands on Practice

UNIT-III: Exploring Data with Graph in Excel and SPSS

12 Lectures

Introductions to Graph & charts, Chart Type, Instant Chart, Update Chart, Column Chart, Picture Fill, Adjust Chart Size, Line Chart, Scatter Chart
Histogram, Boxplots, Graphing Means (Bar Charts and error bars), Line Charts, Scatterplot
Editing Graph
Hand on Practice

UNIT-IV: Introduction of SPSS

12 Lectures

Introduction of SPSS Statistics Environment

- Entering Data into the data editor
- The variable View
- Missing values
- Importing data
- SPSS viewer
- Exporting SPSS output
- Syntax Editor
- Saving Files
- Retrieving a File.

Introduction of Non-parametric Model

- General Procedure of Non parametric tests in SPSS
- Comparing two independent conditions
- Comparing two related conditions

Hands on Practice

Data Analysis in SPSS

- Descriptive Statistics
- Compare Means

SUGGESTED READING:

Andy Field (2013), *Discovering Statistics Using IBM SPSS STATISTICS*, Sage Publication ISBN978-1-4462-4917

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington DC: APA Books.

Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and pro-social behavior: A meta-analytic review of the scientific literature. *Psychological Science*, 12(5), 353–359.

Arrindell, W. A., & van der Ende, J. (1985). An empirical test of the utility of the observer-to-variables ratio in factor and components analysis. *Applied Psychological Measurement*, 9, 165– 178.

Semester IV
SEC-2(ii) - WEIGHT MANAGEMENT

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: - Students will be educated with the knowledge and importance of weight management with the help of Physical exercises and Sports activities.

COURSE OUTCOME: - Students will learn various ways and means to assess fitness & weight management. Such knowledge and skills will help to create a strong foundation to engage human subject of all ages, sex, and ability.

Theory of Syllabus

48 Credits

Unit-I:

12 Lectures

Concept of Body Weight and Importance of Ideal Body Weight
Assessment of Body Weight – Visual Inspection, Height-weight Chart, Body Mass Index (BMI), Waist-Hip Ratio (WHR); Procedure for Measuring Body Weight and Height, Calculation of Body Mass Index (BMI) and Waist-Hip Ratio (WHR)

Unit-II:

12 Lectures

Concept and Causes of Obesity
Health Problems caused by over/ under nutrition - Diabetes Mellitus (Type II), Atherosclerosis, Coronary Heart Disease, Stroke, Cancer, Anorexia Nervosa, Bulimia Nervosa, Anemia, and Osteoporosis.

Unit-III: Nutrition and Weight Management

12 Lectures

Concept of Nutrition, Nutrients, Balanced Diet, Dietary Aids and Gimmicks, Concept of Energy and Activity, Energy Balance Equations, Calorie Intake and Expenditure.

Unit- IV:

12 Lectures

Ways and Means for Weight Management – Losing, Gaining and Maintaining Weight.
Concept and Causes of Malnutrition. Concept of Body Composition and its Assessment - Skinfold tests, Hydrostatic weighing, Body composition Analyzer.

SUGGESTED READINGS

ACSM'S (2001), ACSM Fitness Book (U.K., Human Kinetics).
Department of Physical Education and Sports Sciences, University of Delhi (2007), Draft Resource Material – Fitness, Aerobics and Gym-Operations.
Kumari, Sheela, S., Rana, Amita, and Kaushik, Seema (2009), A Practical Workbook on Fitness, Aerobics and Gym Operations, KhelSahitya, New Delhi.
Sharma K. et.al. (2014), Fitness Aerobics & Gym Operations, Jyoti Enterprises, Delhi.

Semester IV
SEC-2(iii) -WELLNESS LIFESTYLE

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: - Students will be educated with the knowledge and importance of wellness lifestyle with the help of Physical exercises and Sporting activities.

COURSE OUTCOME: - Students learn various ways and means to assess wellness. Such core knowledge and skills will help to create a strong foundation to engage human subject of all ages, sex, ability and persons with specialized need.

Theory of Syllabus

48Credits

UNIT-I

12Lectures

Introduction of physical fitness, components of physical fitness. Introduction, meaning and components of wellness. Measurement and evaluation of physical fitness.

UNIT- II

12 Lectures

Fitness and wellness counseling – role of fitness counselor in motivating the people, Physical activity and wellness - role of physical activity for the promotion of wellness.

UNIT –III

12 Lectures

Substance abuse and their hazards, Role of prevention of substance abuse in wellness and physical fitness, weight Management and its role in wellness.

UNIT-IV

12 Lectures

Meditation, anger management and stress management, Role of recreation, meditation and stress management in the promotion of health and wellness.

Suggested Reading:

- American college of sports medicine. (2005). ACSM'S Health-Related Physical Fitness Assessment Manual., London, Lippincott.
- Anspaugh, D. J. & Others (2003). Wellness, Boston McGraw Hills,
- Corbin C.B, G.J. Welk, W.R. Corbin and K.A. Welk (2008). Fitness & Wellness Concepts.
- Corbin, C.B. & Others. (2006) Concepts of Fitness and Wellness, Boston, McGraw Hill,
- Edward A. Taub, F. Murad and Oliphant D. 2007.The Wellness Solution,
- Hoeger, W.K. And S.A, Principles And Labs For Physical Fitness And Wellness, Australia: Thomson, 2006
- Kennedy, Carol, A. & Yoke, M.M., (2008). Methods of Group Exercise Instruction N.Y. Human Kinetics,
- Lang, Annette. (2007). Morning Strength Workouts, U.S. Human kinetic,
- Robin, J. (2005). The Great Physicians Rx for Health & Wellness: Seen Keys to Unlocking Your Health Potential. Nelson Books, Thomson Nelson Publishers, Nashville, Tennessee, USA.
- Savard, M. and C. Svec (2005). The body Shape Solution to Weight Loss and Wellness. Atria Books, Sydney, Australia.
- Taub, E.A., F. Murad and D. Oliphant (2007). The Wellness Solution based on Nobel Prize Science. World Almanac Library Publishers, Milwaukee, Wisconsin, USA.
- Tomkinson, G.R. & Olds, T.S. (2007). Pediatric Fitness, London Karger.
- Trudeau, K. (2007). The Weight – Loss Cure. Alliance Publishing Group, Inc., Elk Grove Village, Illinois, USA.
- Uppal and Gautam. (2008). Health and Physical Education, Friends Publication.

Semester IV
SEC - 2 (iv) Posture and Athlete Care

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: To impart the knowledge about the various physical postures, athletic care and first aid in case of sports injuries and rehabilitation.

COURSE OUTCOME: Students will learn the science of physical posture, athletic care and first aid in case of sports injuries and rehabilitation. Such core knowledge and skill helps to create a strong foundation to correct different postures, athletic care and first aid, especially persons with specialized need.

THEORY SYLLABUS:**48 Credits****Unit-I: Postures****12 Lectures**

Posture – Concept, Significance and Benefits, characteristics & Effect

Static postural assessments

Movement assessments

Bad Posture- Sitting, Standing, Walking, Lying down), Effects of Bad Posture on the Body.

Postural Deformities – Types and Causes of Kyphosis, Scoliosis, Lordosis, Knock Knees, Bow Legs, Flat Foot and respective corrective exercises.

Illnesses due to Improper Posture- Back Pain, Neck Pain and Corrective Exercises.

Unit-II: Athletic Care**12 Lectures**

Sports Medicine and Athletic Care - Concept and Significance, Factors causing Injuries

General Principles of Prevention of Injuries

Common Sports Injuries (Strain and Muscle and Ligament Sprain, Frozen Shoulder, Lower Back Strain, Tennis and Golfer's Elbow, Runner's Knee, Shin Pain, Blister, Concussion, Abrasion, Laceration, Haematoma, Fracture, Dislocation)

Unit-III: First Aid, Ergogenic Aids and Rehabilitation**12 Lectures**

1.1 Sports Injuries and First Aid (P.R.I.C.E.)

1.2 Rehabilitation - Aim and Objective, Recovery (Ice bath, Contrast Bath, Hot Fomentation)

1.3 Management of Injuries (Strain and Muscle and Ligament Sprain, Frozen Shoulder, Lower Back Strain, Tennis and Golfer's Elbow, Runner's Knee, Shin Pain, Blister, Concussion, Abrasion, Laceration, Haematoma, Fracture, Dislocation)

Unit-IV: Therapeutic Modalities and Rehabilitation**12 Lectures**

1.4 Therapeutic Modalities (Therapeutic Ultrasound, Interferential Therapy Unit, T.E.N.S., Infrared Lamp, Wax Bath, Short Wave Diathermy)

1.5 Muscle Strengthening through Active and Passive Exercise.

1.6 Therapeutic value with Yogasanas for rehabilitation and strengthening of the muscles.

SUGGESTED READINGS

ACSM's Guidelines for Exercise Testing and Prescription (2001), American College of Sports Medicine, New York, U.S.A.

Anspaugh, D.J., G. Ezell and K.N. Goodman (2006) **Teaching Today Health**, Mosby Publishers, Chicago (USA)

Beotra, Alka (2001-02) **Drug Education Handbook on Drug Abuse in Sports**, Applied Nutrition Sciences, Mumbai.

Donatelle, R.J. and Ketcham P. (2007), **Access to Health**, Benjamin Cummings, Boston, USA.

Fahey, T.D., M.P. Insel and W.T. Rath (2006), **Fit & Well: Core Concepts and Labs in Physical Fitness**, McGraw Hill, New York.

Flyod, P.A., S.E. Mimms and C. Yelding (2003) **Personal Health: Perspectives and Lifestyles**, Thomson, Wadsworth, Belmont, California, USA.

Hoeger, W K and S.A. Hoeger (2004). **Principles and Labs for Fitness and Wellness**, Thomson Wadsworth, California, USA.

Kumari, Sheela, S., Rana, Amita, and Kaushik, Seema, (2008), **Fitness, Aerobics and Gym Operations**, Khel Sahitya, New Delhi.

Jain, J. (2004) **Khel Dawaon Ka** (New Delhi: Delhi University Press).

Pande, P. K. (1987) **Outline of Sports Medicine** (New Delhi: Jaypee Brothers).

Roy, Steven and Richard, Irvin (1983) **Sports Medicine**, Benjamin Cummings, Boston, USA.

Schindler, J.A. (2003) **How to Live 365 Days a Year** (Boston: Running Press).

Semester IV
SEC - 2 (v) Olympic Education

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: To impart the knowledge about the Olympism its functions through the various International sports federation, National committees and IOC commissions.

COURSE OUTCOME: Students will learn the deep knowledge about ancient and modern Olympics, administration, organisation of Olympics Games and functions of IOC.

THEORY SYLLABUS:

48 Credits

UNIT-I THE OLYMPIC MOVEMENT

12 Lectures

Concept of Olympics movement, the ancient Olympic games and the Modern Olympic games and its movement.

Aims and symbols of the Olympic movement.

The International Olympic Committee (IOC).

UNIT-II STRUCTURE OF THE OLYMPIC MOVEMENT

12 Lectures

The National Olympic Committee (NOC).

The International Sports Federations (IFs).

The National Sports Federations (NFs).

Volunteerism and Olympics games.

UNIT-III THE OLYMPIC GAMES

12 Lectures

Organization of Olympics games.

The international bid process for selecting sites / city for the games.

Participation in Olympic Games.

Women and sports.

UNIT-IV IOC PROGRAMMES

12 Lectures

Olympic museum, Olympic academy and Olympic solidarity program. Paralympics games and concept of Sports for all.

Culture, Olympism, winning, participation and universality of the games.

Drug abuse and doping.

SUGGESTED READING:

Carto, J.E.L. And Calif, S.D. (1984). Medicine & Sport Science: Physical Structure of Olympic Athletes. London: Karger.

Cliw, Gifford, (2004). Summer Olympic.

Daw, Anderson. (2008). The Story of the Olympics.

Kumar, Pardeep. (2008). Historical Development of Track & Field. Friends Publication. New Delhi.

Maranirs David, Rome 1960: The Olympics that changed the world, 2008.

Osborne, Manpope, Ancient Greece and the Olympic, 2004.

Oxlade, chris., Olympic, 1999.

Perrottet, tony, The Naked Olympics: the true story of the Ancient Games, 2004.

Toropove, Brandon., The Olympic for Beginners, 2008.

Wallechineley, Davi, The Complete Book of the Olympic, 1992.

Semester IV
SEC - 2 (vi) SPORTS & EXERCISE NUTRITION

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: - To acquaint student with the knowledge of basic nutrition and nutrition in Sports & Exercise and other related aspects important to sports persons.

COURSE OUTCOME: - The student would be able to apply the knowledge of nutrition in day to day life and in sports and training. Such core knowledge and skill helps to create a strong foundation to engage human subject of all ages, sexes and abilities.

THEORY SYLLABUS:

48 Credits

Unit-I

12 Lectures

Introduction to basic concepts in nutrition-Nutrients of physiological significance their sources & functions requirements in normal health conditions.

Unit-II

12 Lectures

Energy metabolism-BMR, RMR, energy expended on physical activity and TEF. Energy requirements of specific sports groups, Energy cost of activities, Energy substrate for activities of different intensity and duration; aerobic Concept of energy balance in maintaining weight.

Unit-III

12 Lectures

Basic food groups, Concept of balanced diet, General and specific dietary guidelines in planning meals for children, adolescents, adult men and women, elderly, Nutritional considerations for sports/exercising person (endurance and strength sports/exercise training) during training, pre event meal, during event and post event meal.

Unit-IV

12 Lectures

Concept of Fluid in sports- Hypotonic, Isotonic and Hypertonic. Requirement of fluid for various activities. Fluid balance in sports and exercise- Importance, Symptoms and prevention of dehydration. Normal weight-concept, weight management skills.

Eating disorders in Sports Persons, Female athletic triad and Sports anemia. Nutrients as ergogenic aids for sports and exercise. Supplements and their role in sports.

SUGGESTED READINGS

- Antoni, J. et al, Editors (2008). Essentials of Sports Nutrition and Supplements. Humana Press, USA.
Benardot, D. (2005). Advanced Sports Nutrition. Human Kinetics, USA.
Brown Judith E (2002). Nutrition Now. Canada Pub. Peter Marshal
Caliendo Mang Alica (1981). Nutrition and Preventive Health Care McMillan Publication Co.
Clark, N. (2008). Sports Nutrition. 4th Ed. Human Kinetics, USA.
Eberle, S.G. (2007). Endurance Sports Nutrition. Human Kinetics, USA.
Finic HH et al (2006), Practical Applications in Sports Nutrition J & B Publisher, USA.
Lal PR (2009) Handbook of Sports Nutrition, Friends Publication.
McArdle, W.d. & Katch, V.L. (2008). Sports and Exercise Nutrition. 3rd Ed. Lippincott Williams and Wilkins, USA.
Meyer, D.E.L. (2006). Vegetarian Sports Nutrition. Human Kinetics Publishers, USA.
Whitney E. and Rolfes S.R. (2005). Understanding Nutrition. Thomson Wadsworth. Belmont. California. U.S.A.

Semester IV
SEC - 2 (vii) STRESS MANAGEMENT

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: - To acquaint the student with the knowledge and understanding of anger, stress and its management and other related aspects important to sports persons.

COURSE OUTCOME: - The student would be able to apply the knowledge, learning and understanding the concept of anger, stress and how to manage it.

THEORY SYLLABUS:**48 Credits****Unit-I****12 Lectures**

Definition of stress and anger, Causes and effects of stress and anger, two main emotions of stress-fear and anger, Daily life stressors, Process of stress and anger- Psycho Physiology of stress.

Unit-II**12 Lectures**

Adaptation to stress-Reframing of habitual stress resistance, types of stress-personal and social stress Occupational stress, Peer stress / Students stress, Family stress, Stress & elderly and Stress & drug abuse. Stress related diseases- i) Sleep disorder, ii) Eating disorder, iii) Sexual and emotional disorder, iv) Other stress related diseases, v) Stress & Spirituality.

Unit-III**12 Lectures**

Self-awareness and stress management, Muscular tension reduction, Emotional tension reduction, Stress free living, Stress free examination, Stress management through physical activity, Stress management through recreation.

Unit-IV**12 Lectures**

Anger management- Redford William's 12 steps of anger management
Stress management- behavior modification, time management, coping strategy & intervention skills.
Relaxation technique- i) Diaphragmatic breathing, ii) Meditation, iii) Progressive muscle relaxation, iv) Yoga, v) Mental imagery, vi) Music therapy, vii) Massage therapy

SUGGESTED READINGS

- Adrain F & Herrick E. and Sharp P (1998). Anger Management. Routledge Publishing. Florence. Kentucky. U.S.A.
- Allen E (2008). Stress Management for Dummies. For Dummies Publishers. U.S.A.
- Davis M. et al (2008). The Relaxation and Stress Reduction workbook. Harbinger Publications, USA.
- Greenberg J.S. (2008). Comprehensive stress management. McGraw Hill, USA
- Hipp E. (2008). Fighting Invisible Tigers: Stress Management for Teens. Free Spirit Publishing, USA.
- Mac W. (2007). Anger and Stress Management. God's Way. Calvary Press, USA.
- Petee F (2006). Anger Management. Pentagon. Press. New York. U.S.A.
- Swate Y B (2009). Anger Management. Sage Publication. New Delhi.
- NCERT & CBSE publication and reading for stress management.

Semester IV
SEC - 2 (viii) PERSONALITY DEVELOPMENT

L - T - P = 4 - 0 - 0

Max. Marks = 100

Time: 3Hrs

Objective: To impart the knowledge about the personality of the individuals and factors responsible for the development of personality.

COURSE OUTCOME: Students will learn different components and importance of personality. Such core knowledge and skill helps to create a strong foundation for developing personality.

THEORY SYLLABUS:

48 Credits

UNIT-I

12 Lectures

Introduction to Personality & holistic Personality, Meaning and Definition of Personality & holistic Personality. Freud's concept of personality. Defense Mechanisms. Components of holistic Personality (Physical, Emotional, Social, Temporal-Mental, Occupational, Vital, Environmental and Spiritual). Holistic personality as represented by the car and its four wheels. (8 Hours)

UNIT-II

12 Lectures

Physical Personality: Introduction, Meaning, Definition and Components of Physical Personality. Physical Personality Principles of developing, controlling and maintaining Physical personality. Theoretical background Measurement of personality. Understanding physical growth and development. Pattern of physical growth and development of different body tissues. Switching on the favorable genes and switching off the unfavorable and undesired genes. (8 Hours)

UNIT-III

12 Lectures

Personality and Wellness: Introduction to wellness, relation of wellness and personality. Components of wellness, health, physical fitness, behaviour, behaviour change method, understanding self-responsibility for one's wellness. Personality and Physical Fitness: Introduction, Components of Physical Fitness, Role of Physical Fitness in Physical Personality Development. (9 Hours)

UNIT-IV

12 Lectures

Mental Personality: Introduction, Meaning and Definition of Mental Personality. Type A, B and C personality characteristics. Somatotype and Personality Traits: Introduction to Somatotype and Mental Personality Traits. Spiritual Personality Development: Introduction, Meaning and Definition of Spiritual Personality. Quick fix and long term foundation of Spiritual Personality Development. Heredity and Environment: Introduction to Heredity and Environment in relation to personality development. (9 Hours)

SUGGESTED READINGS

- Kansal, D.K. (2010). Holistic Personality Development. Sports and Spiritual Science Publications, New Delhi
 Bernard N. (2001). Turn off the Fat Genes. Harmony Books, New York. U.S.A.
 Callohan L. (2002). The Fitness Factor. The Lyons Press. Guilford. Connecticut. U.S.A.
 Covey SR (2004). The 8th Habit. Franklin Covey Co., Running Press Book Publishers. Philadelphia. Pennsylvania. U.S.A.

Semester- V

S.No.	Paper No.	Title	Credit
			Theory/Practical/Tutorial
1	SEC-3	SEC – 3-4 credits (4Th) Select any one option other than SEC - 1: i. English (Technical writing) ii. Hindi (Social Media) iii. Growth and Development iv. Adapted Physical Education v. Sports Management vi. Method of Education vii. Exercise Prescription viii. Sports for All	4 (4 THz)
2	DSE-1**	Sports Proficiency – 1**	6 (4 THz + 2 P)
3	DSE-2	Kinesiology and Biomechanics	6 (5 THz + 1 P)
4	DSE-3	Research Methodology	6 (5 THz + 1 Tut)
		Total Credit	22

Note:

- ☐ THz = Theory
- ☐ P = Practical
- ☐ Tut = Tutorial

**DSE-1: A student must select different game/sport other than DSC – 3/ DSC – 9 (Game of specialization) to be studied in DSE-1 from out of the below listed games/sports:-

List of Games/Sports

Badminton (ii) Basketball (iii) Cricket (iv) Football (v) Handball (vi) Hockey (vii) Judo
(viii) Kabaddi (ix) Kho-Kho (x) Volleyball

Semester V**L -T - P = 4 -0 -0****SEC-3 (i) English (Technical Writing)**

The syllabus contents of the English will be provided by the Department of English, C.S.J.M.U., Kanpur

Note: (a) One Theory period is equal to 1 credit of 1 hour duration.

48 Credits

Marking Scheme: Maximum Marks -100 marks

Theory Examination -75 Marks

Internal Assessment -25 Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks

Project/Assignment/Seminar - 10 Marks

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

Question Paper will be divided into two parts A and B. The Examiner is required to set 5 questions for Part-A and 5 questions for Part-B setting at least one question from each unit from each of the four units of the syllabus. The questions of Part-A shall carry 5 marks each and questions for Part-B shall carry 15 marks each. A student is required to attempt any 3 questions from Part-A and 4 questions from Part-B. It is mandatory for an examiner to set two sets of question papers (English Version as well as Hindi Version).

Semester V

L -T - P = 4 -0 -0

SEC-3 (ii) Hindi (Social Media)

The syllabus contents of the Hindi will be provided by the Department of Hindi, C.S.J.M.U., Kanpur

Note: (a) One Theory period is equal to 1 credit of 1 hour duration.

48 Credits

Marking Scheme: Maximum Marks -100 marks

Theory Examination -75 Marks

Internal Assessment -25 Marks

Internal Assessment (Maximum Marks – 25)

Presentation/ Class Test/Viva - 10 Marks

Project/Assignment/Seminar - 10 Marks

Attendance - 5 Marks

Instruction for Examiners/ Paper Setters for Theory Examination:

Question Paper will be divided into two parts A and B. The Examiner is required to set 5 questions for Part-A and 5 questions for Part-B setting at least one question from each unit from each of the four units of the syllabus. The questions of Part-A shall carry 5 marks each and questions for Part-B shall carry 15 marks each. A student is required to attempt any 3 questions from Part-A and 4 questions from Part-B. It is mandatory for an examiner to set two sets of question papers (English Version as well as Hindi Version).

Semester V
SEC-3 (iii) Growth and Development

L –T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: - Students will be educated with the knowledge and importance of physical growth & development

COURSE OUTCOME: - Students learn various factors affecting the physical growth & development.

Theory of Syllabus **48 Credits**

Unit-I **12 Lectures**

Introduction-Meaning and definition of growth, development, difference between the growth and development, factors affecting growth and development .Stages of growth & development:-Pre-natal and Post natal growth and development

Unit-II **12 Lectures**

Physical growth, Cognitive (mental) growth, emotional development and Psychological Development, relationship between physical growth of brain and intellectual ability

Unit-III **12 Lectures**

Adolescent growth & development. Distance & Velocity Curves

Unit-IV **12 Lectures**

Introduction to Motor Development and body physique

Suggested Readings:

- Day J AP (1986). Perspectives in Kianthropometry. The 1984 Olympic Scientific Congress Proceedings. Volume I. Human Kinetics Publisher. Champaign. Illinois. USA.
- Gallahue DL and JC Ozmun (1998). Understanding Motor Development- Infants, Children, Adolescents and Adults McGraw Hill Company Boston. USA.
- Gallahue DL (1993). Developmental Physical Education for Today's Children WCB. Brown & Benchmark. Dubuque Indiana. USA.
- Harrison GA, JS Weiner JM Tanner and NA Barnicot (1984) Human Biology Clarendon Press. Oxford. London.
- ICMR (1989). Growth and Physical Development of Indian Infants and Children. Indian Council of Medical Research. New Delhi.
- Kansal DK (2008). Textbook of Applied Measurement Evaluation and Sports Selection. Sports and Spiritual Science Publications. New Delhi.

Semester V
SEC-3 (iv) ADAPTED PHYSICAL EDUCATION

L –T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:- Students will be educated with the knowledge and importance of adapted physical education with the help of Physical exercises and Sporting activities, which will be beneficial for abled person.

COURSE OUTCOME:- Students learn various ways and means for adapted physical education with the help of Physical exercises and Sporting activities, which will be beneficial for abled person.

THEORY SYLLABUS:

48 Credits

UNIT-I INTRODUCTION TO ADAPTED PHYSICAL EDUCATION

12 Lectures

Meaning, definitions, Aims and objectives, Need and importance. Role of physical education in adapted physical education. Brief historical review of adapted physical education.

UNIT-II CLASSIFICATION OF DISABILITY

12 Lectures

Changing concept of disability handicaps, retardation, physically and mentally challenged.

Physical disability, Characteristics and Category. Functional limitation, General causes.

Mental retardation and learning disability, Characteristics, Category, Functional limitation, General causes, Hearing and speech impairment. Characteristics, Category, Functional limitation, General causes, Visual impairment, Characteristics, Category, Functional limitation, General causes. Other disabled conditions. Behavioral problems associated with disability, Adjustment problem, Emotional problem, Personality problem, Social problems, Social stigma, Discrimination and Social rejection

UNIT-III ADAPTED PHYSICAL EDUCATION PROGRAMMES

12 Lectures

Guiding principles for adapted physical education programme (AAHPER Principle).

Physical education programme for disabled of - Elementary school, Middle school, High school.

Special adapted programme for various types and categories of physical disability. Regular physical activity Informal games and special activity, Informal and formal competitions.

Special adapted programme for hearing and speech impairment, visual impairment, mental retardation and learning impairment. Regular physical activity, Informal games and special activity, Informal and formal competitions.

UNIT-IV ACTIVITIES FOR DISABLED

12 Lectures

Co-curricular activities for disabled, outdoor programs for disabled, and adventure based outdoor programme.

Creative development and hobby & culture development programme. Aquatic activity programme for disabled Importance of activity for disabled.

Nature of aquatic activity programme based on types of various disabilities and rehabilitative role and importance of aquatic activity Rehabilitation, aims and objectives of rehabilitation, meaning of functional and occupational rehabilitation Importance of adapted programme in rehabilitation. Functional rehabilitation, Psychological rehabilitation – adjustment, environmental and personality development and legislative approach

SUGGESTED READINGS:

C, Blauwet, (2007). Promoting the Health and Human Rights of Individuals with a Disability through the Paralympic Movement. (ICSSPE,) at 21. (Blauwet- Promoting the Health).

Barton, L. (1993) „Disability, empowerment and physical education“, in J. Evans (ed.), Equality, Education and Physical Education. London: The Falmer Press.

Guttmann, L. (1976) Textbook of Sport for the Disabled. Oxford: HM & M Publishers.

K, DePauw & S. Gavron, (2005). Disability and Sport. (2nd Ed) Illinois: Human Kinetics.

- R, Metts. (2000). Disability Issues, Trends and Recommendations for the World Bank (Washington D.C.: World Bank,).
- Oliver, M. (1990). The Politics of Disablement. Basingstoke: Macmillan.
- Sport England (2000) Young People with a Disability and Sport. London: Sport England.

Semester V
SEC-3(v)-SPORTS MANAGEMENT

L –T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:- To acquaint students with knowledge of management and planning of Sports Competitions & Tournaments.

COURSE OUTCOME:- The student learns to plan, organize & execute sports events.

THEORY SYLLABUS:

48 Credits

Unit-I

12 Lectures

Meaning, concept and definition of sports management , Historical perspective of sports management in India
Nature and scope of sports management, Aims and objectives of sports management, skills of sports management.

Unit - II

12 Lectures

Guiding principles of sports management , Leaderships, Identification of resources
Process or function of Sports Management (Planning, Organizing, Personnel / Staffing, Direction, Controlling, Coordination)

Unit –III

12 Lectures

Definition and meaning of planning, Need and importance of planning, Principle of planning, Steps involved in planning process. Organization and conduct of competition at various levels (State level competition , Inter college competition, National level Competition)
Techniques of supervision in sports management, Methods of supervision / Role of a coach/manager.

Unit – IV

12 Lectures

Job specification of sports manager in professional and state regulated sports bodies, managers, physical educational professional, career avenues and professional preparation, Tournaments/Competitions, Types of Tournaments, Fixture, Seeding, Structure and functions of S.A.I., University Sports Council and A.I.U.
Purchase: List of Consumable and Non- Consumable sports goods and equipment in the Department of physical education, Procedure to purchase sports goods and equipment in the department of physical education, stock entry, storing and distribution.

Suggested Readings

- Allen, L.A. (1988) Management & Organization. Kogakusha Co. Tokyo.
- Hert, Renis, New Patterns of Management, McGraw Hill, 1961.
- Sandhu, K. Sports Dynamics: Psychology, Sociology and Management
- Sivia, G.S. (1991). Sports Management in Universities, New Delhi: A.I.U. Deen Dayal Upadhyaya Marg.

Semester V
SEC-3 (vi)- METHODS IN PHYSICAL EDUCATION

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:- To acquaint students with theoretical & practical knowledge of methods of teaching, coaching & officiating in Physical Education & Sports.

COURSE OUTCOME:-Students will understand the use of various methods in teaching & coaching in the field of physical education & sports. They will also learn the officiating in various sports events.

THEORY SYLLABUS

48 Credits

UNIT I

12 Lectures

Meaning, Definition, Scope and importance of Organisation and Administration. Meaning of teaching, coaching, officiating and as a career in Physical Education & Sports. Meaning and need for methods, factors influencing teaching method.

UNIT II

12 Lectures

Teaching methods: command, demonstration, imitation, discussion, part- whole, whole- part-whole, explanation and recitation. Class management: techniques, formations, command (types and techniques) factors effecting class management Lesson Plan: Need, construction, Introduction development, skill/recreation

Unit-III

12 Lectures

Leadership in Physical Education and Sports: Meaning, Definition, Scope and importance; qualities and qualification of Physical Education Teachers. Reports and records; Meaning, Definition and essence of writing different reports. Records maintaining of Physical Education and Sports for future reference.

Unit-IV

12 Lectures

Tournaments/Competitions and types, Fixture, types of fixture and seeding, Time table: Meaning, concept, importance and principles of construction of time-table and Factors effecting construction of Time-table.

SUGGESTED READINGS

- Alliance, A. (1999). Physical Best Activity Guide, New Delhi,
- Carpel, S. et al Editors (2006). A Practical Guide to Teaching Physical Education. Routledge Publishers, USA.
- Dheer, S. and Radhika. (1991). Organisation and Administration of Physical Edu., ND: Friends Pub.
- Frost, R.B. and Others. (1992). Administration of Physical Education and Athletics, Delhi: Universal Book.
- Gangwar, B.R. (1999). Organisation Admn. & Methods of Physical education, Jalandhar: A.P. Pub.
- Gangwar, B.R. (1999). Sharirik Shiksha Ka Prabandh Prashashan Avam Vidhiya, Jalandhar: A.P. Pub.
- Graham, G.M. (2009). Children Moving: A Reflective Approach to Teaching Physical Education. 8th Ed. McGraw Hill, USA.
- Gupta R. (2010). Sharirik Shiksha Mein Shikhshan Pradhyogiki. Friends Publication. New Delhi.
- Gupta R. Kumar P. & Sharma D.P. (1999). Lesson Plan in Physical Education & Sports. R.D.P. Publication. New Delhi.
- Gupta R. Kumar P. & Sharma. D.P.S. (2004). Sharirik Shiksha Mein Path Yojna. Sahyog Prakashan. New Delhi.
- Gupta R. Kumar P. & Tyagi S. (2008) Textbook on Teaching Skill & Prowess. Part I & II. Friends Publication. India. New Delhi.

- Kamlesh ML (2005). Methods in Physical Education. Friends Publication. Delhi.
- Kamlesh ML (2005). Sharirik Shiksha Ki Vidiyan. Friends Publication. Delhi.
- Panday Laxmikant (1996). Sharririk Shiksha Ki Shiksha Padati. Metropolitan Book. New Delhi.
- Shaw D & Kaushik S (2001). Lesson Planning- Teaching Methods and Classman in Physical Education. K.S.K. Delhi.
- Shaw, D & Kaushik, S, (2001). Lesson Planning: Technical Methods and Class Management, New Delhi: S.K.
- Singh, M.K. (2007). Shareerik Shiksha Main Sangtan, Prashashan, Avum Parvakshan. N.D. Friends Publication.
- Shrivastava A.K. (2004). Shareerik Shiksha Khel Main Sangthan Avum Prashashan. Sports. New Delhi.
- Vanaik A. (2010). Methods in Physical Education, Friends Publication. New Delhi
- Wrisberg A (2007). Sport Skill Instruction for Coaches. Human Kinetics. Champaign. Illinois. U.S.A.

Semester V
SEC - 3(vii) - Exercise Prescription

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective:- Students will be educated with the knowledge and importance of Exercise Prescription with the help of Physical Exercises and Sports activities in systematic and scientific procedure.

COURSE OUTCOME:- Students learn various ways, means and methods to exercise prescription the better fitness and lead a healthy life style.

Theory of Syllabus

48 Credits

Unit I

12 Lectures

Meaning and definition of Exercise and Physical Activity, difference between Exercise and Physical Activity, types of exercises, exercise, lifestyle and physical fitness, exercise and health, health benefits of exercise and exercise recommendations for health.

Unit II

12 Lectures

Basis for exercise prescription for general population, background of exercise prescription in regard to interest, attitude, habits and physical capability, exercise for sportsperson, their fitness, wellness and competition.

Unit III

12 Lectures

Health benefits of exercise, Exercise as proactive care, prevention of heart diseases, osteoporosis, diabetes, hypertension, obesity etc.

Necessity of Exercise Prescription for sedentary population and sportsperson, self-responsibilities and behaviour change stages for exercise regularity.

Unit IV

12 Lectures

Steps for exercise prescription, Stress test, and physical fitness test, understanding the acronyms FITT (Frequency, intensity, time), type (mode of exercise) and GO SIR (Progression-Gradual increase, overload, specificity, individualization, recovery and regularity).

Suggested Reading:

American college of sports Medicine., ACSM's Health-Related Physical Fitness Assessment Manual., London, Lippincott, 2005.

Anspaugh, D. J. & Others, Wellness, Boston McGraw Hills, 2003

Corbin C.B, G.J. Welk, W.R. Corbin and K.A. Welk (2008). Fitness & Wellness Concepts.

Corbin, C.B. & Others, Concepts of Fitness And Wellness, Boston, McGraw Hill, 2006

Edward A. Taub, F. Murad and Oliphant D., The Wellness Solution, 2007.

Hoeger, W.K. And S.A, Principles And Labs For Physical Fitness And Wellness, Australia: Thomson, 2006

Kennedy, Carol, A. & Yoke, M.M., Methods of Group Exercise Instruction N.Y. Human Kinetics, 2008

Lang, Annette , Morning Strength Workouts, U.S. Human kinetic, 2007

Robin, J. (2005). The Great Physicians Rx for Health & Wellness: Seven Keys to Unlocking Your Health Potential. Nelson Books, Thomson Nelson Publishers, Nashville, Tennessee, USA.

Savard, M. and C. Svec (2005). The body Shape Solution to Weight Loss and Wellness. Atria Books, Sydney, Australia.

Taub, E.A., F. Murad and D. Oliphant (2007). The Wellness Solution based on Nobel Prize Science. World Almanac Library Publishers, Milwaukee, Wisconsin, USA.

Tomkinson, G.R. & Olds, T.S. (ED.), Pediatric Fitness, London Karger, 2007.

Trudeau, K. (2007). The Weight – Loss Cure. Alliance Publishing Group, Inc., Elk Grove Village, Illinois, USA.

Uppal and Gautam. (2008). Health and Physical Education, Friends Publication,

Semester V
SEC - 3 (viii) SPORTS FOR ALL

L -T - P = 4 -0 -0

Max. Marks =100

Time: 3Hrs

Objective: To impart the knowledge about the sports, play, recreation, games and motivational factors towards sports, their fitness components and health.

COURSE OUTCOME: Students will learn about the sports and recreation, and their health benefits for normal and challenged population.

THEORY SYLLABUS:**48 Credits****UNIT-I****12 Lectures**

INTRODUCTION: Meaning and definition of Sports, Play, Games, Recreation, Pleasure, Happiness, Comforts;
 Motivation towards Sports; Introduction to Sports for fitness, fun and, competitions. (10 Lectures)

UNIT-II**12 Lectures**

SPORTS FOR FITNESS: Meaning and definition; Components of health related Physical Fitness.
 Measurement of Health Related Physical Fitness (HRPF); Development and Maintenance of Health Related Fitness

UNIT-III**12 Lectures**

SPORTS FOR FUN: Meaning & Definition of fun, Minor games, Games Festival; Organization and guidelines for Games Festival; Games Festival Facility; Sports Clubs.
 SPORTS FOR COMPETITIONS: Meaning & Definition of Competition; Sports Selections; Sports participation and sports competitions. (10 Lectures)

UNIT-IV**12 Lectures**

SPORTS FOR HEALTH: Meaning and Definition of Health; Preventive health measures and sports;
 SPORTS FOR
 SPORTS FOR CHALLENGED POPULATIONS: Introduction, Meaning and definitions of different challenged populations: Visually Challenged, Auditory Challenged, Physical Challenged. Modified Sports for above categories of challenged populations.
 SPORTS FOR FIGURE & PERSONALITY: Meaning, concept and definition of Figure, general appearance, Personality measures; overweight and its disfigure effects; weight control, exercise and Sports.

SUGGESTED READINGS

- Bhatnagar DP. SK Verma and R. Mokha (1999). Human Growth. Exercise Science Publications Society. Department of Sports Sciences, Punjabi University, Patiala-147 002, Punjab.
- Corbin et.al. (2006). Fitness & Wellness-Concepts. McGraw Hill. Publishers. New York.U.S.A.
- Gopalan GB Sastri VR and. Balasubramanian SC (2004). Nutritive Value of Indian Foods. National Institute of Nutrition (ICMR). Hyderabad-500 007.
- Jensen C. and Naylor J. (2005). Opportunities in Recreation and Leisure Sports. McGraw Hill. Publishers. New York.U.S.A.
- Kansal DK (2008). Text book of Applied Measurement, Evaluation & Sports Selection, Sports & Spiritual Science Publications, New Delhi.
- Singh S.P.S. and Malhotra P (2003). Anthropometry. Human Biology Department. Punjabi University. Patiala-147 002 (India).

Semester V**DSE-1 (i) Sports Proficiency – 1 (BADMINTON)****L –T - P = 4 -0 -2**

Max. Marks =150

Time: 3Hrs

Objective: -The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS**48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
 Organisational Structure (State, National and International Level)
 Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Rules of the game/sport.
 Duties and Responsibilities of Officials.
 Score sheet and Record Keeping
 Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
 Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
 Coordinative Abilities and Flexibility.

Practical -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
 Learning to demonstrate various drills for perfecting a skill
 Learning and demonstrating to complete the process of scoring/judgment.

Suggested reading:

- Bloss, M.V. et al (2000). Badminton. McGraw Hills,USA.
 Downey J (1990). How to Coach Badminton. Collins Pub. London.
 Golds, M. (2002). Badminton: Skills of the Game. Growood Press,USA.
 Grice, T. (2007). Badminton: Steps to Success. 2nd Ed. Human Kinetics,USA.
 GuptaR.KumarP.andTyagiS.(2008).TextbookonTeachingSkillandProwess(PartI&II).Friends Publication. New Delhi.
 Jain D (2001). Teaching and Coaching –Badminton. Khel S.K.Delhi
 Kumar A (2003). Badminton. Discovery, New Delhi.
 Narang P (2005). Play and Learn Badminton. Khel Sahitaya Kendra
 Singh MK (2006). A to Z Badminton. Friends Pub. New Delhi.
 Singh MK (2007). Comprehensive Badminton. Friends Pub. New Delhi.
 Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi.
 Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester V
DSE-1 (ii) - Sports Proficiency – 1 - BASKETBALL

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Rules of the game/sport.
Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practicals -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- Drewett, J. (2007). How to Improve at Basketball. Crabtree Publishing Co.,USA.
Goldstein, S. (1998). Basketball Fundamentals. 2nd Ed. Golden Aura Publishing,USA.
Jain Naveen (2003). Play and Learn Basket Ball. KhelSahitya Kendra. New Delhi.
Nat BB (1997). Conditioning Coaches Association. NBA Power Conditioning. Human Kinetics.
Sharma OP (2003). Basket Ball Skills and Rules. Khel Sahitya Kendra, Delhi.
Thani Lokesh (1995). Skills & Tactics of Basket Ball. Sport Pub. New Delhi.
Thani Yograj (2002). Coaching Successfully Basket Ball. Sports Publisher. Delhi.
Wilmore J. H. &Costill, D.L. (2004).Physiology of Sports & Exercise. Human Kinetics,USA.

Semester V
DSE-1 (iii) - Sports Proficiency – 1 (CRICKET)

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: -The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
 Organisational Structure (State, National and International Level)
 Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Rules of the game/sport.
 Duties and Responsibilities of Officials.
 Score sheet and Record Keeping
 Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
 Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
 Coordinative Abilities and Flexibility.

Practical -

24 Credits

Learning and demonstrating various skills/techniques of sports.
 Learning to demonstrate various drills for perfecting a skill
 Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

Amarnath M. (1996). Learn to Play Good Cricket. UBS Publishers. New Delhi.
 Boycott, G. (2010). Play Cricket the Right Way. Great Northern Books Limited, U.K.
 Cricket (2008). Sports Skills: Cricket Fielding (Know the Game). A & C Black Publishers.
 Gupta, K. (2006). How to Play Cricket. Goodwill Publishing House, New Delhi.
 Hobbs, J. (2008). The Game of Cricket As it should be Played. Jepson Press, USA.
 Jain R. (2003). Fielding Drills in Cricket. KhelSahitya Kendra. New Delhi.
 Rachna (2002). Coaching Successfully: Cricket. KhelSahitya Kendra. New Delhi.
 Sharma P. (2003). Cricket. Shyam Parkashan. Jaipur.
 Thani V. (1998). Coaching Cricket. KhelSahitya Kendra. New Delhi.
 Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester V**DSE - 1 (iv) - Sports Proficiency – 1 (FOOTBALL)****L –T - P = 4 -0 -2**

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS**48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Rules of the game/sport.
Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practicals -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- American Football Coaches Association (2002). The Football Coaching Bible. 1st Ed., Human Kinetics, USA.
Carling, C., Williams, M. and Reilling, T. (2006). Handbook of Soccer Match Analysis : A Systematic Approach to Improving Performance. Routledge Publishers,USA.
Long, H. and Czarnecki, J. (2007). Football for Dummies. For Dummies Publisher,USA.
N Kumar (2003). Play and Learn Football. K.S.K. New Delhi.
Reilly, T. (2006). The Science Training Soccer : A Scientific Approach to Developing Strength, Speed and Endurance. Routledge Publisher,USA.
Reilly, T. and J.C.D. Arau (2008). Science and Football V : The Proceedings of the 5th World Congress on Sports Science and Football, Volume5.
Sharma OP (2001). Teaching and Coaching –Football. Khel S.K.Delhi.
(2002). Coaching Successfully Football. K.S.K. New Delhi.
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester V
DSE - 1 (v) Sports Proficiency – 1 (HANDBALL)

L –T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
 Organisational Structure (State, National and International Level)
 Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Rules of the game/sport.
 Duties and Responsibilities of Officials.
 Score sheet and Record Keeping
 Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
 Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
 Coordinative Abilities and Flexibility.

Practicals -

24 Credits

Learning and demonstrating various skills/techniques of sports.
 Learning to demonstrate various drills for perfecting a skill
 Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- Jain D (2003). Play & Learn Handball. KhelSahitya Kendra. New Delhi.
 Kleinman, I. (2009). Complete Physical Education Plans. 2nd Ed. Human Kinetics,USA.
 Page, J. (2000). Ball Games. Lerner Sports Publisher,USA.
 Phillips, B.E. (2009). Fundamental Handball. Kessinger Publishers,USA.
 Schmottlach N Mcmanama J (1997). Physical Education Handbook. 9th Edition. Allyn & Bacon. London.
 Schmottlach, N. and McManama (2005). Physical Education Activity Handbook. Benjamin Cummings, USA.
 Surhone, L.M. et al (2010). Team Handball. Betascript Publishing,USA
 Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
 Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester V**DSE - 1 (vi) Sports Proficiency – 1 (HOCKEY)****L –T - P = 4 -0 -2**

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS**48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Rules of the game/sport.
Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practicals -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

International Hockey Federation (2003). Rules of the Game of Hockey with Guidance for Players and Umpires. International Hockey Federation. India.
Jain D (2003). Hockey Skills & Rules. khel Sahitya Kendra . New Delhi.
Narang P (2003). Play & Learn Hockey. KhelSahitya Kendra. New Delhi.
Pecknold, R. and Foeste, A. (2009). Hockey : Essential Skills. McGraw Hills,USA.
Rossiter, S. (2003). Hockey the NHL Way : Goal tending Illustrated Edition. Sterling Publishers,USA.
(2002). Coaching Successfully Hockey. Sports Publication. Delhi.
Walter, R. and Johnson, M. (2009). Hockey Plays and Strategies. Human Kinetics,USA.
Weekes, D. (2003). The Biggest Book of Hockey Trivia. Greystone Books,USA.
Wukovits, J.F. (2000). History of Hockey 1st Ed. Lucent Books,USA.
Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester V
DSE - 1 (vii) Sports Proficiency – 1 (JUDO)

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Rules of the game/sport.
Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practicals -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

Diago, T. (2005). Kodokan Judo Throwing Techniques. Kodansha International Publisher, Japan.
Harrison EJ (2002). Coaching Successfully Judo. Sports. Delhi.
Jain D (2003). Play and Learn Judo. Khel Sahitaya Kendra. New Delhi.
Law, M. (2009). Falling Hard : A Journey into the World of Judo. Trumpeter Publisher, Japan.
Putin, V., Shestakov, V. ad Levitsky, A. (2004). Judo : History, Theory and Practice.
Blue Snake Books, Moscow.
Takahashi, M. (2005). Mastering Judo. Human Kinetics, USA.

Semester V
DSE - 1 (viii) Sports Proficiency – 1 (KABADDI)

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
 Organisational Structure (State, National and International Level)
 Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Rules of the game/sport.
 Duties and Responsibilities of Officials.
 Score sheet and Record Keeping
 Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
 Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
 Coordinative Abilities and Flexibility.

Practicals -

24 Credits

Learning and demonstrating various skills/techniques of sports.
 Learning to demonstrate various drills for perfecting a skill
 Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- Diago, T. (2005). Kodokan Judo Throwing Techniques. Kodansha International Publisher, Japan.
 Harrison EJ (2002). Coaching Successfully Judo. Sports. Delhi.
 Jain D (2003). Play and Learn Judo. Khel Sahitaya Kendra. New Delhi.
 Law, M. (2009). Falling Hard : A Journey into the World of Judo. Trumpeter Publisher, Japan.
 Putin, V., Shestakov, V. ad Levitsky, A. (2004). Judo : History, Theory and Practice.
 Blue Snake Books, Moscow.
 Takahashi, M. (2005). Mastering Judo. Human Kinetics, USA.

Semester V
DSE - 1 (ix) Sports Proficiency – 1 (KHO-KHO)

L –T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Rules of the game/sport.
Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practicals -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

Chakrabarty G (2002). Kho - Kho Aveloken. Khel Sahitya Kendra.Delhi.
Panday L (1982). Kho - Kho Sarvaswa. Metropolitan. New Delhi
Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester V
DSE - 1(x) Sports Proficiency – 1 (VOLLEYBALL)

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: - The student will be able to learn and acquaint themselves with the sport of their choice and gain proficiency.

COURSE OUTCOME: -The student attains knowledge, understanding, interpreting and analyzing proficiency in a game of one's choice in the areas of training, talent identification, officiating and coaching.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Rules of the game/sport.
Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practicals -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

Steve Oldenburg (2015). Complete Conditioning for Volleyball. Human Kinetics.
Donald S. Shondell, Cecile Renaud (2002). Volleyball Coaching Bible. Human Kinetics.
Joel B. Dearing (2003). Volleyball Fundamentals. Human Kinetics.
American Volleyball Coaches Association (2006). Volleyball Skills and Drills. Human Kinetics.
Becky Schmidt (2016). Volleyball: Steps to Success. Human Kinetics.

Semester V
DSE-2 Kinesiology and Biomechanics

L -T - P = 5 -0 -1

Max. Marks =150

Time: 3Hrs

Objective: To impart the knowledge about the various movements of the body affecting performance in sports and a basic knowledge of various Sports Injuries and their management.

COURSE OUTCOME: Students will learn the science of movement for better sports performance and the basic knowledge of the various injuries and their management. Such core knowledge and skill helps to create a strong foundation to engage human subject of all ages, sex, and ability.

THEORY SYLLABUS

60 Credits

UNIT-I

(10 lectures)

Meaning, aim & objectives, importance of kinesiology for physical education and sports

Fundamental concepts: Centre of gravity, line of gravity, axis and planes of motion, fundamental starting positions, terminology of fundamental movements, and classification of muscles

UNIT-II

(15 lectures)

Location & Action of Muscles at Various Joints:-

a) Upper extremity – shoulder girdle, shoulder joints, elbow joint

b) Neck, trunk (Lumbosacral region)

c) Lower extremity – Hip joint, knee joint, ankle joint

Muscular analysis of fundamental movements:- Walking, running, jumping, throwing, catching, pulling, pushing, striking, hanging

UNIT-III

(15 lectures)

Structure of Motor Actions: - Structure of cyclic and acyclic motor action and movement combination, functional relationship of different phases of motor action.

Qualities & Physiological Principles Of Movements:- Movement rhythm, movement coupling movement flow, movement precision and movement amplitude.

UNIT-IV

(20 lectures)

Meaning, aims, objectives and importance, types of motion, linear motion & angular motion

Linear kinematics: Speed, velocity acceleration uniform accelerated motion and projectile motion

Angular kinematics: Angular speed, angular velocity, angular acceleration and relationship between linear and angular motion

Linear kinetics: mass, weight, force, pressure work, power energy, impulse, moments, impact, friction, and Newton's laws of motion angular kinetics: moment of inertia, conservation of moments, transfer of moments, levers, equilibrium

Biomechanical principles: Principles of initial force, principles of optimum path of acceleration, principles of conservation of moment and principles of counter action.

Practical

12 Credits

Demonstration of planes & axes of a given movement i) Determination of the location of muscles at various joints

ii) Shoulder girdle, Shoulder joints, Elbow

joint iii) Hip joint, Knee joint, Ankle joint

Muscular analysis of the techniques of game of your specialization

Determination of center of gravity of a Bat/Racket (Suspension method)

Evaluation of a Dynamogram to draw a velocity time curve, distance time curve.

SUGGESTED READINGS

- Bartlett, R. (2007). Introduction to Sports Biomechanics. Routledge Publishers, USA.
- Blazevich, A. (2007). Sports Biomechanics. A & C Black Publishers, USA.
- Breer & Zarnicks (1979). Efficiency of human movement. WIB Sounders Co. USA.
- Hamill, J. and Knutzen, K.M. (2003). Biomechanical Basis of Human Movement. Lippincott Williams and Wilkins, USA.
- Hay (1993). The biomechanics of sports techniques. Prentice Hall Inc. New Jersey.
- McGinnis, P. (2004). Biomechanics of Sports & Exercise. Human Kinetics, USA.
- Oatis, C.A. (2008). Kinesiology. 2nd Ed. Lippincott, Williams & Wilkins, USA.

Semester V
DSE-3- Research Methodology

L -T - P = 5 -1 -0

Max. Marks =100

Time: 3Hrs

Objective: The student will gain the knowledge about Research Methods of sampling, writing of Research Report and analysis of the data through statistical techniques.

COURSE OUTCOME: The student will be able to use the knowledge of Research for analysis of data and leading to logical conclusion on any field of investigation.

THEORY SYLLABUS

60 Credits

Unit 1 Introduction to Research in Physical Education

15 Lectures

Research: Nature, Unscientific vs. scientific methods of problem solving, Ethical Issues in Research.
Identification and criteria in selecting a Research Problem, defining and delimiting problem.
Literature review: Purpose, Literature search methods, steps of literature review, major literature sources.
Statistical concept: Importance of statistic in Physical Education, ways to select a sample.

Unit 2 Research Methods

15 Lectures

Sampling (Random, cluster, stratified)
Survey :- Survey by Questionnaire and survey by Interview
Experimental Methods: - Relationship studies, Comparative Studies and Control of experimental factors.
Instrumentation

Unit 3 Writing the Research Report

15 Lectures

Research proposal
Organization of the Thesis report
Research article, oral and poster presentation
Table, figure, bibliography.

Unit 4 Statistical concepts in Research

15 Lectures

- Types of data
Measures of central tendency (mean, median and mode), Measures of variability (range and standard deviation), numerical problems to be solved from raw data.
- 3 Tests for measuring correlation (Product moment correlation) and differences (Independent T-test), numerical problems to be solved from raw data, plotting of graphs and chart.

Tutorial One Tutorial period is equal to 1 credit of 1 hour duration.

12 Credits

SUGGESTED READINGS:

- Author's guide: Research Methods applied to Health Physical and Recreation, Washington, D.C. 1991.
Best John & Kahni, J.V. 1992). Research in Education, New Delhi. Prentice Hall of India (Pvt.) Ltd..
Best, J.W. (1963). Research in education. U.S.A.: Prentice Hall.
Clark, H. H., & Clark, D. H. (1975). Research process in physical education. Englewood cliffs, New Jersey: Prentice Hall, Inc.
Garrett, H.E. (1981). Statistics in psychology and education. New York: Vakils Feffer and Simon Ltd.
Koul, L. (2002). Methodology of Educational Research, Vikas Publishing House, New Delhi.
Oyster, C. K., Hanten, W. P., & Llorens, L. A. (1987). Introduction to research: A guide for the health science professional. Landon: J.B. Lippincott Company.

- Thomas, J.R., & Nelson J.K. (2005). Research method in physical activity. U.S.A: Champaign, IL: Human Kinetics Books.
- Thomas, J.R., Nelson, J.K. & Silverman, S.J. (2011). Research method in physical activity. U.S.A: Champaign, IL: Human Kinetics Books.
- Verma, J. P. (2000). A text book on sports statistics. Gwalior: Venus Publications.

Semester- VI

S.No.	Paper No.	Title	Credit
			Theory/ Practical / Tutorial
1	SEC-4	SEC – 4 -4 credits (4 THz) Select any one option other than SEC 2: i. Introduction to MS Excel and SPSS ii. Weight Management iii. Wellness Lifestyle iv. Posture and Athletic Care. v. Olympic Education vi. Sports and Exercise Nutrition. vii. Stress Management viii. Personality development	4 (4 THz)
2	DSC – 4***	Sports Proficiency – 2***	6 (4 THz + 2 P)
3	DSC-5	Sports Specific Skill Enhancement	6 (4 THz + 2 P)
4	DSE-6	Project Work / Dissertation OR Select any ONE option i. Computer Application ii. Fitness and Exercise Management iii. Gym Operation iv. Sports Journalism	6 (5Th + 1 P)
		Total Credit	22

Note:

- ☐ THz = Theory
- ☐ P = Practical
- ☐ Tut = Tutorial

***DSE-4: A student must select different game/sport other than DSC – 3/ DSC – 9 (Game of specialization) and

DSE-1 to be studied in DSE-4 from out of the below listed games/sports:-

List of Games/Sports

i) Badminton (ii) Basketball (iii) Cricket (iv) Football (v) Handball (vi) Hockey (vii) Judo (viii) Kabaddi (ix) Kho-Kho (x) Volleyball

Semester VI**SEC-4(i) - INTRODUCTION TO MS-EXCEL AND SPSS****L -T - P = 4 - 0 -0**

Max. Marks =100

Time: 3Hrs

Objective:- The student will develop and gain knowledge about MS-Excel and SPSS**COURSE OUTCOME:-** The Students will be able to apply the knowledge in the field of physical education and sports research as well as evaluating the sports performance.**THEORY SYLLABUS****48 Credits****UNIT-I Introduction to Excel****12 Lectures**

Introduction, Entering, Editing and Formatting of Data and Formatting Number.

Understanding Formulas, Auto sum, mean, median, mode, average, sort, Auto fill and custom list

UNIT-II Introduction of Analysis tool in Excel**12 Lectures**

Table, pivot table, Data Tool, Referencing Formula, lookups, Conditional Logics

Outline, sort, Filter and subtotal, pivot Table, Protecting Data and collaboration.

Analysis Toolkit

Hands on Practice

UNIT-III: Exploring Data with Graph in Excel and SPSS**12 Lectures**

Introductions to Graph & charts, Chart Type, Instant Chart, Update Chart, Column Chart, Picture Fill, Adjust Chart Size, Line Chart, Scatter Chart

Histogram, Boxplots, Graphing Means (Bar Charts and error bars), Line Charts, Scatterplot

Editing Graph

Hand on Practice

UNIT-IV: Introduction of SPSS**12 Lectures**

Introduction of SPSS Statistics Environment

Entering Data into the data editor

The variable View

Missing values

Importing data

SPSS viewer

Exporting SPSS output

Syntax Editor

Saving Files

Retrieving a File.

Introduction of Non-parametric Model

General Procedure of Non parametric tests in SPSS

Comparing two independent conditions

Comparing two related conditions

Hands on Practice

Data Analysis in SPSS

Descriptive Statistics

Compare Means

SUGGESTED READING:Andy Field (2013), Discovering Statistics Using IBM SPSS STATISTICS, Sage Publication
ISBN978-1-4462-4917

American Psychological Association. (2010). *Publication manual of the American Psychological Association* (6th ed.). Washington DC:APA Books.

Anderson, C. A., & Bushman, B. J. (2001). Effects of violent video games on aggressive behavior, aggressive cognition, aggressive affect, physiological arousal, and pro-social behavior: A meta-analytic review of the scientific literature. *Psychological Science*, 12(5), 353–359.

Arrindell, W. A., & van der Ende, J. (1985). An empirical test of the utility of the observer-to-variables ratio in factor and components analysis. *Applied Psychological Measurement*, 9, 165– 178.

Semester VI
WEIGHT MANAGEMENT

SEC-4(ii)

L -T - P = 4 - 0 -0

Max. Marks =100

Time: 3Hrs

Objective:- Students will be educated with the knowledge and importance of weight management with the help of Physical exercises and Sports activities.

COURSE OUTCOME:- Students will learn various ways and means to assess fitness & weight management. Such knowledge and skills will help to create a strong foundation to engage human subject of all ages, sex, ability.

Theory of Syllabus

48 Credits

Unit-I:

12 Lectures

Concept of Body Weight and Importance of Ideal Body Weight
Assessment of Body Weight – Visual Inspection, Height-weight Chart, Body Mass Index (BMI), Waist-Hip Ratio (WHR); Procedure for Measuring Body Weight and Height, Calculation of Body Mass Index (BMI) and Waist-Hip Ratio (WHR)

Unit-II:

12 Lectures

Concept and Causes of Obesity
Health Problems caused by over/ under nutrition - Diabetes Mellitus (Type II), Atherosclerosis, Coronary Heart Disease, Stroke, Cancer, Anorexia Nervosa, Bulimia Nervosa, Anemia, Osteoporosis.

Unit -III: Nutrition and Weight Management 12 Lectures

Concept of Nutrition, Nutrients, Balanced Diet, Dietary Aids and Gimmicks, Concept of Energy and Activity, Energy Balance Equations, Calorie Intake and Expenditure.

Unit- IV:

12 Lectures

Ways and Means for Weight Management – Losing, Gaining and Maintaining Weight.
Concept and Causes of Malnutrition. Concept of Body Composition and its Assessment - Skinfold tests, Hydrostatic weighing, Body composition Analyzer.

SUGGESTED READINGS

ACSM'S (2001), ACSM Fitness Book (U.K., Human Kinetics).
Department of Physical Education and Sports Sciences, University of Delhi (2007), Draft Resource Material – Fitness, Aerobics and Gym-Operations.
Kumari, Sheela, S., Rana, Amita, and Kaushik, Seema (2009), A Practical Workbook on Fitness, Aerobics and Gym Operations, KhelSahitya, New Delhi.
Sharma K. et.al. (2014), Fitness Aerobics & Gym Operations, Jyoti Enterprises, Delhi.

Semester VI
SEC - 4 (iv) Posture and Athlete Care

SEC - 4 (iv)

L - T - P = 4 - 0 - 0

Max. Marks = 100

Time: 3Hrs

Objective: To impart the knowledge about the various physical postures, athletic care and first aid in case of sports injuries and rehabilitation.

COURSE OUTCOME: Students will learn the science of physical posture, athletic care and first aid in case of sports injuries and rehabilitation. Such core knowledge and skill helps to create a strong foundation to correct different postures, athletic care and first aid, especially persons with specialized need.

THEORY SYLLABUS:

48 Credits

Unit-I: Postures

12 Lectures

Posture – Concept, Significance and Benefits, characteristics & Effect
Static postural assessments
Movement assessments
Bad Posture- Sitting, Standing, Walking, Lying down), Effects of Bad Posture on the Body.
Postural Deformities – Types and Causes of Kyphosis, Scoliosis, Lordosis, Knock Knees, Bow Legs, Flat Foot and respective corrective exercises.
Illnesses due to Improper Posture- Back Pain, Neck Pain and Corrective Exercises.

Unit-II: Athletic Care

12 Lectures

Sports Medicine and Athletic Care - Concept and Significance, Factors causing Injuries
General Principles of Prevention of Injuries
Common Sports Injuries (Strain and Muscle and Ligament Sprain, Frozen Shoulder, Lower Back Strain, Tennis and Golfer's Elbow, Runner's Knee, Shin Pain, Blister, Concussion, Abrasion, Laceration, Haematoma, Fracture, Dislocation)

Unit-III: First Aid, Ergogenic Aids and Rehabilitation

12 Lectures

Sports Injuries and First Aid (P.R.I.C.E.R)
Rehabilitation - Aim and Objective, Recovery (Ice bath, Contrast Bath, Hot Fomentation)
Management of Injuries (Strain and Muscle and Ligament Sprain, Frozen Shoulder, Lower Back Strain, Tennis and Golfer's Elbow, Runner's Knee, Shin Pain, Blister, Concussion, Abrasion, Laceration, Haematoma, Fracture, Dislocation)

Unit-IV: Therapeutic Modalities and Rehabilitation

12 Lectures

Therapeutic Modalities (Therapeutic Ultrasound, Interferential Therapy Unit, T.E.N.S., Infrared Lamp, Wax Bath, Short Wave Diathermy)
Muscle Strengthening through Active and Passive Exercise.
Therapeutic value with Yogasanas for rehabilitation and strengthening of the muscles.

SUGGESTED READINGS

- ACSM's Guidelines for Exercise Testing and Prescription** (2001), American College of Sports Medicine, New York, U.S.A.
Anspaugh, D.J., G. Ezell and K.N. Goodman (2006) **Teaching Today Health**, Mosby Publishers, Chicago (USA)
Beotra, Alka (2001-02) **Drug Education Handbook on Drug Abuse in Sports**, Applied Nutrition Sciences, Mumbai.
Donatelle, R.J. and Ketcham P. (2007), **Access to Health**, Benjamin Cummings, Boston, USA.

Fahey, T.D., M.P. Insel and W.T. Rath (2006), **Fit & Well: Core Concepts and Labs in Physical Fitness**, McGraw Hill, New York.

Floyd, P.A., S.E. Mimms and C. Yelding (2003) **Personal Health: Perspectives and Lifestyles**, Thomson, Wadsworth, Belmont, California, USA.

Hoeger, W W K and S.A. Hoeger (2004). **Principles and Labs for Fitness and Wellness**, Thomson Wadsworth, California, USA.

Kumari, Sheela, S., Rana, Amita, and Kaushik, Seema, (2008), **Fitness, Aerobics and Gym Operations**, Khel Sahitya, New Delhi.

Jain, J. (2004) **Khel Dawaon Ka** (New Delhi: Delhi University Press).

Pande, P. K. (1987) **Outline of Sports Medicine** (New Delhi: Jaypee Brothers).

Roy, Steven and Richard, Irvin (1983) **Sports Medicine**, Benjamin Cummings, Boston, USA.

Schindler, J.A. (2003) **How to Live 365 Days a Year** (Boston: Running Press).

Semester VI
SEC - 4 (v) Olympic Education

L -T - P = 4 - 0 -0

Max. Marks =100

Time: 3Hrs

Objective: To impart the knowledge about the Olympism its functions through the various International sports federation, National committees and IOC commissions.

COURSE OUTCOME: Students will learn the deep knowledge about ancient and modern Olympics, administration, organisation of Olympics Games and functions of IOC.

THEORY SYLLABUS:

48 Credits

UNIT-I THE OLYMPIC MOVEMENT

12 Lectures

Concept of Olympics movement, the ancient Olympic games and the Modern Olympic games and its movement.

Aims and symbols of the Olympic movement.

The International Olympic Committee (IOC).

UNIT-II STRUCTURE OF THE OLYMPIC MOVEMENT

12 Lectures

The National Olympic Committee (NOC).

The International Sports Federations (IFs).

The National Sports Federations (NFs).

Volunteerism and Olympics games.

UNIT-III THE OLYMPIC GAMES

12 Lectures

Organization of Olympics games.

The international bid process for selecting sites / city for the games.

Participation in Olympic Games.

Women and sports.

UNIT-IV IOC PROGRAMMES

12 Lectures

Olympic museum, Olympic academy and Olympic solidarity program.

Paralympics games and concept of Sports for all.

Culture, Olympism, winning, participation and universality of the games.

Drug abuse and doping.

SUGGESTED READING:

Carto, J.E.L. And Calif, S.D. (1984). Medicine & Sport Science: Physical Structure of Olympic Athletes. London: Karger.

Cliw, Gifford, (2004). Summer Olympic.

Daw, Anderson. (2008). The Story of the Olympics.

Kumar, Pardeep. (2008). Historical Development of Track & Field. Friends Publication. New Delhi.

Maranirs David, Rome 1960: The Olympics that changed the world, 2008.

Osborne, Manpope, Ancient Greece and the Olympic, 2004.

Oxlade, Chris. Olympic, 1999.

Perrottet, tony, The Naked Olympics: the true story of the Ancient Games, 2004.

Toropove, Brandon. The Olympic for Beginners, 2008.

Wallechineley, Davi, The Complete Book of the Olympic, 1992.

Semester VI
SEC – 4 (vi) SPORTS & EXERCISE NUTRITION

L –T - P = 4 - 0 -0

Max. Marks =100

Time: 3Hrs

Objective: - To acquaint student with the knowledge of basic nutrition and nutrition in Sports & Exercise and other related aspects important to sports persons.

COURSE OUTCOME: - The student would be able to apply the knowledge of nutrition in day to day life and in sports and training. Such core knowledge and skill helps to create a strong foundation to engage human subject of all ages, sexes and abilities.

THEORY SYLLABUS:

48 Credits

Unit-I

12 Lectures

Introduction to basic concepts in nutrition-Nutrients of physiological significance their sources & functions requirements in normal health conditions.

Unit-II

12 Lectures

Energy metabolism-BMR, RMR, energy expended on physical activity and TEF. Energy requirements of specific sports groups, Energy cost of activities, Energy substrate for activities of different intensity and duration; aerobic Concept of energy balance in maintaining weight.

Unit-III

12 Lectures

Basic food groups, Concept of balanced diet, General and specific dietary guidelines in planning meals for children, adolescents, adult men and women, elderly, Nutritional considerations for sports/exercising person (endurance and strength sports/exercise training) during training, pre event meal, during event and post event meal.

Unit-IV

12 Lectures

Concept of Fluid in sports- Hypotonic, Isotonic and Hypertonic. Requirement of fluid for various activities. Fluid balance in sports and exercise- Importance, Symptoms and prevention of dehydration. Normal weight-concept, weight management skills. Eating disorders in Sports Persons, Female athletic triad and Sports anemia. Nutrients as ergogenic aids for sports and exercise. Supplements and their role in sports.

SUGGESTED READINGS

- Antoni, J. et al, Editors (2008). Essentials of Sports Nutrition and Supplements. Humana Press, USA.
- Benardot, D. (2005). Advanced Sports Nutrition. Human Kinetics, USA.
- Brown Judith E (2002). Nutrition Now. Canada Pub. Peter Marshal
- Caliendo Mang Alica (1981). Nutrition and Preventive Health Care McMillan Publication Co.
- Clark, N. (2008). Sports Nutrition. 4th Ed. Human Kinetics, USA.
- Eberle, S.G. (2007). Endurance Sports Nutrition. Human Kinetics, USA.
- Finic HH et al (2006), Practical Applications in Sports Nutrition J & B Publisher, USA.
- Lal PR (2009) Handbook of Sports Nutrition, Friends Publication.
- McArdle, W.d. & Katch, V.L. (2008). Sports and Exercise Nutrition. 3rd Ed. Lippincott Williams and Wilkins, USA.
- Meyer, D.E.L. (2006). Vegetarian Sports Nutrition. Human Kinetics Publishers, USA.
- Whitney E. and Rolfes S.R. (2005). Understanding Nutrition. Thomson Wadsworth. Belmont. California. U.S.A.

Semester VI
SEC - 4 (vii) STRESS MANAGEMENT

L -T - P = 4 - 0 -0

Max. Marks =100

Time: 3Hrs

Objective: - To acquaint the student with the knowledge and understanding of anger, stress and its management and other related aspects important to sports persons.

COURSE OUTCOME: - The student would be able to apply the knowledge, learning and understanding the concept of anger, stress and how to manage it.

THEORY SYLLABUS:**48 Credits****Unit-I****12 Lectures**

Definition of stress and anger, Causes and effects of stress and anger, two main emotions of stress-fear and anger, Daily life stressors, Process of stress and anger- Psycho Physiology of stress.

Unit-II**12 Lectures**

Adaptation to stress-Reframing of habitual stress resistance, types of stress-personal and social stress
Occupational stress, Peer stress / Students stress, Family stress, Stress & elderly and Stress & drug abuse.
Stress related diseases- i) Sleep disorder, ii) Eating disorder, iii) Sexual and emotional disorder, iv) Other stress related diseases, v) Stress & Spirituality.

Unit-III**12 Lectures**

Self-awareness and stress management, Muscular tension reduction, Emotional tension reduction, Stress free living, Stress free examination, Stress management through physical activity, Stress management through recreation.

Unit-IV**12 Lectures**

Anger management- Redford William's 12 steps of anger management
Stress management- behavior modification, time management, coping strategy& intervention skills.
Relaxation technique- i) Diaphragmatic breathing, ii) Meditation, iii) Progressive muscle relaxation, iv) Yoga, v) Mental imagery, vi) Music therapy, vii) Massage therapy

SUGGESTED READINGS

- Adrain F & Herrick E. and Sharp P (1998). Anger Management. Routledge Publishing. Florence. Kentucky. U.S.A.
- Allen E (2008). Stress Management for Dummies. For Dummies Publishers. U.S.A.
- Davis M. et al (2008). The Relaxation and Stress Reduction workbook. Harbinger Publications, USA.
- Greenberg J.S. (2008). Comprehensive stress management. McGraw Hill, USA
- Hipp E. (2008). Fighting Invisible Tigers: Stress Management for Teens. Free Spirit Publishing, USA.
- Mac W. (2007). Anger and Stress Management. God's Way. Calvary Press, USA.
- Petee F (2006). Anger Management. Pentagon. Press. New York. U.S.A.
- Swate Y B (2009). Anger Management. Sage Publication. New Delhi.
- NCERT & CBSE publication and reading for stress management.

Semester VI
SEC - 4 (viii) PERSONALITY DEVELOPMENT

L - T - P = 4 - 0 - 0

Max. Marks = 100

Time: 3Hrs

Objective: To impart the knowledge about the personality of the individuals and factors responsible for the development of personality.

COURSE OUTCOME: Students will learn the different components and importance of personality. Such core knowledge and skill helps to create a strong foundation for developing personality.

THEORY SYLLABUS:**48 Credits****UNIT-I****12 Lectures**

Introduction to Personality & holistic Personality, Meaning and Definition of Personality & holistic Personality. Freud's concept of personality. Defence Mechanisms. Components of holistic Personality (Physical, Emotional, Social, Temporal-Mental, Occupational, Vital, Environmental and Spiritual). Holistic personality as represented by the car and its four wheels. (8 Hours)

UNIT-II**12 Lectures**

Physical Personality: Introduction, Meaning, Definition and Components of Physical Personality. Physical Personality Principles of developing, controlling and maintaining Physical personality. Theoretical background Measurement of personality. Understanding physical growth and development. Pattern of physical growth and development of different body tissues. Switching on the favorable genes and switching off the unfavorable and undesired genes. (8 Hours)

UNIT-III**12 Lectures**

Personality and Wellness: Introduction to wellness, relation of wellness and personality. Components of wellness, health, physical fitness, behaviour, behaviour change method, understanding self-responsibility for one's wellness. Personality and Physical Fitness: Introduction, Components of Physical Fitness, Role of Physical Fitness in Physical Personality Development. (9 Hours)

UNIT-IV**12 Lectures**

Mental Personality: Introduction, Meaning and Definition of Mental Personality. Type A, B and C personality characteristics. Somatotype and Personality Traits: Introduction to Somatotype and Mental Personality Traits. Spiritual Personality Development: Introduction, Meaning and Definition of Spiritual Personality. Quick fix and long term foundation of Spiritual Personality Development. Heredity and Environment: Introduction to Heredity and Environment in relation to personality development. (9 Hours)

SUGGESTED READINGS

- Bernard N. (2001). Turn off the Fat Genes. Harmony Books, New York. U.S.A.
 Callohan L. (2002). The Fitness Factor. The Lyons Press. Guilford. Connecticut. U.S.A.
 Covey SR (2004). The 8th Habit. Franklin Covey Co., Running Press Book Publishers. Philadelphia. Pennsylvania. U.S.A.
 Kansal, D.K. (2010). Holistic Personality Development. Sports and Spiritual Science Publications, New Delhi

Semester VI
DSE- 4(i) Sports Proficiency – 2 - BADMINTON

L –T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.

COURSE OUTCOME:- Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
 Organisational Structure (State, National and International Level)
 Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Duties and Responsibilities of Officials.
 Score sheet and Record Keeping
 Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
 Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
 Coordinative Abilities and Flexibility.

Practical -

24 Credits

Learning and demonstrating various skills/techniques of sports.
 Learning to demonstrate various drills for perfecting a skill
 Learning and demonstrating to complete the process of scoring/judgment.

Suggested reading:

- Bloss, M.V. et al (2000). Badminton. McGraw Hills,USA.
 Downey J (1990). How to Coach Badminton. Collins.
 Golds, M. (2002). Badminton: Skills of the Game..
 Grice, T. (2007). Badminton: Steps to Success. 2nd Ed. Human Kinetics,USA.
 GuptaR.KumarP.andTyagiS.(2008).TextbookonTeachingSkillandProwess(PartI& II).Friends Publication. New Delhi.
 Jain D (2001). Teaching and Coaching –Badminton. Khel S.K.Delhi
 Kumar A (2003). Badminton. Discovery, New Delhi.
 Narang P (2005). Play and Learn Badminton. Khel Sahitaya Kendra
 Singh MK (2006). A to Z Badminton. Friends Pub. New Delhi.
 Singh MK (2007). Comprehensive Badminton. Friends Pub. New Delhi.
 Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
 Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester VI
DSE - 4(ii) Sports Proficiency – 2 - BASKETBALL

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.**COURSE OUTCOME:-** Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.**THEORY SYLLABUS****48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.

Practical -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

Drewett, J. (2007). How to Improve at Basketball. Crabtree Publishing Co.,USA.
Goldstein, S. (1998). Basketball Fundamentals. 2nd Ed. Golden Aura Publishing,USA.
Jain Naveen (2003). Play and Learn Basket Ball. KhelSahitya Kendra. New Delhi.
Nat BB (1997). Conditioning Coaches Association. NBA Power Conditioning. Human Kinetics.
Sharma OP (2003). Basket Ball Skills and Rules. Khel Sahitya Kendra, Delhi.
Thani Lokesh (1995). Skills & Tactics of Basket Ball. Sport Pub. New Delhi.
(2002). Coaching Successfully Basket Ball. Sports Publisher. Delhi.
Wilmore &Costill (2004).Physiology of Sports & Exercise. Human Kinetics, US.

Semester VI
DSE - 4(iii) Sports Proficiency – 2 – CRICKET

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.**COURSE OUTCOME:-** Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.**THEORY SYLLABUS****48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.

Practical -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- Amarnath M. (1996). Learn to Play Good Cricket. UBS Publishers. New Delhi.
Boycott, G. (2010). Play Cricket the Right Way. Great Northern Books Limited, U.K.
Cricket (2008). Sports Skills: Cricket Fielding (Know the Game). A & C Black Publishers.
Gupta, K. (2006). How to Play Cricket. Goodwill Publishing House, New Delhi.
Hobbs, J. (2008). The Game of Cricket As it should be Played. Jepson Press, USA.
Jain R. (2003). Fielding Drills in Cricket. KhelSahitya Kendra. New Delhi.
Rachna (2002). Coaching Successfully: Cricket. KhelSahitya Kendra. New Delhi.
Sharma P. (2003). Cricket. Shyam Parkashan. Jaipur.
Thani V. (1998). Coaching Cricket. KhelSahitya Kendra. New Delhi.
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester VI
DSE - 4(iv) Sports Proficiency – 2 FOOTBALL

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.**COURSE OUTCOME:-** Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.**THEORY SYLLABUS****48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.

Practical -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- American Football Coaches Association (2002). The Football Coaching Bible. 1st Ed., Human Kinetics, USA.
Carling, C., Williams, M. and Reilling, T. (2006). Handbook of Soccer Match Analysis : A Systematic Approach to Improving Performance. Routledge Publishers,USA.
Long, H. and Czarnecki, J. (2007). Football for Dummies. For Dummies Publisher,USA.
N Kumar (2003). Play and Learn Football. K.S.K. New Delhi.
Reilly, T. (2006). The Science Training Soccer : A Scientific Approach to Developing Strength, Speed and Endurance. Routledge Publisher,USA.
Reilly, T. and J.C.D. Arau (2008). Science and Football V : The Proceedings of the 5th World Congress on Sports Science and Football, Volume5.
Sharma OP (2001). Teaching and Coaching –Football. Khel S.K.Delhi.
(2002). Coaching Successfully Football. K.S.K. New Delhi.
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester VI
DSE - 4(v) Sports Proficiency – 2 HANDBALL

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.

COURSE OUTCOME:- Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.

Practical -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- Jain D (2003). Play & Learn Handball. KhelSahitya Kendra. New Delhi.
Kleinman, I. (2009). Complete Physical Education Plans. 2nd Ed. Human Kinetics, USA.
Page, J. (2000). Ball Games. Lerner Sports Publisher, USA.
Phillips, B.E. (2009). Fundamental Handball. Kessinger Publishers, USA.
Schmottlach N Mcmanama J (1997). Physical Education Handbook. 9th Edition. Allyn & Bacon. London.
Schmottlach, N. and McManama (2005). Physical Education Activity Handbook. Benjamin Cummings, USA.
Surhone, L.M. et al (2010). Team Handball. Betascript Publishing, USA
Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester VI
DSE - 4(vi) Sports Proficiency – 2 - HOCKEY

L –T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.**COURSE OUTCOME:-** Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.**THEORY SYLLABUS****48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.

Practical -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

International Hockey Federation (2003). Rules of the Game of Hockey with Guidance for Players and Umpires. International Hockey Federation. India.
Jain D (2003). Hockey Skills & Rules. khel Sahitya Kendra . New Delhi.
Narang P (2003). Play & Learn Hockey. KhelSahitya Kendra. New Delhi.
Pecknold, R. and Foeste, A. (2009). Hockey : Essential Skills. McGraw Hills,USA.
Rossiter, S. (2003). Hockey the NHL Way : Goaltending Illustrated Edition. Sterling Publishers,USA.
(2002). Coaching Successfully Hockey. Sports Publication. Delhi.
Walter, R. and Johnson, M. (2009). Hockey Plays and Strategies. Human Kinetics,USA.
Weekes, D. (2003). The Biggest Book of Hockey Trivia. Greystone Books,USA.

Semester VI
DSE - 4(vii) Sports Proficiency – 2 - JUDO

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.**COURSE OUTCOME:-** Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.**THEORY SYLLABUS****48 Credits****Unit-I****(12 lectures)**

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II**(12 lectures)**

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III**(12 lectures)**

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV**(12 lectures)**

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance, Coordinative Abilities and Flexibility.

Practical -**24 Credits**

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- Diago, T. (2005). Kodokan Judo Throwing Techniques. Kodansha International Publisher, Japan.
Harrison EJ (2002). Coaching Successfully Judo. Sports. Delhi.
Jain D (2003). Play and Learn Judo. Khel Sahitaya Kendra. New Delhi.
Law, M. (2009). Falling Hard : A Journey into the World of Judo. Trumpeter Publisher, Japan.
Putin, V., Shestakov, V. ad Levitsky, A. (2004). Judo : History, Theory and Practice. Blue Snake Books, Moscow.
Takahashi, M. (2005). Mastering Judo. Human Kinetics, USA.

Semester VI
DSE - 4(viii) Sports Proficiency – 2 - KABADDI

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.

COURSE OUTCOME:- Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practical -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

- Diago, T. (2005). Kodokan Judo Throwing Techniques. Kodansha International Publisher, Japan.
Harrison EJ (2002). Coaching Successfully Judo. Sports. Delhi.
Jain D (2003). Play and Learn Judo. Khel Sahitaya Kendra. New Delhi.
Law, M. (2009). Falling Hard : A Journey into the World of Judo. Trumpeter Publisher, Japan.
Putin, V., Shestakov, V. and Levitsky, A. (2004). Judo : History, Theory and Practice. Blue Snake Books, Moscow.
Takahashi, M. (2005). Mastering Judo. Human Kinetics, USA.

Semester VI
DSE - 4(ix) Sports Proficiency – 2 - KHO-KHO

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.

COURSE OUTCOME:- Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practical -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

Chakrabarty G (2002). Kho - Kho Aveloken. Khel Sahitya Kendra.Delhi.
Panday L (1982). Kho - Kho Sarvaswa. Metropolitan. New Delhi
Vanaik A. (2005). Playfield Manual, Friends Publication. New Delhi
Vanaik A. (2017). Officiating and Coaching, Friends Publication. New Delhi

Semester VI
DSE - 4(x) Sports Proficiency – 2 - VOLLEYBALL

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective:- To acquaint with the theoretical and practical knowledge of respective games and sports.

COURSE OUTCOME:- Students acquire the knowledge of opted games and sports and also learn the technical and tactical experience of games and sports.

THEORY SYLLABUS

48 Credits

Unit-I

(12 lectures)

Historical Development and Modern Trends (National and International Level)
Organisational Structure (State, National and International Level)
Playfield Technology – Marking and Construction of the playfields and Safety Measures.

Unit-II

(12 lectures)

Duties and Responsibilities of Officials.
Score sheet and Record Keeping
Planning, organizing and reporting a competition

Unit-III

(12 lectures)

Basic skills and techniques of the Sports/Game.
Drills for the perfection of Skills/Technique

Unit-IV

(12 lectures)

Introduction to Physical and Motor Fitness components related to sport: Strength, Speed, Endurance,
Coordinative Abilities and Flexibility.

Practical -

24 Credits

Learning and demonstrating various skills/techniques of sports.
Learning to demonstrate various drills for perfecting a skill
Learning and demonstrating to complete the process of scoring/judgment.

SUGGESTED READINGS

Steve Oldenburg (2015). Complete Conditioning for Volleyball. Human Kinetics.
Donald S. Shondell, Cecile Renaud (2002). Volleyball Coaching Bible. Human Kinetics.
Joel B. Dearing (2003). Volleyball Fundamentals. Human Kinetics.
American Volleyball Coaches Association (2006). Volleyball Skills and Drills.
Human Kinetics.
Becky Schmidt (2016). Volleyball: Steps to Success. Human Kinetics.

SEMESTER - VI

DSE – 5 Sports Specific Skill Enhancement

L -T - P = 4 -0 -2

Max. Marks =150

Time: 3Hrs

Objective: To improve the students' proficiency in the Practical aspects of his chosen Game and Sports which he/she has already studied in Sem.-1 and Sem.-3

COURSE OUTCOMES: Students will learn the theoretical and practical aspects of the Game of his choice to apply at various levels for teaching, learning and coaching purposes efficiently.

THEORY SYLLABUS:**48 Credits****Unit-I****(12 lectures)**

Advanced Skills & their stages of perfection:
 Tactical Skills with perfection drills
 Technical Skills with perfection drills

Unit-II**(12 lectures)**

Team Building and Development:
 Selection of players
 Specific training as per positions of the player
 Short term & long term training plan
 Psychological skills for relaxation & arousal

Unit-III**(12 lectures)**

Officiating in sports:
 Officiating signals
 Interpretation of rules
 Knowledge of Scoring & score sheet
 Match Analysis
 Psychological skills/qualities of officials
 Organization of a Tournament
 Drawing of fixtures for knock-out and league Tournament.

Unit-IV**(12 lectures)**

Analysis of teams
 ☐ Fitness & Sports skill Testing
 ☐ Tactical Aspect of sports.
 ☐ Analysis of Technical & Tactical skills of a team
 ☐ Team scouting

PRACTICAL**24 Credits**

Demonstration of Tactical and Technical Drills
 Preparation of Psychological techniques of relaxation and arousal
 Preparing knock-out and League fixtures
 Officiating a Match
 Scoring a match
 Demonstrating Various Motor Fitness Test and Sports Skill Tests

SUGGESTED READINGS

American Volleyball Coaches Association (2005). Volleyball: Skills & Drills. Human Kinetics.
 Champaign. U.S.A.
 Barrow & McGee's Practical Measurement and Assessment.

Barrow H.M. and McGee R. (1979). A Practical Approach to Measurement in Physical Education. Lea & Febiger, Philadelphia. U.S.A.

Chakrabarty G (2002). Kho - Kho Aveloken. Khel Sahitya Kendra. Delhi.

Caffary B (1992). Skillful Judo. A & C Black London.

Dubey HC (1999). Hockey. Discovery Publishing House. New Delhi.

FIVB (1996). Backcourt Spiking in Modern Volley Ball. FIVB. Chennai

International Hockey Federation (2003). Rules of the Game of Hockey with Guidance for Players and Umpires. International Hockey Federation-India

Vanark, A. (2017). Officiating and Coaching, Friends Publications, Delhi.

Semester VI
DSE - 6 Project work/ Dissertation

DSE-6

L -T - P = 5 -0 -1

Max. Marks =150

Time: 3Hrs

Objective: - To provide knowledge of Research Methods and Techniques, to make a project report.

COURSE OUTCOME: - Students will be able to collect data and analyze & write

Theory of Syllabus

60 Credits

Dissertation / Project Report

The candidate is required to select a topic of his/her choice for the Dissertation and project. The Steps for Dissertation/Project Report that should be followed are given below:

- Additional research on the topic.
- Analyzing the problem or topic.
- Conducting extensive research.
- Summarizing findings from the research investigation.
- Recommending Drawing conclusions and making recommendations.
- Documenting the results of the research.
- Defending conclusions and recommendations.

The original and copies of the thesis/project MUST include the following items **IN THE ORDER LISTED BELOW:**

- Title Page.
- Acknowledgment
- Abstract
- Table of Contents.
- Introduction
- Review of Related Literature
- Procedure and methodology
- Results and findings
- Discussions, summary and conclusions
- Bibliography /References.

Note: (a) One Theory period is equal to 1 credit of 1 hour duration.

(b) One Practical period is equal to 1 credit of 2 hours duration.

12 Credits

Marking Scheme: Maximum Marks- 150 marks

Thesis evaluation	-	75 marks (By External Examiner)
External Viva-Voce	-	50 Marks
Internal Assessment	-	25 Marks

GYMNASIUM-OPERATIONS**L –T - P = 5 -0 -1**

Max. Marks =150

Time: 3Hrs

Objective: - To provide knowledge of Gym, its management and operation.**COURSE OUTCOME:** - Students will learn to apply knowledge of gym operation and management.**THEORY SYLLABUS****60 Credits****UNIT-I****15 Lectures**

NUTRITION AND WEIGHT MANAGEMENT: Concept of nutrition and health, balanced diet, dietary aids and gimmicks, Energy and activity, calculating calorie intake and expenditure, Obesity, anorexia and related health problems – measurements and management, Weight management programme

UNIT-II**15 Lectures**

AEROBIC FITNESS : Understanding of various forms of aerobics- floor aerobics, step – aerobics, weight, Aerobics and aqua aerobics, Training effects of aerobic fitness on various physiological systems namely skeletal, Muscular, circulatory and respiratory, Improvement of aerobic fitness , Aerobic fitness programme.

UNIT-III**15 Lectures**

GYM-OPERATION: Location and Establishment of gym (Publicity, policy, reception, information, Registration, offer of programme), Procurement, placement & maintenance of gym Equipment, Marketing, clientage, Enrolments, record keeping, social activities, Public Relations, Individualized/group grooming programme, basic concepts of financial management , Gym-instructor – qualification, qualities, pay-roll Performance – evaluation, grooming and presentation, Introduction to different exercise equipment , Gym management – Costing, Balance sheet, Promotional plans

UNIT-IV**15 Lectures**

EVALUATION AND EXERCISES SCHEDULES: Measurement of Weight and Height, Calculating BMI (Body Mass Index), Measurement of Fitness Components, Flexibility (Sit and Reach Test, Hip Bend and Toe Touch), Strength (Sit-Ups, Leg-Raise for Minimal Strength), Cardiovascular Endurance (One-mile run, Physical Efficiency test, Harvard step test), Self- evaluation –Personal Health and Well-being, Exercise schedules – Aerobics, Fitness and Weight Management, Yoga(Any Five Asanas)

PRACTICALS**12 Credits**

Calculating BMI
Flexibility Test (Sit and reach test, hip bend and toe touch)
Strength Test (Bend knee sit ups, leg raise for minimal strength)
Cardiovascular endurance test (Harvard step test, cooper 12/9 min. run)
Self-evaluation- (Personal health and wellbeing)
Any five Asanas
Aerobic schedule
Weight management

SUGGESTED READINGS

Alexenderia, Virginia, (1994)“The Gym Workout” Published by Time Life Books.

Carol Kennedy Armbruster. Mary M. Yoke “Methods of Group Exercise Instruction”, 2009.

Sheela Kumari, Fitness, Aerobics & Gym Operations, New Delhi, Khel Sahitya Kendra, 2009.

Sunil Bharihoke, The Gym, 2002.

Time life books, Gym workout, London times life books, 2004

Time life books, staying flexible, London, time life books, 2005

Time life books, super firm tough workouts, London times life books, 2005

Wayne L. Westcott, Thomas R. Bachle, “ Strength Training”, 2007

Semester VI**DSE- 6 (ii) FITNESS AND EXERCISE MANAGEMENT****L –T - P = 5 -0 -1**

Max. Marks =150

Time: 3Hrs

Objective: - To provide knowledge of fitness and exercises management and its application in games & sports.**COURSE OUTCOME:** - Students will learn to apply knowledge of physical fitness and exercise management for betterment and quality of life.**THEORY SYLLABUS****60 Credits****Unit-I: Fitness****15 Lectures**

Physical Activity – Concept, Benefits of Participation in Physical Activities with Specific Reference to Health; Concept, Need, Components and Significance of Total Fitness
Types of Physical Activities – Walking, Jogging, Running, Calisthenics, Rope Skipping, Cycling, Swimming, Circuit Training, Weight training, Adventure Sports
Components of Physical Fitness (Health, Skill and Cosmetic Fitness); Need and Importance of Measurement and Evaluation of Physical Fitness
Principles of Physical Fitness, Warming Up, Conditioning, Cooling Down, Methods to Develop and Measure Health and Skill related components of Physical Fitness

Unit-II: Wellness**15 Lectures**

Wellness – Concept, Components, Significance with reference to Positive Lifestyle
Concepts of Quality of Life and Body Image
Factors affecting Wellness
Wellness Programs

Unit-III: Fitness and Balance Diet**10 Lectures**

Concept of physical fitness and Balanced Diet, Dietary Aids and Gimmicks.
Energy and Activity- Calorie Intake and Expenditure, Energy Balance Equation.

Unit- IV Exercises and Weight Management**20 Lectures**

Concept and definition of weight management and exercise prescription.
Weight management and Obesity - Concept, Causes, Assessment, Management; Obesity Related Health Problems.
Weight Management through Behavioral Modifications and life style.
Injury prevention and care of general and specific exercises- foot injuries, shin injuries, knee injuries, multiple site injuries, heat related injuries (heat stroke, heat exhaustion).
Exercises with music – Need, benefits and selection of music for different types of exercises.

PRACTICAL**12 Credits**

Measurement of Fitness Components – Leg-raise for Minimal Strength (Muscular Strength); Sit-ups (Muscular Endurance); Harvard Step Test, Run and Walk Test (Cardiovascular Endurance); Sit and Reach Test (Flexibility)
Measuring height, weight, waist circumference and hip circumference, Calculation of BMI (Body Mass Index) and Waist-Hip Ratio
Engage in at least one wellness program and write a report on it.

SUGGESTED READINGS

- ACSM'S (2001), **ACSM Fitness Book** (U.K., Human Kinetics).
- Anspaugh, David J.; Hamrick, Michael H.; and Rosato, Frank D. (2003), **Wellness – Concepts and Applications** McGraw Hill, New York.
- Brown, J.E. (2005) **Nutrition Now** Thomson-Wadsworth.
- Corbin, C. B., G. J. Welk, W. R Corbin, K. A. Welk (2006) **Concepts of Physical Fitness: Active Lifestyle for Wellness**. McGraw Hill, New York, USA.
- Fahey, T.D., M.P. Insel and W.T. Rath (2006), **Fit & Well: Core Concepts and Labs in Physical Fitness**, McGraw Hill, New York.
- Hoeger, W.W. & S. Hoeger (2007) **Fitness and Wellness**. 7th Ed. Thomson Wadsworth, Boston, USA.
- Hoeger, W K and S.A. Hoeger (2004). **Principles and Labs for Fitness and Wellness**, Thomson Wadsworth, California, USA.
- Kamlesh, M. L. & Singh, M. K. (2006) **Physical Education** (Naveen Publications).
- Kansal, D.K. (2008) **Textbook of Applied Measurement, Evaluation & Sports Selection**. Sports & Spiritual Science Publications, New Delhi.
- Kumari, Sheela, S., Rana, Amita, and Kaushik, Seema, (2008), **Fitness, Aerobics and Gym Operations**, Khel Sahitya, New Delhi
- Lumpkin, A. (2007) **Introduction to Physical Education, Exercise Science and Sports Studies**, McGraw Hill, New York, U.S.A.
- Savard, M. and C. Svec (2006) **The Body Shape Solution to Weight Loss and Wellness : The Apples & Pears Approach to Losing Weight, Living Longer, and Feeling Healthier..** Atria Books, Sydney, Australia.
- Department of Physical Education and Sports Sciences, University of Delhi (2007), Draft **Resource Material – Fitness, Aerobics and Gym-Operations**.
- Powers, S. K.; S.L. Dodd, and V.J. Noland (2006) **Total Fitness – Exercise, Nutrition and Wellness** Benjamin Cummings, USA.
- Sharkey, B. J. (2002), **Fitness and Health** 5th ed. (U.K., Human Kinetics).
- Uppal, A.K. (2004), **Fitness and Health** 5th ed. (U.K., Human Kinetics).
- Williams, Melvin H. (1990), **Lifetime Fitness and Wellness – A Personal Choice** 2nd ed. (USA : Wm. C. Brown Publishers).

Semester VI
DSE- 6 (iii) COMPUTER APPLICATION

L -T - P = 5 -0 -1

Max. Marks =150

Time: 3Hrs

Objective: - To provide knowledge of computer application in games & sports.

COURSE OUTCOME: - Students will learn to apply knowledge of computer research in Physical Education.

THEORY SYLLABUS: 60 Credits

UNIT-I

10 Lectures

Introduction to computers, Components of computer- CPU, Input, output and storage devices. Computer software – Operating System, Window-95, 98, 2000, XP, Vista, DOS

UNIT-II

15 Lectures

Data and information concepts – bits, bytes, KB, MB, GB, TB. MS-Office, MS-Word Spreadsheets and Power Point presentations, Internet Access

UNIT-III

15 Lectures

Computer networks: Need and scope, classification: LAN, WAN, MAN and Client server technology. Local Area Networks (LAN) – Components of LAN, Advantages of LAN, advantages of WAN.

UNIT-IV

20 Lectures

Internet and Other Technology: Internet and www, internet, applications of internet, internet protocols. Mobile commerce, Bluetooth and Wi-Fi, E-mail, Video conferencing. Computers and physical education: Need and scope of computer applications in physical education. Preparations of lessons regarding physical education using computer.

Practical:

12 Credits

To prepare test/lesson/data sheets using

1. MSOffice
2. Spread Sheets
3. MS Word
4. MS Excel
5. Power Point

SUGGESTED READINGS

Committee on Engaging Computer Science in Health Care. (2009). Computational Technology for Effective Health Care. National Academic Press. U.S.A.
Irtegov D. (2004). Operating System Fundamentals. Firewall Media.
Milke M (2007). Absolute Beginner's Guide to Computer Basics. Pearson Education Asia.
NIIT (2004). Basics of Networking Prentice – Hall. India Pvt. Ltd.

Semester VI
DSE- 6 (iv) SPORTS JOURNALISM

L –T - P = 5 -0 -1

Max. Marks =150

Time: 3Hrs

Objective: - To provide knowledge and understanding of the sports journalism and its application in the games & sports.

COURSE OUTCOME: - the students will learn to apply knowledge of sports journalism and research in sports and Physical Education.

THEORY SYLLABUS

60 Credits

UNIT-I INTRODUCTION & WRITING SKILLS

15 Lectures

Meaning, scope and changing trends of journalism in sports. Role of journalism in sports promotion & Vice – versa Historical development & role of print and electronic media in sports promotion Media, ethics and responsibilities of journalist & editor (social, legal and professional) Language – vocabulary, spellings, figure of speech, dialect, grammar, punctuation Sports terminators and its use Fundamentals of a sports story/ news. News – types, curtain – raiser, advance follow – up, news – analysis, box news. Design & make – ups: headings, front reading, layout & page making late stories, editorial tools, marks & skills.

UNIT-II ORGANIZATIONAL AND PRESENTATION SKILLS FOR MEDIA

15 Lectures

Organizational set-up of a newspaper- printing, process sequences of operations in the printing of a newspaper/journals. Introduction of various sports organization and agencies- Olympic Games, Asian games, commonwealth games, awards and trophies.

Write-ups: feature, follow-ups, advance story, curtain raiser, flash back, articles, filters, editorials, boxes, radio and T.V. commentary anchoring, interviews, group discussions, talk – shows, and reviews in sports Development and maintenance of sports / personal library Statistics, records and computers in sports.

UNIT-III EXTENDED RELEVANT DIMENSIONS

15 Lectures

Theory and principles of advertising in sports, Public relations in sports, press release, conferences Public Relation Media – advertising, press release, conferences, exhibitions, fairs, street drama, public speaking, radio, televisions, newspapers, films, posters, pictures, and graphics, Sports photo feature and writing captions of photos .

UNIT-IV JOURNALISM AND SPORTS

15 Lectures

Introduction to photo journalism in reference to sports. Process of newspaper publishing and management Olympics and sports journalism. Research tools for developing a sports story

Introduction to various types of information technology. Satellite communication: use of satellite in radio and T.V. communication for sports information.

PRACTICAL:

12 Credit

Reporting
 Review of sports articles
 Sports Photography
 Article writing

Suggested Readings:

Aamidor A (2003). Real Sports Reporting. Indiana University Press. Valparaiso. Indiana. U.S.A.
 Ahuja, B.N (1988) Theory and Practice of Journalism. Surjeet Delhi.
 Andrews P (2005). Sports Journalism: A Practical Introduction. Sage Publications Ltd. Delhi.
 Boyle R (2006). Sports Journalism: Context and Issues. Sage Publications Ltd.
 Kamath, M V (1980). Professional Journalism. K.S.K. New Delhi