Sant Gadge Baba Amravati University, Amravati

Part A

Faculty: Interdisciplinary studies

Programme: MPEd.CBCS (Master of Physical Education) (Two year(4 sem))

POs:

- 1. Maintain health & Fitness of society.
- 2. Promote all round development of society (physical, mental, social, and spiritual)
- 3. Effective Communication: Speak, read, write and listen clearly in person and through electronic media.
- 4. Effective Citizenship: Demonstrate empathetic social concern and equity centred national development, and the ability to act with an informed awareness of issues and participate in civic life through volunteering.
- 5. Self-directed and Life-long Learning: Acquire the ability to engage in independent and life-long learning in the broadest context socio-technological changes

PSOs:

- 1. Prepare physical education teacher.
- 2. Fulfilled the need of physical education teachers of the society from grass root level to higher education.
- 3. Develop the need based Teaching resources in sports and Physical Education.
- 4. Contribute as trained Workforce to provide teaching learning support from school level to higher education.
- 5. Contribute as researcher in making sports policy, curriculum design and in evaluation reforms.

Employability Potential of the Programme:

Employability in Physical Education – Physical education is one of the developing fields of educational study as well as the profession. Physical education comprises the knowledge and study of all body activities and psychomotor activities during the playing and movement. Physical education or PE is the study of physical movement, safety and health and well-being. There is a wide range of activities linked with PE including sports, dance and weight training.

Skillset Requirements:

The aspirants seeking a career in the field of physical education need to be skilled and competent. They must possess a deep understanding of the subject and practical experience in the field. By perfecting and honing the necessary skills in daily work, one can have a flourishing career in the field. Check below the necessary skills required for a career in physical education-

Athletic Skills- The aspirants wishing to make a career in the field must be a good athlete. He or She must reflect good health, physical coordination and vitality. The aspirants who are confident and strong, physically fit will be able to demonstrate the techniques needed for competitive sports and exercise routines.

Organizational Skills-Physical education teachers are required to have very strong organizational skills. Their duties comprise the collection of parental permission forms and additional fees significant for field trips and sporting events involving other schools.

Teaching Skills-The physical education teachers need to be able to break down complex concepts and instructions into smaller, more manageable steps. He or she must be able to recognize which students require encouragement and deliver it when needed.

Other Skills

- Attention to Detail Skills
- Awareness of the environmental effect on human health
- Good Explanation Ability
- Interpersonal Skills
- Knowledge of Health Issues and Physical Activity
- Mentoring & Guiding skills
- Motivation, Empathy and Leadership Skills
- Observation & Analytical Skills
- Career in Physical Education: Job Profiles

These skills can be developed through our Masters programme.

Presently, the trend of sports is becoming wider at the worldwide level. There are a plethora of requirements for experts in physical education. To produce such experts in Physical education and sports has been set up everywhere. Physical education as a profession is a very demanding profession where one with skills can earn handsome salary. It is a very good profession for anyone who wishes to spread awareness regarding physical fitness.

After the completion of this course the student may go for the higher study in sports and physical education or get the job in health and sports industries. There are several job possibilities available for the aspirants in the field of Physical Education. One can also start their Gym or Fitness center. Check below the job profiles available in the field of physical education-

Career in Physical Education:

Physical Education Teacher-A Physical Education Teacher (PE teacher) is a professional responsible for developing exercise-based learning to teach students about sports and health. They train the students and help them become physically fit.

Sports Coach- They are responsible for training, instructing and directing the operations of a particular individual or a sports team as a whole.

Physical Instructor- Physical Instructor is a professional who teaches several physical and stretching exercises to

help people indulge in exercise activities.

Lifestyle Trainer- is a mentor responsible for providing food and lifestyle changes to the people to help them stay fit and acquire a healthy lifestyle.

Team Manager- Team Managers are responsible for handling the business side of sports. Bringing in investors, managing media and press, organizing events and competitions etc. are some of their duties.

Interpersonal Skills: Teams that promote positive communication and respect among players improve overall motivation. Coaches who learn to communicate effectively with their athletes can deliver positive feedback and constructive criticism in ways that actually influence players. Technological precision, scouts have an entire sheet of information on how fast an athlete can run, how high they can jump and how accurate their passing.

Critical Thinking Skills: help athletes to perform at their best when they are under high pressure and stress. When these basic thinking skills are most well-organized, athletes' performance will be improved and maintained at a high level of performance even under high pressure of the professional competition.

Consultant- Consultants are experts in their field and are hired in organizations and institutions periodically. They train and use their expertise for the overall improvement of the team.

A career in physical education can make way for a vast range of career options; from being a part of the chosen sport, health clubs, sports good manufacturer, marketing, commentator, sports photographer, journalism, trainer, and many other related options. Sportspersons on retiring can also look forward to satisfying jobs in assignments such as umpires and referees.

Also in a country like India, spas and yoga centers are at a rise. The aspirants can also use his/her expertise for a job in such places. People nowadays look for jobs in the field of Physical Education and Sport as they have the best knowledge regarding rehabilitative and therapeutic modalities like Cryotherapy, Thermotherapy etc. Trained Physical Education personnel get opportunities in defense and police services with special recruitment drives.

Part B

Syllabus Prescribed for Two YearsM.P.Ed. (Master of Physical Education)

Programme:Semester 1 Title of the Course/Subject

Code of the Course/Subject

MPCC-101

DSC-1: RESEARCH METHODOLOGY IN PHYSICAL EDUCATION & SPORTS

60

(Total Number of

Periods)

COs

- Determine need and scope of research in Physical Education. Design of conducting research.
- Identify potential research areas in Physical Education & Sports Sciences
- Knowledge of ethics of research.

Unit Content

- Unit I **Introduction-**Meaning and Definition of Research Need, Nature and Scope of research in Physical Education. Classification of Research, Location of Research Problem, Criteria for selection of a problem, Qualities of a good researcher. Research ethics : concept, meaning and importance.(**12**)
- Unit II **Methods of Research** -Descriptive Methods of Research; Survey Study, Meaning of Survey, Tools of Survey Research, Questionnaire, Construction of Questionnaire, Interview, Procedure of conducting interview, Case study, Introduction of Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism: Internal Criticism and External Criticism.(**12**)
- Unit III **ExperimentalResearch** -Experimental Research Meaning, Nature and Importance, Meaning of Variable, Types of Variables. Experimental Design - Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design, Factorial Design. (12)
- Unit IV Sampling- Meaning and Definition of Sample and Population. Types of Sampling; Probability Methods; Systematic Sampling, Cluster sampling, Stratified Sampling. Area Sampling – Multistage Sampling. Non- Probability Methods; Convenience Sample, Judgment Sampling, Quota Sampling.(12)
- Unit V **Research Proposal and Report-** Cauterization of Thesis / Dissertation, Front Materials, Body of Thesis – Back materials. Method of Writing Research proposal, Thesis / Dissertation; Method of writing abstract and full paper for presenting in a conference and to publish in journals, Mechanics of writing Research Report, Footnote and Bibliography writing.(**12**)

**Activities 1 lecture

- 2.tutorials
- 3.fieldwork
- 4.library work
- 5. Seminars
- 6. assignment
- 7. self-studies

- 1. BestJ.W(1971)ResearchinEducation,NewJersey;PrenticeHall, Inc
- 2. C.R.Kothari, Research Methodology : Methods And Techniques, New Age International Publishers; Fourth edition
- 3. ClarkeDavid.H&ClarkeH,Harrison(1984)ResearchprocessesinPhysicalEducation,NewJersey;PrenticeHallI nc.
- 4. CraigWilliamsandChrisWragg(2006)DataAnalysisandResearchforSportandExerciseScience,Londonl Routledge Press
- D N Sansanwal, Research Methodology And Applied Statistics, Shipra Publications, ASIN: 9388691555 ISBN-13: 978-9388691543
- 6. JerryRThomas&JackKNelson(2000)ResearchMethodsinPhysicalActivities;Illonosis;HumanKinetics;
- 7. John W. Creswell, Research Design: Qualitative, Quantitative, and Mixed Methods Approaches, SAGE Publications, Inc; Fifth edition, ISBN-13 : 978-1506386706
- 8. Kamlesh,M.L.(1999)ReserachMethodologyinPhysicalEducationandSports,NewDelhiMoses,A.K.(1995)Th esisWriting Format,Chennai; PoompugarPathippagam
- 9. MoorthyA.M.ResearchProcessesinPhysicalEducation(2010);FriendPublication,NewDelhi
- 10. Rothstain,A(1985)ResearchDesignandStatisticsforPhysicalEducation,EnglewoodCliffs:PrenticeHall,Inc
- 11. Subramanian, R, Thirumalai Kumar S& Arumugam C(2010) Research Methods in Health, Physical Education and Sports, New Delhi; Friends Publication.

Code of the Course/Subject

MPCC-102

DSC-2: PHYSIOLOGY OF EXERCISE

60

COs

- To create awareness of human body & physiological systems.
- To know the effect of exercise on various systems.
- Discuses metabolic and energy transformation.
- Associate climatic condition and sports performance.
- Describe ergogenic aids.

- Unit I Skeletal Muscles and Exercise: Macro & Micro Structure of the Skeletal Muscle, Chemical Composition. Sliding Filament theory of Muscular Contraction. Types of Muscle fiber. Muscle Tone, Chemistry of Muscular Contraction – Heat Production in the Muscle, Effect of exercises and training on the muscular system. (12)
- Unit II **Cardiovascular System and Exercise:** Heart Valves and Direction of the Blood Flow Conduction System of the Heart – Blood Supply to the Heart – Cardiac Cycle – Stroke Volume – Cardiac Output – Heart Rate – Factors Affecting Heart Rate – Cardiac Hypertrophy – Effect of exercises and training on the Cardio vascular system. (**12**)
- Unit III **Respiratory System and Exercise:** Mechanics of Breathing Respiratory Muscles, Minute Ventilation – Ventilation at Rest and During Exercise. Diffusion of Gases – Exchange of Gases in the Lungs –Exchange of Gases in the Tissues – Control of Ventilation – Ventilation and the AnaerobicThreshold. Oxygen Debt – Lung Volumes and Capacities – Effect of exercises and training on the respiratory system.(**12**)
- Unit IV Metabolism and Energy Transfer: Metabolism ATP PC or Phosphagen System Anaerobic Metabolism – Aerobic Metabolism – Aerobic and Anaerobic Systems during Rest and Exercise. Short Duration High Intensity Exercises – High Intensity Exercise Lasting Several Minutes – Long Duration Exercises.(12)
- Unit V Climatic conditions and sports performance and ergogenic aids: Variation in Temperature and Humidity – Thermoregulation – Sports performance in hot climate, Cool Climate, high altitude. Influence of: Amphetamine, Anabolic steroids, Androstenedione, Beta Blocker, Choline, Creatine, Human growth hormone on sports performance. Narcotic, Stimulants: Amphetamines, Caffeine, Ephedrine, Sympathomimetic amines. Stimulants and sports performance.(12)

Note: Laboratory Practical in Physiology be designed and arranged internally.

**Activities 1.Lecture

- 2.Tutorials
- 3.fieldwork
- 4. Library work
- 5. Seminars
- 6. Assignment
- 7. self-studies

- 1. Amrit Kumar, R, Moses. (1995). Introduction to Exercise Physiology.Madras: PoompugarPathipagam.
- 2. Anne Waugh & Allison Grant, (2018) Ross & Wilson Anatomy and Physiology in Health and Illness, Elsevier, London
- $3. \\ Beotra Alka, (2000) Drug Education Handbook on Drug Abuse in Sports: Sports Authority of India Delhi.$
- $\label{eq:linear} 4. \quad Clarke, D.H. (1975). Exercise Physiology. New Jersey: Prentice Hall Inc., Englewood Cliffs.$
- 5. David, LCostill. (2004). Physiology of Sports and Exercise. Human Kinetics.
- 6. Fox,E.L.,andMathews,D.K.(1981).ThePhysiologicalBasisofPhysicalEducationandAthletics.Philadelphia:Sanders CollegePublishing.
- 7. Guyton, A.C. (1976). Textbook of Medical Physiology. Philadelphia: W.B. Sandersco. Richard, W.Bowers. (1989). Sport sPhysiology. WMC: Brown Publishers.
- 8. SandhyaTiwaji.(1999).ExercisePhysiology.SportsPublishers.
- 9. Shaver, L. (1981). Essentials of Exercise Physiology. New Delhi: Subject Publications. Vincent, T. Murche. (2007). Elementary Physiology. Hyderabad: Sports Publication.
- 10. William, D.McAradle. (1996). Exercise Physiology, Energy, Nutrition and Human Performance. Philadelphia: Lippincot tWilliams and Wilkins Company.

Title of the Course/Subject

MPCC-103

DSC-3: YOGIC SCIENCES 60

COs

- Demonstrate an understanding of professional ethics in yoga science.
- Recognize the need to engage in lifelong learning through continuing education and research.
- Learning and professional development through self-study.
- Categorization mudras and kriyas.
- Application of Yogic science for sports performance.

Unit Content

- Unit I Introduction: Meaning and Definition of Yoga. Astanga Yoga: Yama, Niyama, Aasna, Pranayama, Prathyahara, Dharana, Dhyana, Samadhi, Concept of Yogic Practices; Principles of Breathing Awareness Relaxation, Sequence Counter pose Time Place Clothes Bathing Emptying the bowels Stomach Diet No Straining Age Contra- Indication Inverted asana Sunbathing.(12)
- Unit II **Aasanas and Pranayam:** Loosening exercise: Techniques and benefits. Asanas: Types- Techniques and Benefits, Surya Namaskar: Methods and benefits. Pranayama: Types- Methods and benefits. Nadis: Meaning, methods and benefits, Chakras: Major Chakaras- Benefits of clearing and balancing Chakras.(**12**)
- Unit III **Kriyas:** Shat Kriyas- Meaning, Techniques and Benefits of Neti Dhati Kapalapathi- Trataka Nauli Basti, Bandhas: Meaning, Techniques and Benefits of Jalendra Bandha, Jihva Bandha, Uddiyana Bandha, Mula Bandha.(**12**)
- Unit IV Mudras: Meaning, Techniques and Benefits of Hasta Mudras, Asamyuktahastam, Samyuktahastam, Mana Mudra, Kaya Mudra, Banda Mudra, Adhara Mudra. Meditation: Meaning, Techiques and Benefits of Meditation – Passive and active, Saguna Meditation and Nirguna Meditation.(12)
- Unit V Yoga and Sports: Yoga Supplemental Exercise Yoga Compensation Exercise Yoga Regeneration Exercise- Power Yoga. Role of Yoga in Psychological Preparation of athelete: Mental Wellbeing, Anxiety, Depression Concentration, Self Actualization. Effect of Yoga on Physiological System: Circulatory, Skeletal, Digestive, Nervous, Respiratory, Excretory System.

Note: Laboratory Practicals be designed and arranged internally. (12)

**Activities	1. Lecture
	2.Tutorials

- 3.fieldwork
- 4. Library work
- 5. Seminars
- 6. Assignment
- 7. Self-studies

- 1. B.P.Bam, Winning Habits: Techniques for Excellence in Sports, Pearson; First edition, ISBN-13 : 978-8131710289
- M L Gharote, Shri S K Ganguly, Teaching method for yogic Practices, Kaivalyadhama; 4th edition (2001); Kaivalyadhama Yoga Institute
- 3. R Nagarathna (Author), Dr H R Nagendra (Author), Dr Surinder P S Pruthi, New Perspectives in Stress Management, Swami Vivekananda Yoga Prakashana; 3rd (1986)
- 4. George Feuerstein, (1975). Text Book of Yoga. London: MotilalBansaridass Publishers (P) Ltd. Gore, (1990), Anatomy and Physiology of Yogac Practices. Lonavata: Kanchan Prkashan.
- 5. Helen Purperhart (2004), The Yoga Adventure for Children. Netherlands: A Hunter House book. Iyengar, B.K.S. (2000), Light on Yoga. New Delhi: Harper Collins Publishers.
- 6. Karbelkar N.V.(1993) PatanjalYogasutraBhashya (Marathi Edition) Amravati: Hanuman VyayamPrasarak Mandal
- 7. Kenghe. C.T. (1976). Yoga as Depth-Psychology and para-Psychology (Vol-I): Historical Background, Varanasi: BharataManishai.
- 8. Kuvalyananada Swami & S.L. Vinekar, (1963), Yogic Therapy Basic Principles and Methods. New Delhi: Govt. of India, Central Health Education and Bureau.
- 9. Moorthy A.M. & Alagesan. S. (2004) Yoga Therapy. Coimbatore: Teachers Publication House. Swami Kuvalayanda, (1998), Asanas. Lonavala: Kaivalyadhama.
- Swami Satyananada Sarasvati. (1989), Asana Pranayama Mudra Bandha. Munger: Bihar School of Yoga.
 Swami SatyanandaSaraswathi. (1984), Kundalini and Tantra, Bihar: Yoga Publications Trust. Swami
- Sivananda, (1971), The Science of Pranayama. Chennai: A Divine Life Society Publication. 12. Thirumalai Kumar. S and Indira. S (2011) Yoga in Your Life, Chennai: The Parkar Publication. Tiwari O.P.

60

MPCC-104

DSC-4: TEST, MEASUREMENT AND EVALUATION IN PHYSICAL EDUCATION

COs

- Develop an assessment instrument (a health & fitness test, skill test of various games and sports etc.) and a scoring.
- Develop knowledge, skills, and abilities related to health and fitness assessment;
- Technique of Evaluate students' performance assessment of various instruments and create new tests.

Unit Content

- Unit I Introduction: Meaning and Definition of Test, Measurement and Evaluation. Need and Importance of Measurement and Evaluation. Criteria for Test Selection – Scientific Authenticity. Meaning, definition and establishing Validity, Reliability, Objectivity. Norms – Administrative Considerations.(12)
- Unit II Motor Fitness Tests: Meaning and Definition of Motor Fitness. Test for Motor Fitness; Indiana Motor Fitness Test (for elementary and high school boys, girls and College Men) Oregon Motor Fitness Test (Separately for boys and girls) - JCR test. Motor Ability; Barrow Motor Ability Test – Newton Motor Ability Test – Muscular Fitness – Kraus Weber Minimum Muscular Fitness Test.(12)
- Unit III **Physical Fitness Tests:** Physical Fitness Test: AAHPERD Health Related Fitness Battery (revised in 1984), ACSM Health Related Physical Fitness Test, Roger's physical fitness Index. Cardio vascular test; Harvard step test, 12 minutes run / walk test, Multi-stage fitness test (Beep test). (12)
- Unit IV Anthropometric and Aerobic-Anaerobic Tests: Physiological Testing: Aerobic Capacity: The Bruce Treadmill Test Protocol, 1.5 Mile Run test for college age males and females. Anaerobic Capacity: Margaria-Kalamen test, Wingate Anaerobic Test, Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Method of measuring Circumference: Arm, Waist, Hip, Thigh. Method of Measuring Skin folds: Triceps, Sub scapular, Suprailiac. (12)
- Unit V Skill Tests: Specific Spots Skill Test: Badminton: Miller Wall Volley Test. Basketball: Johnson Basketball Test, Harrison Basketball Ability Test. Hockey: Friendel Field Hockey Test, Harban's Hockey Test, Volleyball, Russel Lange Volleyball Test, Brady Volleyball Test. Football: Mor-Christian General Soccer Ability Skill Test Battery, Johnson Soccer Test, Mc-Donald Volley Soccer Test. Tennis: Dyer Tennis Test.(12)

Note: Practicals of indoor and out-door tests be designed and arranged internally.

**Activities 1. Lecture

- 2.Tutorials
- 3.fieldwork
- 4. Library work
- 5. Seminars
- 6. Assignment
- 7. Self-studies

- 1. Authors Guide (2013) ACSM's Health Related Physical Fitness Assessment Manual, USA: ACSM Publications
- Collins, R.D., & Hodges P.B. (2001) A Comprehensive Guide to Sports Skills Tests and Measurement (2nd edition) Lanham: Scarecrow Press
- 3. Cureton T.K. (1947) Physical Fitness Appraisal and Guidance, St. Louis: The C. Mosby Company
- 4. Getchell B (1979) Physical Fitness A Way of Life, 2nd Edition New York, John Wiley and Sons, Inc
- 5. Jenson, Clayne R and Cynt ha, C. Hirst (1980) Measurement in Physical Education and Athletics, New York, Macmillan Publising Co. Inc
- 6. Kansal D.K. (1996), "Test and Measurement in Sports and Physical Education, New Delhi: DVS Publications
- Krishnamurthy (2007) Evaluation in Physical Education and Sports, New Delhi; Ajay Verma Publication
 Vivian H. Heyward (2005) Advance Fitness Assessment and Exercise Prescription, 3rd Edition, Dallas TX: The Cooper Institute for Aerobics Research
- Wilmore JH and Costill DL. (2005) Physiology of Sport and Exercise: 3rd Edition. Champaigm IL: Human Kinetics
- 10. Yobu, A (2010), Test, Measurement and Evaluation in Physical Education in Physical Education and Sports. New Delhi; Friends Publications

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)	
	TRACK & FIELD		

MPPC- 101

(Track event performance)

60

COs

- Demonstrate Fundamental skills-Short and Middle distance running.
- Use of Starting blocks- stance on the blocks. Body position at the start start start chnique. Change in body position during running.
- Modified movements of the arms, stride length and frequency.
- Interpret Position of torso while running and at finish.
- Application of Advanced Skills & Various techniques of start: Sitting start, standing start and Active game practice.
- Interpretation of Lead up activities, General rules, Duties of officials
- Able to Officiating in various levelCompetitions and Marking of the play area.

Content

Performance	For Boys- (Any Two)				
	1. Sprint Events – 100 Mts./200 Mts.				
	2. Hurdles 110 mts.				
	3. Middel Distance Running 800mts / 1500mts				
	For Girls- (Any Two)				
	1. Sprint Events – 100 Mts./200 Mts.				
	2. Hurdles 100 mts.				
	3. Middel Distance Running 800mts .				
Fundamental	-Short and Middle distance.				
skills	1. Use of Starting blocks- stance on the blocks.				
SKIIIS	2. Body position at the start- starting technique, change in body position during running, movements of the arms, stride length and frequency, position of torso while running and at finish.				
Advanced	Various techniques of sprint start:				
Skills	Bullet start & standing start.				

Active game practice

Distribution of marks for game Examination is given below:

Performance of any two track events:

S		Roll No.	Event 1		Event 2		Project Report	Viva Voce	Total
N	D.		Performa nce	Style/ Technique	Performa nce	Style/ Technique	neport	, occ	
			10	10	10	10	20	10	70

(The performance table is given in appendix.)

**Activities

- 1. Demonstration
- 2. Tutorials
- 3. fieldwork
- 4. sports and game Seminars
- 5. Assignment
- 6. Self-practice

Note:

- Athletic Project report on Track Events <u>Must be written by own handwriting</u> (Details regarding all track events, various styles and techniques of each event.)
- Tournaments held at National and International levels, Distinguished sports awards and personalities related to the events.
- Warming-up- General free hand exercises, specific work out, Fundamental skills, Lead up activities, General rules and their interpretations, Duties of officials, officiating in class competitions and Intramurals, Marking of the play area.

Code of the Course/Subject

MPPC-102

Title of the Course/Subject

(Total Number of Periods)

SPECIALIZATIONS IN INDIGENOUS GAME (INDIAN GAME)

60

COs

- Explain History of the variousIndigenous games.
- Able to design and preparetheplay fields, Equipment's and materials required.
- Demonstrate Fundamental skill, Lead up games, system of play, rules, Regulations of game, Officials and their signals.
- Create and executeStrategy's, Techniques, Tactics in game situation.
- Give original example and applicationsvarious Methods of coaching.
- Evaluate Modern trends in the game, latest record, awards of the game.

Content

The Candidate has choice to select **any one** of the following games as the Indian Game Specialization in 1stSemester.

- 1. Kabaddi
- 2. Kho-Kho
- 3. Malkhamb (boys)
- 4. Rop-malkhamb (girls)

Distribution of marks for game Examination is given below:

Sl. No	Roll No.	Knowledg e offondame ntalskill.		Officiating oftheGame	Project Report	Vivav oce	Total
		20	20	10	10	10	70

**Activities

1. Demonstration

- 2. Tutorials
- 3. fieldwork
- 4. sports and game Seminars
- 5. Assignment
- 6. Self-practice

Note:History of the game, Measurement and Preparation of the Fields, Equipments and materials required, Fundamental skill, Lead up games, Techniques, Tactics, system of play, rules and regulations of game, Methods of coaching, Officials and their signals, Modern trends in the game, latest record of the game awards.

The student will submit the project report in own handwriting at the time of exam.

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)	
MPPC- 103	YOGA	90	

COs

- Able to demonstrate proficiency at the Yoga-asanas.
- Utilizeand execute Kriyas in yoga.
- Explain key concepts of Pranayama and its benefits.
- Learning Aerobics and its practical uses.
- Determine and categorization of Mudras.

Content

- Yoga Asanas(Sitting, Standing and Laying Asanas)
- Suryanamaskar (12 count)
- Kriyas (ShudhiKriya,Jalneti, Sutraneti, Dugdhaneti, Kunjal, Nauli)
- **Pranayam** (Bhastika, Pranayams, Anulom-vilom, Kapalbhati)
- Aerobics (Rhythmic Aerobics dance, Low impact aerobics, High impact aerobics, being successful in exercise and adaptation to aerobic workout.)
- Mudras (Eight types of Mudra)
- Bandha

Distribution of marks for game Examination is given below:

SI.	Roll	Yoga-asana (Two	Surya	Kriya*	Project	Total
No	No.	student choice &	namaskar	/Pranayama*	Report	
110		two examiner		/Aerobics*/Mudras*		
•		choice)		/Bandha* (Any One)		
		40	10	10	10	70
1						

- 2. Tutorials
- 3. fieldwork
- 4. sports and game Seminars
- 5. Assignment
- 6. Self-practice

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPPC- 104	TEACHING/COACHING LESSON ATHLETICS (TRACK EVENTS)	90

COs

- Develop proficiency in taking teaching classes in Track events under school/college situation.
- Provided teaching experience to students.
- Interpret Methods of coaching, Officials and their signals.
- Evaluate Modern trends in the game, latest record, awards of the game.

Content

The students need to develop proficiency in takingteaching classes inTrack events under school situation. In view of this, the students shall be provided with teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the first semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Distribution of marks for game Examination is given below:

Sl. No	Roll No.	Lesson plan.	Knowled ge of subject	Teaching aptitude	Use of audio- visual aids	Class Control (Student Creativity/Abil ity)	Total
		10	20	20	10	10	70

**Activities

- Demonstration
 Tutorials
- 3. fieldwork
- 4. sports and game Seminars
- 5. Assignment
- 6. Self-practice

<mark>Semester II</mark>

Code of the Course/Subject

MPCC-201

Title of the Course/Subject

(Total Number of Periods)

DSC-1: APPLIED STATICTICS IN PHYSICAL EDUCATION AND SPORTS

60

COs

- Convert a problem description into testable research hypotheses.
- Select appropriate statistical tools to investigate a research hypothesis.
- Select standard experiment designs, with application of statistics analysis of research hypothesis.
 - Application of computer software for statistics.

Unit	Content					
Unit I	Introduction					
	Meaning and Definition of Statistics. Function, need and importance of Statistics. Types of Statistics. Meaning of the terms, Population, Sample, Data, types of data. Variables; Discrete, Continuous. Parametric and non-parametric statistics.(12)					
Unit II	Data Classification, Tabulation and Measures of Central Tendency					
	Meaning, uses and construction of frequency table. Meaning, Purpose, Calculation and advantages of Measures of central tendency – Mean, median and mode.(12)					
Unit III	Measures of Dispersions and Scales					
	Meaning, Purpose, Calculation and advances of Range, Quartile, Deviation, Mean Deviation, Standard Deviation, Probable Error. Meaning, Purpose, Calculation and advantages of scoring scales; Sigma scale, Z Scale, Hull scale(12)					
Unit IV	Probability Distributions and Graphs					
	Normal Curve. Meaning of probability- Principles of normal curve – Properties of normal curve. Divergence form normality – Skewness and Kurtosis. Graphical Representation in Statistics; Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve.(12)					
Unit V	Inferential and Comparative Statistics					
	Tests of significance; Independent "t" test, Dependent "t" test – chi – square test, level of confidence and interpretation of data. Meaning of correlation – co-efficient of correlation – calculation of co-efficient of correlation by the product moment method and rank difference method. Concept of ANOVA and ANCOVA.(12)					
	Note : It is recommended that the theory topics be accompanied with practical, base on computer software of statistics.					
**Activitie	 Lecture Tutorials fieldwork Library work Seminars Assignment 					
	7. Self-studies					

- 1. Best J. W (1971) Research in Education, New Jersey; Prentice Hall, Inc
- Clark D.H. (1999) Research Problem in Physical Education 2nd edition, Eaglewood Cliffs, Prentice Hall, Inc.
 Jerry R Thomas & Jack K Nelson (2000) Research Methods in Physical Activities; Illonosis; Human Kinetics;
- 4. Kamlesh, M. L. (1999) Reserach Methodology in Physical Education and Sports, New Delhi Rothstain A (1985) Research Design and Statistics for Physical Education, Englewood Cliffs: Prentice Hall, Inc
- 5. Prof. J. P. Verma (,A Text Book on Sports Statistics, SPORTS PUBLICATION; First edition (1 jan. 2019); Sports Publication- 7/26, Ground Floor, Ansari Road, Darya Ganj, Delhi
- 6. Prof. J. P. Verma, Statistics for Psychology, SPORTS PUBLICATION; First edition (1 jan. 2019); Sports Publication- 7/26, Ground Floor, Ansari Road, Darya Ganj, Delhi
- 7. Sivaramakrishnan. S. (2006) Statistics for Physical Education, Delhi; Friends Publication Thirumalaisamy (1998), Statistics in Physical Education, Karaikudi, Senthilkumar Publications.
- 8. महेंद्रप्रतापसिंह, सांख्यिकीकेसिद्धांतएवप्रयोग, १९५५, कोशोरपुब्लीशिंगहाउसकिताबमहाल, मुंबई

(Total Number of Periods)

MPCC-202

DSC-2: SPORTS BIOMECHANICS AND KINESIOLOGY

60

- COs
 - 1. Describe terminology of sports biomechanics and Kinesiology.
 - 2. Identify biomechanical, health, physiological, and psychological limitations to and interventions for improving physical performance.
 - 3. Identify and explain the mechanisms underlying biomechanical, physiological changes that occur during after acute and chronic exercises.
 - 4. Understand how mechanical principles can be applied to the analysis of human movement to assess and improve performance and reduce risk of injury.
 - 5. Application of mechanical principle to analysis human movement for performance.
 - 6. To design safety devices.
 - 7. To prepare a mode of reduce the risk of injury.
 - 8. To invent and event new technics, styles of various sports.

Unit	Content					
Unit I	Introduction					
	Meaning, nature, role and scope of Applied kinesiology and Sports Biomechanics. Meaning of Axis and Planes, Dynamics, Kinematics, Kinetics, Statics Centre of gravity -Line of gravity plane of the body and axis of motion, Vectors and Scalars.(12)					
Unit II	Muscle Action					
	Origin, Insertion and action of muscles: Pectoralis major and minor, Deltoid, Biceps, Triceps (Anterior and Posterior), Trapezius, serratus, Sartorius, Rectus femoris, Abdominis, Quadriceps, Hamstring, Gastrocnemius.(12)					
Unit III	Motion and Force					
	Meaning and definition of Motion. Types of Motion: Linear motion, angular motion, circular motion, uniform motion. Guiding principles of motion, Principles related to the law of Inertia, Law of acceleration, and law of counter force. Meaning and definition of force- Sources of force -Force components. Force applied at an angle - friction, Spin - Centripetal force - Centrifugal force.(12)					
Unit IV	Projectile and Lever					
	Freely falling bodies -Projectiles -Equation of projectiles stability Factors influencing equilibrium - Guiding principles for stability -static and dynamic stability. Meaning of work, power, energy, kinetic energy and potential energy. Leverage -classes of lever - practical application. Water resistance - Air resistance-Aerodynamics.(12)					
	Note: Laboratory practical should be designed and arranged for students internally.					
Unit V	Movement Analysis					
	Analysis of Movement: Types of analysis: Kinesiological, Biomechanical. Cinematographic. Methods of analysis – Qualitative, Quantitative, Predictive, Mechanical analysis of track and field events.(12)					
**Activitie	s 1. Lecture 2. Tutorials 3. fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies					

- 1. Deshpande S.H.(2002). ManavKriyaVigyan Kinesiology (Hindi Edition) Amravati :HanumanVyayamPrasarak Mandal.
- Hoffman S.J. Introduction to Kinesiology (Human Kinesiology publication In.2005. Steven Roy, & Richard Irvin. 2. (1983). Sports Medicine. New Jersery: Prentice hall. Thomas. (2001). Manual of structural Kinesiology, New York: Me Graw Hill.
- 3. Uppal A.K. Lawrence Mamta MP Kinesiology(Friends Publication India 2004)
- 4. Uppal, A (2004), Kinesiology in Physical Education and Exercise Science, Delhi Friends publications.
- Williams M (1982) Biomechanics of Human Motion, Philadelphia; Saunders Co.
 Hay, James G. The Biomechanics of Sports Techniques, Fourth Edition (Englewood cliffs, New Jersey; Prentice) Hall, 1993 4.
- 7. Hay, James G. and Raid J. Gavin, Anatomy, Mechanics and Human motion, Second Edition (Englewood cliffs, New Jersey: Prentice Hall, 1988).
- 8. Robertson, D. Gordon E. et. Al. Research Methods in Biomechanics. (Champaign etc : Human kinetics publishers, 2004)
- 9. Rai Ramesh, Biomechanics - Mechanical Aspects of human motion (Mohali Punjab : Agrim Publication, 2003)

Code of the Course/Subject

MPCC-203

Title of the Course/Subject

(Total Number of Periods)

60

DSC-3: INFORMATION & COMMUNICATION TECHNOLOGY (ICT) IN PHYSICAL EDUCATION

COs

- Describe information and communication technology; 1.
- The purpose and scope of ICT in physical education. 2
- 3. Application basic ICT skills in planning and teaching at school level. create web-based learning environment using virtual classrooms and web based educational applications
- 4. To educate required social, ethical, and legal issues surrounding technology
- 5. To create scoring and recording of raw data and organizing using ICT.
- 6. Learn to design sport related software.
- Use a system map or a block diagram to identify the components of an ICT system. 7.

Unit	Content					
Unit I	Communication & Classroom Interaction					
	Concept, Elements, Process & Types of Communication Communication Barriers & Facilitators of communication, Communicative skills of English - Listening, Speaking, Reading & Writing Concept & Importance of ICT Need of ICT in Education Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration, Challenges in Integrating ICT in Physical Education(12)					
Unit II	Fundamentals of Computers					
	Characteristics, Types & Applications of Computers Hardware of Computer: Input, Output & Storage Devices Software of Computer: Concept & TypesComputer Memory: Concept & Types Viruses & its ManagementConcept, Types & Functions of Computer Networks Internet and its Applications Web Browsers & Search Engines Legal & Ethical Issues(12)					
Unit III	Software and Applications					
	MS-Word: Main Features &its Uses in Physical Education ; MS Excel: Main Features &its Applications in Physical Education ; Jamovi, SPSS: Creating a Database, Creating a Table, Queries, Forms & Reports on Tables and its Uses in Physical Education; MS-Power Point: Preparation of Slides with Multimedia Effects MS Publisher: Newsletter & Brochure. (12)					
Unit IV	ICT Integration in Teaching Learning Process					
	Approaches to Integrating ICT in Teaching Learning Process Project Based Learning (PBL), Co-Operative Learning Collaborative Learning ICT and Constructivism: A Pedagogical Dimension(12)					
Unit V	E-Learning & Web Based Learning					
	E-Learning, Web Based Learning, Visual Classroom(12)					
**Activit	ies 1. Lecture 2. Tutorials 3. fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies					

- 1. B. Ram, New Age International Publication, Computer Fundamental, Third Edition-2006
- Brain under IDG Book. India(p) Ltd Teach Yourself Office 2000, Fourth Edition-2001 2.
- 3. Douglas E. Comer, The Internet Book, Purdue University, West Lafayette in 2005
- 4. Heidi Steel Low price Edition, Microsoft Office Word 2003- 2004
- 5. ITL Education Solution Ltd. Introduction to information Technology, Research and Development Wing-2006
- 6. Pradeep K. Sinha & Priti; Sinha, Foundations computing BPB Publications -2006.
- Rebecca Bridges Altman Peach pit Press, Power point for window, 1999 7.
- Sanjay Saxena, Vikas Publication House, Pvt. Ltd. Microsoft Office for ever one, Second Edition-2006 8.
- Ton J. Cleophas, Aeilko H. Zwinderman, SPSS for Starters, Springer; 2010 edition 9.
- 10. J.P. Verma, Data Analysis in Management with SPSS Software, Springer; 2013 edition

MPCC-204

DSC-4: MANAGEMENT IN PHYSICALEDUCATION AND

60

(Total Number of

Periods)

SPORTS

COs

- 1. To know the concept of sports management.
- 2. Differentiate between formal, informal and co-curricular activity.
- 3. Outline the process of designing curriculum.
- 4. Analysis of various models of curriculum. Incorporate an understanding of ethical, legal, and socio-cultural issues in managerial decision making and policy determinations in sport
- 5. Employ sound principles of strategic planning, financial management, risk management, and human resource management in sport
- Apply a fundamental knowledge and practical understanding of sport marketing, communication, and event 6. management principles
- Creative use of available resources. 7.

Unit	Content				
Unit I	Introduction to Management				
	Modern concept and scope of Management, Functions and Importance of Management ; Qualities and responsibility of Manager, Base of philosophy in Management ; Competency approaches and implementation in physical education and sports Management Progressive concepts of management ; General Administration theories, Personnel and Material management, Management for instruction and activities programming. (12)				
Unit II	Financial management in Physical education and Sports				
	Financial management of education, sports in schools, Colleges and Universities ; Cost Accounting and controlling ; Funds, discretionary funds and Auditing ; Criteria of a good Budget, Steps of budget preparation (12)				
Unit III	Management of Programme, Facilities, Equipment and supplies.				
	Programme Management-Instructional Management, selecting, teaching activities, selection teaching aid and materials, class management grouping of students, Dress, roll, call, class size Time allotment, scheduling, criteria for evaluating the instructional programme, problem of instrumental programme. Management of competitions & Participations intramural Inter-collegiate, Inter-school, and Handicapped. Management of Equipment and supplies Need, selection, purchase, storing, Issuing and maintainance of equipment & supplies. (12)				
Unit IV	Legal Aspects Supervision in Physical education and sport				
	Legal Aspects of Management: Legal implecations for requiring physical education, legal liability, Rights, School, code, college, code, University code & Cooperation, code related to physical education and sports. Concept and techniques of supervision; Principles and functions of Supervision Personality trait of Supervision ; Nature, need and concept of Evaluation, Follow-up(12)				
Unit V	Marketing, Sponsorship and Future trends of Management				
	Concept of Marketing, Marketing management of competitive sports, Factors effecting on marketing programme ; Advertisement and Multimedia ; Role of sponsorship in sports management ; Concept and need of system approach and its implementation in physical education and sports(12)				
**Activitie	s 1. Lecture 2.Tutorials 3.fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies				

- 1. Barrow H. M. "Man and Movement : Principles of Physical Education," Lea & Febiger, Philadelphia, USA, 1977 (Ch. II)
- 2. Bonnie, L. (1991). The Management of Sports. St. Louis: Mosby Publishing Company, Park House.
- Bucher C. A., "Administration of Physical Education & Athletic Programmers", 7th edition, St. Lovis, the 3. C.V. Mosby Co., 1979.
- 4. Burton W.H. & Bruckner L.J., "Supervision : A Social Process", Appleton Century Croits, Inc. New York, Third Edition, 1955.
- 5. Chakraborthy & Samiran. (1998). Sports Management. New Delhi: Sports Publication.
- 6. Charles, A, Bucher & March, L, Krotee. (1993). Management of Physical Education and Sports. St. Louis: Mosby Publishing Company.
- 7. Chelladurai, P. (1999). Human Resources Management in Sports and Recreation. Human Kinetics.
- Dr. M. L. Chibber, "Leadership Book for Youth, Parents and Teachers", Prashanti Nilayam : Sri Satya Sai 8. Books and Publication Trust, 2004.
- Earle F, Zeigler & Gary Bowie, "Management Competency Development in Sports & Physical Education", 9. Lea & Febiger, Philadelphia, 1983.
- 10. Education Series 3 Delhi: Doaba House, Book seller and Publisher.

- 11. Harry Scott and Richard B. West Kamper-'From Programme to faculties in Physical Education', Harper and Brother, New York.
- 12. John, E, Nixon & Ann, E, Jewett. (1964). Physical Education Curriculum, New York: The Ronald Press Company.
- 13. Rensis Likert, "New Patterns of Management", McGraw Hill, Kogakusha Ltd, New Delhi, 1961.
- 14. Williams, J. F. (2003). Principles of Physical Education. Meerut: College Book House.

15. Yadvnider Singh. Sports Management, New Delhi: Lakshay Publication.

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPPC- 201	TRACK & FIELD (FIELD EVENTS PERFORMANCE)	60

COs

- Demonstrate Fundamental skills-
 - A. Jumping Events(High Jump/Long Jump/Triple Jump)
 - B. Throwing Events(Shot-put/Discuss/ Javelin/Hammer Throw)
- Knowing the importance of warming-up- general free hand exercises, specific work out related to the events.
- Use and maintain of Field, equipment, jumping pit, toe board etc.
- Discus the body position at the runway & jumping / vaulting technique and Change in body position during running, jumping, and throwing.
- Application of Advanced Skills & Various techniques of:
 A. Jumping Events(High Jump/Long Jump/Triple Jump)
 D. Theories Events(Shot art/Discuss/Longling)
 - B. Throwing Events(Shot-put/Discuss/ Javelin/Hammer Throw)
- Interpretation of Lead up activities, General rules, Duties of officials
- Able to Officiating in various level Competitions and Marking of the play area.

Uni	t		Conter	nt						
			Perfor 1. 2.	(Any On Jumping (High Jur Throwin	; Events np/Long g Events	Gach Group Jump/Tripl Javelin/Ha	e Jump)	nrow)		
Acti	ve ga	me pra	actice							
Perf	forma	nce of	any two	track ever	nts:					
Dist	ributi	ion of	marks fo	or game Ex	aminatio	on is given	below:			
	SI.	Roll	Event		Eve		Project	Viva	Total]
	Sl. No.	Roll No.	(Jumpi	ng)	(Thro	wing)	Project Report	Viva Voce	Total	
		-							Total	
		-	(Jumpi Perform	ng) Style/	(Throw Perform	wing) Style/			Total 70	
(The	No.	No.	(Jumpi Perform ance 10	ng) Style/ Technique	(Throw Perform ance 10	wing) Style/ Technique 10	Report	Voce		
(The	No.	No.	(Jumpi Perform ance 10	ng) Style/ Technique 10	(Throw Perform ance 10	wing) Style/ Technique 10	Report	Voce		
	No.	No.	(Jumpi Perform ance 10	ng) Style/ Technique 10 s given in ap	(Throw Perform ance 10	wing) Style/ Technique 10	Report	Voce		
	No.	No.	(Jumpi Perform ance 10	ng) Style/ Technique 10 s given in ap	(Throv Perform ance 10 ppendix.)	wing) Style/ Technique 10	Report	Voce		
	No.	No.	(Jumpi Perform ance 10	ng) Style/ Technique 10 given in ap 1. Demo	(Thro Perform ance 10 ppendix.)	wing) Style/ Technique 10	Report	Voce		
	No.	No.	(Jumpi Perform ance 10	ng) Style/ Technique 10 g given in ap 1. Demo 2. Tutori 3. fieldw	(Thro Perform ance 10 ppendix.) instration ials vork	wing) Style/ Technique 10	Report 20	Voce		
	No.	No.	(Jumpi Perform ance 10	ng) Style/ Technique 10 g given in ap 1. Demo 2. Tutori 3. fieldw	(Throv Perform ance 10 ppendix.) nstration ials vork and gam	wing) Style/ Technique 10	Report 20	Voce		

Note:

- Athletic Project report on Field Events Must be written by own handwriting (Details regarding all Field events, various styles and techniques of each event.)
- Tournaments held at National and International levels, Distinguished sports awards and personalities related to the events. Warming-up- General free hand exercises, specific work out, Fundamental skills, Lead up activities, General rules and their interpretations, Duties of officials, officiating in class competitions and Intramurals, Marking of the play area.

Code of the Course/Subject

MPPC-202

TEAM GAMES SPECIALIZATION

Title of the Course/Subject

(Total Number of **Periods**)

(FOREIGN GAME)

60

COs

- Explain History of the various foreign games.
- Able to design and prepare the play fields, Equipment's and materials required.
- Demonstrate Fundamental skill, Lead up games, system of play, rules, Regulations of game, Officials and their signals.
- Create and execute Strategy's, Techniques, Tactics in game situation.
- Give original example and applications various Methods of coaching.
- Evaluate Modern trends in the game, latest record, awards of the game.

Unit Content

The Candidate has choice to select any one of the following games as the Specialization in 2nd Semester.

Baseball	Volleyball
Basketball	Cricket
Football	Handball
Hockey	Softball

Distribution of marks for game Examination is given below:

Sl. No	Roll No.	Knowledge of fondamental		Officiating oftheGame	Project Report	Viva voce	Total
		skill.					
		20	20	10	10	10	70

**Activities

- 1 Demonstration
- 2. Tutorials fieldwork 3.
- 4. sports and game Seminars
- 5. Assignment
- 6. Self-practice
- Note: History of the game, Measurement and Preparation of the Fields, Equipments and materials required, Fundamental skill, Lead up games, Techniques, Tactics, system of play, rules and regulations of game, Methods of coaching, Officials and their signals, Modern trends in the game, latest record of the game awards.

The student will submit the project report in his/her own handwriting at the time of exam.

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPPC- 203	PRACTICAL I.C.T.	90

COs

- Discovering the milestones of ICT history.
- Acknowledging the role of technologies in modern society and the potential
- Comprehend the role of MS software in physical education. like-
- M.S. Word, M.S. Excel, M.S. PowerPoint
- Create E-mail address, send E-mail, and receive E-mail ID
- Internet: Searching Web-site, Searching information on the Internet about a pre-established topic.
- Use ICT to refine basic and complex motor skills and apply them to increasingly complex games, activities and sport-specific situations.

Content

The Examination will be conducted in any two items selected by examiner and any two choice items of the examinee from the following contents. The contents of the computer practical as follows:

- M.S. Word: Copy file & paste, Create file, Create folder. File open, Front size & styles create table.
- M.S. Excel: Create table, insert border. Ascending and descending number. Sum, average & percentage.

M.S. PowerPoint: Create slides, background color, slide effects, hide slide, Presentation.

E-mail: Create E-mail address, send E-mail, receive E-mail ID

Internet: surfing Web-site, download, Searching information on the Internet about a preestablished topic.

Distribution	of ma	arks for I	CT Examination is g	iven below:
			Examiner Choice	Candidates Choice

SI.	Roll	Examiner Choice (2 Items)	Candidates Choice (2 Items)	Total
No.	No.	20	20	70

**Activities

1. Demonstration 2.

Tutorials 3. fieldwork

4. sports and game Seminars 5.

Assignment

6. Self-practice

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPPC- 204	TEACHING / COACHING LESSON ATHLETICS (FIELD EVENTS)	90

COs

- Develop proficiency in taking teaching classes in field events under school/college situation.
- Provided teaching experience to students.
- Interpret Methods of coaching, Officials and their signals.
- Evaluate Modern trends in the game, latest record, awards of the field events. •

Content

The students need to develop proficiency in taking teaching classes infield events under school situation. In view of this, the students shall be provided with teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the second semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Sl. No.	Roll. No.	Lesso nplan	Knowled ge ofsubjec	Teachi ng aptitude	Use of audio- visualaids	Class Control (StudentCreativi ty/ Ability)	Total
		10	t 20	20	10	10	70

Distribution of marks for ICT Examination is given below:

**Activities

- 1. Demonstration
- 2. Tutorials
- 3. fieldwork
- 4. sports and game Seminars
- 5. Assignment
- 6. Self-practice

Semester 3

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPCC-301	DSC-1: Scientific Principles of Sports Training	60

COs

- Develop physical conditioning programs based on scientific principles
- Designed physical fitness programme.
- Improve and evaluate coaching styles, including coaching objectives and philosophy.
- enhance sports performance
- Develop teaching strategies.
- Enable to Understand Periodization of training for team Games & Individual sports person.

Unit	Jnit Content					
Unit I	Introduction: Sports training: Definition – Aim, Characteristics, Principles of Sports Training, Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures – Super Compensation – Altitude Training – Cross Training(12)					
Unit II	Components of Physical Fitness: Strength: Methods to improve Strength: Weight Training, Isometric, Isotonic, Circuit Training, Speed: Methods to Develop Speed: Repetition Method, Downhill Run, Parachute Running, Wind Sprints, Endurance, Methods to Improve Endurance: Continuous Method, Interval Method, Repetition Method, Cross Country, Fartlek Training(12)					
Unit III	Flexibility: Methods to Improve the Flexibility- Stretch and Hold Method, Ballistic Method, Special Type Training: Plyometric Training. Training for Coordinative bilities: Methods to improve Coordinative abilities: Sensory Method, Variation in Movement Execution Method, Variation in External Condition Method, Combination of Movement Method, Types of Stretching Exercises.(12)					
Unit IV	Training Plan: Training Plan: Macro Cycle, Meso-cycle. Short Term Plan and Long Term Plans - Periodization: Meaning, Single, Double and Multiple Periodization, Preparatory Period, Competition Period and Transition Period.(12)					
Unit V	Doping: Definition of Doping – Side effects of drugs – Dietary supplements –Blood Doping – The use of erythropoietin in blood boosting – Blood doping control – WADA and NADA introduction and function, The testing programmes – Problems in drug detection – Blood testing in doping control; IOC list of doping classes and methods, Problems with the supply of medicines Subject to IOC regulations: Over- the- counter drugs (OTC) – prescription only medicines (POMs) – Controlled drugs (CDs). Reporting test results – Education(12)					
**Activitie	s 1 lecture 2.tutorials 3.fieldwork 4.library work 5. Seminars 6. assignment 7. self-studies Note: Practicals of indoor and out-door tests be designed and arranged internally.					

- 1. BeotraAlka, (2000), Drug Education Handbook on Drug Abuse in Sports. Delhi: Sports Authority of India.
- Bunn, J.N. (1998) Scientific Principles of Coaching, New Jersey Engle Wood Cliffs, Prentice Hall Inc.
 Cart, E. Klafs&Daniel, D. Arnheim (1999) Modern Principles of Athletic Training St. Louis C. V. Mosphy
- Company
- 4. Daniel, D. Arnheim (1991) Principles of Athletic Traning, St. Luis, Mosby Year Book
- 5. David R. Mottram (1996) Drugs in Sport, School of Pharmacy, Liverpool: John Moore University
- 6. Gary, T. Moran (1997) Cross Training for Sports, Canada : Human Kinetics Hardayal Singh (1991) Science of Sports Training, New Delhi, DVS Publications
- Jensen, C.R. & Fisher A.G. (2000) Scientific Basic of Athletic Conditioning, Philadelphia Ronald, P. Pfeiffer (1998) Concepts of Athletics Training 2nd Edition, London: Jones and Bartlett Publications
- 8. YograjThani (2003), Sports Training, Delhi : Sports Publications

Title of the Course/Subject

MPCC-302

DSC-II Sports Medicine&Rehabilitation

60

Cos

• Educate regarding clinical reasoning skills in the clinical education setting.

- Co-operate and facilitate injured players.
- Provide students with hands-on training through handling injured players.
- Clarify therapeutic modules for sport injures.
- Develop understanding of the key concepts of underpinning Sport Rehabilitation and prevention of injuries.
- Built on pre-existing skills of anatomy and physiology and develop them to a more advance level.
- •Develop the ability to reflect on, and critically evaluate, their own performance within a wider professional and academic outline.

Unit	Content						
Unit I	Introduction: Meaning and concept of sports medicine, Aims & objectives of Sports medicine, Need & scope of sports medicine in physical education & sports sciences, History of sports medicine in India & abroad, Role of physical education teacher/ coaches in athlete's care & rehabilitation (12)						
Unit II	Injury in Sports: Definition of acute, sub-acute and chronic injuries; Soft tissue injuries: injury to skeletal muscle, tendon strain, pull, cramp, muscle tears (myositis) and tendinitis. Injuries to Cartilage & ligaments sprain, Sonorities and tear. Injuries to Hard tissue: skull injuries, Fractures and its types. Dislocation: common joints involve in Dislocation (12)						
Unit III	Injuries management: Spine injuries and their management. Common regional injuries (Head, Neck, Face, Thorax, Abdomen, Pelvis), Upper (Shoulder, elbow, wrist & fingers) & Lower limbs (Hip, Knee, Ankle & foot), Overuse problems and their management, (12)						
Unit IV	First aid: Principle and techniques of Strapping and Bandages. Care and treatment of exposed and unexposed injuries in sports. First aid to Fractures. Advantages and Disadvantages of PRICE & PRINCE therapy. Frist aid box: contains of first aid box & its requirement on play field. (12)						
Unit V	Basics of Rehabilitation : Types of stretching: Isotonic, Isometric, Isokinetic & PNF stretching. Advantages, contradiction of starching. Supporting and aiding techniques & equipment for rehabilitation. Principles pertaining to the prevention of sports injuries (care and treatment). (12)						
	h student shall submit Physiotherapy record of attending the Clinic and observing the hletic injuries and their treatment procedure.(To be assessed internally) es 1. Lecture 2. Tutorials 3. fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies						

- Dohenty.J.Meno.Wetb,ModerD(2000)Track&Field,EnglewoodCliffs,PrenticeHalInc. 1.
- 2. Flegel, Melinda J. Sport first aid. Human Kinetics, 2013.
- 3. Lace, M.V. (1951) Massage and Medical Gymnastics, London: J& AChurchill Ltd.
- 4. Mc Ooyand Young (1954) Tests and Measurement, New York: Appleton Century.
- 5. Naro, C. L. (1967) Manual of Massage and, Movement, London: Febra and Febra Ltd.
- 6. Rathbome, J.I. (1965) Corrective Physical education, London: W.B. Saunders& Co.
- 7. StaffordandKelly,(1968)PreventiveandCorrectivePhysicalEducation,NewYork.
- Park. J.E. and Park. K. "Preventive and Social Medicines". Jabalpur-1988. 8.
- 9. Bedi, Yashpal 'Social and preventive Medicine', Atmaram and Sons, New Delhi, 1985.
- Ghosh, S.N. "Hygiene and Public Health", Calcutta Scientific Publishing C, 1989
 Anderson, C.L. and Chewell, William H. "School Health Practice", St. Louis: The .M. Mosby Company, 1986.
- 12. Pandey. P.K. and Gangopadhyay, S.R. "Health Education for School Children, Friends publication, New Delhi, 1995.

MPCC-303

DSC-3: Health Education and Sports Nutrition

60

- COs
- Contribute to the sports nutrition and dietetics fields in the different sports environments, including Nutrition Education and Research on Sports Nutrition.
- Demonstrate cultural competence in providing nutrition information and care, including knowledge of multicultural food practices, community programs and disparities in food, nutrition and healthcare.
- Understand the role of nutrition in maintaining health and performance.

Unit	Content						
Unit I	Health Education: Concept, Dimensions, Spectrum and Determinants of Health, Definition of Health, Health Education, Health Instruction, Health Supervision Aim, objective and Principles of Health Education, Health Service and guidance instruction in personal hygiene(12)						
Unit II	Health Problems in India: Communicable and Non Communicable Diseases ; Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive, Population, Personal and Environmental Hygiene for schools, Objective of school health service, Role of health education in schools, Health Services - Care of skin, Nails, Eye health service, Nutritional service, Health appraisal, Health record, Healthful school environment, first- aid and emergency care etc.(12)						
Unit III	Hygiene and Health: Meaning of Hygiene, Type of Hygiene, dental Hygiene, Effect of Alcohol on Health, Effect of Tobacco on Health, Life Style Management, Management of Hypertension, Management of Obesity, Management of Stress(12)						
Unit IV	Introduction to Sports Nutrition: Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines, Nutrients: Ingestion to energy metabolism (Carbohydrate, Protein and Fat), Role of carbohydrates, Fat and protein during exercise(12)						
Unit V Nutrition and Weight Management: Concept of BMI (Body mass index), Ob and its hazard, Dieting versus exercise for weight control, Maintaining a Health Lifestyle, Weight management program for sporty child, Role of diet and exercise weight management, Design diet plan and exercise schedule for weight gain an (12)							
**Activitie	s 1. Lecture 2.Tutorials 3.fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies						

- 1. Bucher, Charles A. "Administration of Health and Physical Education Programme". Delbert, Oberteuffer, et. al." The School Health Education".
- 2. Ghosh, B.N. "Treaties of Hygiene and Public Health".
- 3. Hanlon, John J. "Principles of Public Health Administration" 2003. Turner, C.E. "The School Health and Health Education".
- 4. Moss and et. At. "Health Education" (National Education Association of U.T.A.) Nemir A. 'The School Health Education" (Harber and Brothers, New York).
- 5. Nutrition Encyclopedia, edited by Delores C.S. James, The Gale Group, Inc.
- 6. Boyd-Eaton S. et al (1989) The Stone Age Health Programme: Diet and Exercise asNature Intended. Angus and Robertson.
- 7. Terras S. (1994) Stress, How Your Diet can Help: The Practical Guide to Positive Health Using Diet, Vitamins, Minerals, Herbs and Amino Acids, Thorons.

MPEC 301

DSE-I **Sports Engineering (Elective)** 60

COs

- Understand the sport engineering and associated terminology. ٠
- General Principles and purpose of ٠
- Instrumentation in sports.
- Describe the basic structure and function of connective, muscle and nerve cells and tissues, and their interactions in the musculoskeletal and nervous systems.
- Understanding the construction and maintenance of infrastructure.

Unit	Content							
Unit I	Introduction to sports engineering and Technology: Meaning of sports engineering, human motion detection and recording, human performance, assessment, equipment and facility designing and sports related instrumentation and measurement. (12)							
Unit II	Mechanics of engineering materials: Concept of internal force, axial force, shear force, bending movement, torsion, energy method to find displacement of structure, strain energy. Biomechanics of daily and common activities – Gait, Posture, Body levers, ergonomics, Mechanical principles in movements such as lifting, walking, running, throwing, jumping, pulling, pushing etc. (12)							
Unit III	Sports Dynamics: Introduction to Dynamics, Kinematics to particles – rectilinear and plane curvilinear motion coordinate system. Kinetics of particles – Newton's laws of Motion, Work, Energy, Impulse and momentum.(12)							
Unit IV	Building and Maintenance: Sports Infrastructure- Gymnasium, Pavilion, Swimming Pool, Indoor Stadium, Out-door Stadium, Play Park, Academic Block, Administrative Block, Research Block, Library, Sports Hostels, etc.							
	Requirements: Air ventilation, Day light, Lighting arrangement, Galleries, Store rooms, Office, Toilet Blocks (M/F), Drinking Water, Sewage and Waste Water disposal system, Changing Rooms (M/F), Sound System (echo-free), Internal arrangement according to need and nature of activity to be performed, Corridors and Gates for free movement of people, Emergency provisions of lighting, fire and exits, Eco-friendly outer surrounding. Maintenance staff, financial consideration. (12)							
Unit V	 Building process:- design phase(including brief documentation), construction pha functional(occupational) life, Re-evaluation, refurnish, demolish. Maintenan policy, preventive maintenance, corrective maintenance, record and register f maintenance. Facility life cycle costing: Basics of theoretical analysis of cost, total life cost concepts, maintenance costs, energy cost, capital cost and taxation (12) 							
**Activitie	 1. Lecture 2. Tutorials 3. fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies 							

- 1. Franz K. F. et. al., Editor, Routledge Handbook of Sports Technology and Engineering (Routledge, 2013)
- Steve Hake, Editor, The Engineering of Sport (CRC Press, 1996)
 Franz K. F. et. al., Editor The Impact of Technology on Sports II (CRC Press, 2007) Helge N., Sports Aerodynamics (Springer Science & Business Media, 2009)
- Youlin Hong, Editor Routledge Handbook of Ergonomics in Sport and Exercise (Routledge, 2013) 4.
- Jenkins M., Editor Materials in Sports Equipment, Volume I (Elsevier, 2003) Colin White, Projectile 5. Dynamics in Sport: Principles and Applications
- 6. Eric C. et al., Editor Sports Facility Operations Management (Routledge, 2010)

MPEC302

DSE-I Physical Fitness and Wellness (Elective)

60

COs

- Understand the basic principles of warming up and cooling down prior to training and their implication for safe participation.
- Understand the physical fitness requirements for undertaking a training programme in which all parts of the body are worked at intensities appropriate for high levels of performance.

[•] Understand how to improve performance & health related fitness components.

Unit	Content						
Unit I	Introduction: Meaning and Definition" of Physical Fitness, Physical Fitness Concepts and Techniques, Principles of physical fitness, Physiological principles involved in human movement. Components of Physical Fitness. Leisure time physical activity and identify opportunities in the community to participate in this activity. Current trends in fitness and conditioning, components of total health fitness and the relationship between physical activity and lifelong wellness. (12)						
Unit II	Nutrition: Nutrients; Nutrition labelling information, Food Choices, Food Guide Pyramid, Influences on food choices-social, economic, cultural, food sources, Comparison of food values. Weight Management-proper practices to maintain, lose and gain. Eating Disorders, Proper hydration, the effects of performance enhancement drugs (12)						
Unit III	Aerobic Exercise: Cardio respiratory Endurance Training; proper movement forms, i.e., correct stride, arm movements, body alignment; proper warm-up, cool down, and stretching, monitoring heart rates during activity. Assessment of cardio respiratory fitness and set goals to maintain or improve fitness levels. Cardio respiratory activities including i.e. power walking, pacer test, interval training, incline running, distance running, aerobics and circuits.(12)						
Unit IV							
Unit V	Flexibility Exercise: Flexibility Training, Relaxation Techniques and Core Training. Safety techniques (stretching protocol; breathing and relaxation techniques) types of flexibility exercises (i.e. dynamic, static), Develop basic competency in relaxation and breathing techniques. Pilates, Yoga. (12)						
**Activitie	s 1. Lecture 2.Tutorials 3.fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies						

Course Material/Learning Resources

- 1. DavidK.Miller&T.EarlAllen,Fitness,Alifetimecommitment,SurjeetPublicationDelhi1989.
- 2. DificoreJudy,thecompleteguidetothepostnatalfitness,A&CBlackPublishersLtd.35Bedfordrow, London 1998

3. Dr.A.K.Uppal, Physical Fitness, Friends Publications (India), 1992. Warner W.K.Oeger & Sharon A. Hoeger, Fitness and Wellness, Morton Publishing Company, 1990.

- 4. Elizabeth&Kenday,Sportsfitnessforwomen,B.T.BatsfordLtd,London,1986.
- 5. EmilyR.Foster,KarynHartiger&KatherineA.Smith,FitnessFun,HumanKineticsPublishers2002.
- 6. Lawrence, Debbie, Exercise to Music. A&CB lack Publishers Ltd. 37, Sohe Square, London 1999
- 7. RobertMalt.90dayfitnessplan, D.K. publishing, Inc.95, MadisonAvenue, NewYork2001

Code of the Course/Subject Title of the Course/Subject

(Total Number of Periods)

MPEC-303

DSE-1 Sports Technology (Elective)

60

COs

- To familiarise the students with the latest technology involved in sports and games.
- General Principles and purpose of Instrumentation in sports, Understand technological advancement.
- Perform and report on the exploratory analysis of data collected usingsportstechnology.
- Instrumentation in sportsScience of Sports Materials, Information regarding modern equipment and Training Gadgets.

Unit	Content						
Unit I	Sports Technology : Meaning, definition, purpose, advantages and applications, General Principles and purpose of instrumentation in sports, Workflow of instrumentation and business aspects, Technological impacts on sports. (12)						
Unit II	Science of Sports Materials: Adhesives- Nano glue, nanomoulding technology, Nano turf. Foot wear production, Factors and application in sports, constraints. Foams- Polyurethane, Polystyrene, Styrofoam, closed-cell and open-cell foams, Neoprene, Foam. Smart Materials – Shape Memory Alloy (SMA), Thermo chromic film, High-density modeling foam (12)						
Unit III	Surfaces of Playfields: Modern surfaces for playfields, construction and installation of sports surfaces. Types of materials – synthetic, wood, polyurethane. Artificial turf. Modern technology in the construction of indoor and outdoor facilities. Technology in manufacture of modern play equipment. Use of computer and software in Match Analysis and Coaching. (12)						
Unit IV	 Modern equipment: Playing Equipment: Balls: Types, Materials and Advantages, Bat/Stick/ Racquets: Types, Materials and Advantages. Clothing and shoes: Types, Materials and Advantages. Measuring equipment: Throwing and Jumping Events. Protective equipment: Types, Materials and Advantages. Sports equipment with nano technology, Advantages. (12) 						
Unit V	Training Gadgets: Basketball: Ball Feeder, Mechanism and Advantages. Cricket: Bowling Machine, Mechanism and Advantages, Tennis: Serving Machine, Mechanism and Advantages, Volleyball: Serving Machine Mechanism and Advantages. Lighting Facilities: Method of erecting Flood Light and measuring luminous. Video Coverage: Types, Size, Capacity, Place and Position of Camera in Live coverage of sporting events. (12)						
Note: Students should be encouraged to design and manufacture improvised sports testir equipment in the laboratory/workshop and visit sports technology factory/ sports goods manufacturers.							
**Activities							

Course Material/Learning Resources

REFERENCE:

- 1. Charles J.A. Crane, F.A.A. and Furness, J.A.G. (1987) "Selection of Engineering Materials" UK: Butterworth Heiremann.
- 2. Finn, R.A. and Trojan P.K. (1999) "Engineering Materials and their Applications" UK: Jaico Publisher.
- 3. John Mongilo, (2001), "Nano Technology 101 "New York: Green wood publishing group. Walia, J.S. Principles and Methods of Education (Paul Publishers, Jullandhar), 1999.
- 4. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jullandhar, Sterling Publishers Pvt. Ltd.), 1982
- 5. Kozman, Cassidy and Jackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

Title of the Course/Subject

(Total Number of Periods)

MPPC 301

MPPC 301 Individual Game Specialization

60

COs

- Student get History of the game, Measurement and Preparation of the Fields, Equipment and materials required.
- Fundamental skill, Lead up games, Techniques, Tactics, system of play, rules and Regulations of game.
- Methods of coaching, Officials and their signals,
- Modern trends in the game, latest record of the game awards.

Cont	ent							
The C Seme		ate has choice t	to select an	y one of the	following	g games a	as the Specia	lization in 3rd
Badn	ninton,	Archery, Table	e Tennis,					
Lawn	n Tenni	s, Judo, Karate	,					
Boxii	ng, Wre	estling, Swimn	ning.					
	-	n of marks for		mination is	given be	low:		
Sl. No.	Roll No.	Knowledge of fondamental skill.	Playing	Officiating oftheGame	Project Report	Viva voce	Total	
		20	20	10	10	10	70	
**Ac	tivities		 Tutoria fieldwo 	ork and game Se ment	minars			J

Note: History of the game, Measurement and Preparation of the Fields, Equipments and materials required, Fundamental skill, Lead up games, Techniques, Tactics, system of play, rules and regulations of game, Methods of coaching, Officials and their signals, Modern trends in the game, latest record of the game awards.

The student will submit the project report in his/her own handwriting at the time of exam.

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPPC- 302	INTERNSHIP	90

COs

- Student establish a positive classroom environment and deliver instruction that is clear, structured, engaging, flexible, and designed and adapted for diverse learning Through Physical education.
- Student effectively plan for establishing a positive classroom community and plan for instruction that meets diverse student needs.
- Pupil Teacher analyse student work to determine student progress toward and mastery of lesson and unit learning objectives while identifying trends in the data that may reveal inequitable outcomes for various student groups.
- Student identifies aspects of their plan and execution or other factors which did or did not support student learning. Candidates determine next steps based upon evidence.

Content

The students need to be develop proficiency in taking coaching/teaching/officiating lessonsat school/college/club/organization level. He/She must able to organize/conduct/manage/administrate sports tournaments and various sports activities at different level.

**Activities

- 1. Demonstration
- 2. Tutorials
- 3. fieldwork
- 4. sports and game Seminars
- 5. Assignment
- 6. Self-practice

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
	CLASS ROOM TEACHING LESSON	
MPPC- 303	(Lessons On Theory Of Different	90

Indigenous Sports & Games)

- COs
- Lessons on theory of different indigenous sports & games.
- The students need to develop proficiency in taking teaching lessons as per selected.
- Develop class control skill in pupil teacher.

Content

The students need to develop proficiency in taking teaching lessons as per selected Indigenous games and sport or game specialization. In view of this, the students shall be provided with selected or specialized game teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons (Four internal and one external) during the course of the third semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these teaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Distribution of marks for ICT Examination is given below:

Sl. No	Roll.	Lesso nplan	Knowled Teachi ge ng ofsubjec aptitude		Use of audio- visualaids	Class Control (StudentCreativi ty/ Ability)	Total
		10	20	20	10	10	70

**Activities

1. Demonstration

Tutorials 2

3. fieldwork

- sports and game Seminars 4.
- 5. Assignment
- 6. Self-practice

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPPC- 304	Coaching Lesson (Indigenous Activity & Yoga)	60

COs

- The students need to develop proficiency in taking coaching classes in Indigenous games under School situation.
- Learning Aerobics and its practical uses.
- In view of this, the students shall be provided with coaching experience.

Content

The students need to develop proficiency in taking coaching classes in Indigenous games under school situation. In view of this, the students shall be provided with coaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons during the course of the third semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Distribution of marks for ICT Examination is given below:

SI. No.	Roll. No.	Lesso nplan	Knowled ge ofsubjec t	Teachi ng aptitude	Use of audio- visualaids	Class Control (StudentCreativi ty/ Ability)	Total
		10	20	20	10	10	70

**Activities

- 1. Demonstration 2. Tutorials
- 3. fieldwork
- sports and game Seminars 4.
- 5. Assignment
- 6. Self-practice

SEMESTER 4th

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPCC 401	DSE-I : Athletic Careand Remedialtherapies	60

COs

- Develop understanding of the key concepts of underpinning Sport Rehabilitation and prevention of injuries.
- Built on pre-existing skills of anatomy and physiology and develop them to a more advance level.
- Develop the ability to reflect on, and critically evaluate, their own performance within a wider professional and academic outline.

Unit	Content	
Unit I	brrective Physical Education: Definition and objectives of corrective physical lucation. Posture and body mechanics, Standards of Standing Posture. Value of od posture, Drawbacks and causes of bed posture. Posture test – Examination of e spine.	
Unit II	Posture: Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knee, Bow leg, Flat foot. Causes for deviations and treatment including exercises.	
Unit III	Massage: Brief history of massage – Massage as an aid for relaxation – Points to be considered in giving massage – Physiological, Chemical, Psychological effects of massage – Indication / Contra indication of Massage – Classification of the manipulation used massage and their specific uses in the human body – Stroking manipulation: Effleurage – Pressure manipulation: Petrissage Kneading (Finger, Kneading, Circular) ironing Skin Rolling – Percussion manipulation: Tapotement, Hacking, Clapping, Beating, Pounding, Slapping, Cupping, Poking, Shaking Manipulation, Deep massage.	
Unit IV	Physiotherapy: Exercise therapy:Active & Passive Movements, Breathing exercise, Relaxation, Traction. Its uses and application.	
	Hydro therapy: aquatic therapy. Supportive therapy: Gait training, Balance & co- ordination exercise. Crutch walking.	
Unit V	Hot & cold therapy: Hot water fermentation. Its uses and effect. Ice cold treatment, ice pack uses & its effects.	
	Electrotherapy: Ultra violet light, infrared light, ultrasonic therapy, Short wave diathermy therapy.	
**Activitie	es 1. Lecture 2.Tutorials 3.fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies	

- 1. Hollis, M., & Fletcher-Cook, P. (2018). Practical exercise therapy. Blackwell Science.
- 2. Liebmann, M. (2004). Art therapy for groups: A handbook of themes and exercises. Psychology Press.
- 3. Winnick, J. P., & Porretta, D. L. (2016). Adapted physical education and sport. Human Kinetics.
- 4. Oberteuffer, D. (1950). Preventive and Corrective Physical Education.
- 5. Armour, K. (Ed.). (2014). Pedagogical cases in physical education and youth sport. Routledge.
- 6. Beck, M. F. (2012). Theory and practice of therapeutic massage. Cengage Learning.
- 7. Brueck, L. R. (2014). Writing resistance: The rhetorical imagination of Hindi Dalit literature. Columbia University Press.
- 8. Singleton, M. (2010). Yoga body: The origins of modern posture practice. Oxford University Press.

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPCC-402	DSC-2: SportsPsychology	60

COs

- Understand the role of the brain in human performance and apply psychological techniques and theories to human performance within sports condition on Players.
- To develop positive attitude of sports person & teach players to cope with adverse situations.
- Explain the major perspectives of psychology (e.g. biological, cognitive, behavioural, sociocultural, etc.)
- Effectively develop and apply health, physical activity, and psychological principles as they relate to human performance.

Unit	Content		
Unit I	Introduction: Meaning, Definition, History, Need and Importance of Sports Psychology. Present Status of Sports Psychology in India. Motor Learning : Basic Considerations in Motor Learning – Motor Perception – Factors Affecting Perception – Perceptual Mechanism. Personality : Meaning, Definition, Structure – Measuring Personality Traits. Effects of Personality on Sports Performance. (12)		
Unit II	Goal Setting: Meaning and Definition, Process of Goal Setting in Physical Education and Sports. Relaxation : Meaning and Definition, types and methods of psychological relaxation. Motivation Meaning and Definition, Types of Motivation: Intrinsic, Extrinsic. Achievement Motivation: Meaning, Measuring of Achievement Motivation. Self-Concept : Meaning and Definition, Method of Measurement. (12)		
Unit III	Anxiety : Meaning and Definition, Nature, Causes, Method of Measuring Anxiety. Competitive Anxiety and Sports Performance. Stress : Meaning and Definition, Causes. Stress and Sports Performance. Aggression : Meaning and Definition,. Concept and causes of aggression in sports, Role of aggression in sports performance, Methods of controlling aggression. Method of Measurement (12)		
Unit IV	Group Cohesion: Group: Definition and Meaning, Group Size, Groups on Composition, Group Cohesion, Group Interaction, Group Dynamics.		
	Fans and Spectators: Meaning and definition, Advantages and disadvantages on Sports Performance. Leadership: Meaning, Definition, types. Leadership and Sports Performance. (12)		
Unit V	Sports Sociology: Meaning and Definition – Sports and Socialization of Individual Sports as Social Institution. National Integration through Sports.Current Problems in Sports and Future Directions – Sports Social Crisis Management – Women in Sports: Sports Women in our Society, Participation pattern among Women, Gender inequalities in Sports. (12)		
**Activitie			
	Practicals: Atleast five experiments related to the topics listed in the Units above should be conducted by the students in laboratory. (Internal assessment.)		

- 1. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Tests, New Delhi: National Council of Educational Research and Training Publication.
- 2. Authors Guide (2013) National Library of Educational and Psychological Test (NLEPT) Catalogue of Test, New Delhi: National Council of Educational Research and Training Publication.
- 3. Jain. (2002), Sports Sociology, Heal SahetyKendre Publishers.
- 4. Jay Coakley. (2001) Sports in Society Issues and Controversies in International Education, Mc-Craw Seventh Ed.
- 5. John D Lauther (2000) Psychology of Coaching. NerJersy: Prenticee Hall Inc. John D. Lauther (1998) Sports Psychology. Englewood, Prentice Hall Inc.
- 6. MiroslawVauks& Bryant Cratty (1999). Psychology and the Superior Athlete. London: The Macmillan Co.
- 7. Richard, J. Crisp. (2000). Essential Social Psychology. Sage Publications.
- 8. Robert N. Singer (2001). Motor Learning and Human Performance. New York: The Macmillan Co.
- Robert N. Singer. (1989) The Psychology Domain Movement Behaviour. Philadelphia: Lea and Febiger.
 Thelma Horn. (2002). Advances in Sports Psychology. Human Kinetic.
- Whiting, K, Karman, Hendry L.B & Jones M.G. (1999) Personality and Performance in Physical Education and Sports. London: Hendry Kimpton Publishers.

(Total Number of Code of the Title of the Course/Subject **Course/Subject** Periods) DSE III **MPCC 403** 60 **Research Project** COs Creating synopsis for Research Project on subject. Finding Relevant reviews for the study. Develop a thorough understanding of the chosen subject area. Demonstrate the ability to collate and critically assess/interpret data. • • Develop an ability to effectively communicate knowledge in a scientific manner. Provide recommendations based on research findings. Notes 1. A candidate shall have Research Project for M.P.Ed. - IV Semester and must submit his/her Synopsis (on or before 10th October) and get it approved by the Head of Department/Principal on the recommendation of D.R.C. (Departmental Research Committee). 2. A candidate must submit his/her Research Project on or before 15th April, the

- 2. A candidate must submit his/her Research Project on or before 15th April, the beginning of the IVth Semester Examination.
 - 3. The candidate has to face the external Viva-Voce conducted by College / Department.

**Activities	1. Searching Research problem .
	2.Colloquy
	3.fieldwork
	4. Library work
	5. Data Collection
	6. Data Analysis
	7. Inferences of the study .

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPEC-401	DSE-1: Value & Environmental Education	60
	(Elective)	

COs

- Understand key concepts from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- Appreciate concepts and methods from ecological and physical sciences and their application in environmental problem solving.
- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- To understand role of sports in moral value development.

Unit	Content
Unit I	Introduction to Value Education: Values: Meaning, Definition, Concepts of Values. Value Education: Need, Importance and Objectives. Moral Values: Need and Theories of Values. Classification of Values: Basic Values of Religion, Classification of Values.
Unit II	Value Systems: Meaning and Definition, Personal and Communal Values, Consistency, Internally consistent, internally inconsistent, Judging Value System, Commitment, Commitment to values.
Unit III	Environmental Education: Definition, Scope, Need and Importance of environmental studies., Concept of environmental education, Historical background of environmental education, Celebration of various days in relation with environment, Plastic recycling &prohibition of plastic bag / cover, Role of school in environmental conservation and sustainable development, Pollution free eco-system.
Unit IV	Rural Sanitation and Urban Health: Rural Health Problems, Causes of Rural Health Problems, Points to be kept in Mind for improvement of Rural Sanitation, Urban Health Problems, Process of Urban Health, Services of Urban Area, Suggested Education Activity, Services on Urban Slum Area, Sanitation at Fairs & Festivals, Mass Education.
Unit V	Natural Resources and related environmental issues:: Water resources, food resources and Land resources, Definition, effects and control measures of: Air Pollution, Water Pollution, Soil Pollution, Noise Pollution, Thermal Pollution Management of environment and Govt. policies, Role of pollution control board.

**Activities	1 lecture
	2.tutorials
	3.fieldwork
	4.library work
	5. Seminars
	6. assignment
	7. self-studies
	Note: Practical of indoor and out-door tests be designed and arranged internally.

Course Material/Learning Resources

- 1. Miller T.G. Jr., Environmental Science (Wadsworth Publishing Co.) Odum, E.P. Fundamentals of Ecology (U.S.A.: W.B. Saunders Co.) 1971.
- Rao, M.N. &Datta, A.K. Waste Water Treatment (Oxford & IBH Publication Co. Pvt. Ltd.) 1987 Townsend 2. C. and others, Essentials of Ecology (Black well Science)
- 3. Heywood, V.H. and Watson V.M., Global biodiversity Assessment (U.K.: Cambridge University Press), 1995
- 4. Jadhav, H. and Bhosale, V.M. Environmental Protection and Laws (Delhi: Himalaya Pub. House), 1995.
- Mc Kinney, M.L. and Schoel, R.M. Environmental Science System and Solution (Web enhanced Ed.) 1996.
 Miller T.G. Jr., Environmental Science (Wadsworth Publishing Co.)

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPEC402	DSE-1 : Educationaltechnologyin Physical Education (Elective)	60

COs

- Identify, describe, and apply emerging technologies in teaching and learning environments. •
- Plan, design, and assess effective learning environments and experiences.
- Implement curriculum methods and strategies that use technology to maximize student learning.
- Develop technology-enabled assessment and evaluation strategies.
- Facilitate instruction in the new literacies that emerge within digital / interactive learning environments

Unit	Content	
Unit I	Nature and Scope: Educational technology-concept, Nature and Scope. Forms of educational technology: teaching technology, instructional technology, and behaviour technology; Transactional usage of educational technology: integrated, complementary, supplementary stand-alone (independent); programmed learning stage; media application stage and computer application stage. (12)	
Unit II	Systems Approach to Physical Education and Communication: Systems Approach to Education and its Components: Goal Setting, Task Analysis, Content Analysis, Context Analysis and Evaluation Strategies; Instructional Strategies and Media for Instruction. Effectiveness of Communication in instructional system; Communication Modes, Barriers and Process of Communication. (12)	
Unit III	Instructional Design: Instructional Design: Concept, Views. Process and stages of Development of Instructional Design. Overview of Models of Instructional Design; Instructional Design for Competency Based Teaching: Models for Development of Self Learning Material.(12)	
Unit IV	Audio Visual Media in Physical Education: Audio-visual media - meaning, importance and various forms Audio/Radio: Broadcast and audio recordings - strengths and Limitations, criteria for selection of instructional units, script writing, pre-production, post-production process and practices, Audio Conferencing and Interactive Radio Conference. Video/Educational Television: Telecast and Video recordings Strengths and limitations, Use of Television and CCTV in instruction and Training, Video Conferencing, SITE experiment, countrywide classroom project and Satellite based instructions. Use of animation films for the development of children's imagination. (12)	
Unit V	New Horizons of Educational Technology: Recent innovations in the area of ET interactive video - Hypertext, video-texts, optical fiber technology - laser disk, computer conferencing. etc. Procedure and organization of Teleconferencing/Interactive video-experiences of institutions, schools and universities. Recent experiments in the third world countries and pointers for, India with reference to Physical education. Recent trends of Research in Educational Technology and its future with reference to education. (12)	
**Activitie	 s 1. Lecture 2.Tutorials 3.fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies 	

- 1. Amita Bhardwaj, New Media of Educational Planning".Sarup of Sons, New Delhi-2003 Bhatia and Bhatia. The Principles and Methods of Teaching (New Delhi :DoabaHouse), 1959. Communication and Education, D. N. Dasgupta, Pointer Publishers
- 2. Education and Communication for development, O. P. Dahama, O. P. Bhatnagar, Oxford Page 68 of 71IBH Publishing company, New Delhi
- 3. Essentials of Educational Technology, Madan Lal, Anmol Publications
- K. Sampath, A. Pannirselvam and S. Santhanam. Introduction to Educational Technology (New Delhi: Sterling Publishers Pvt. Ltd.): 1981.
- 5. Kochar, S.K. Methods and Techniques of Teaching (New Delhi, Jalandhar, Sterling Publishers Pvt. Ltd.), 1982
- 6. Kozman, Cassidy and kJackson. Methods in Physical Education (W.B. Saunders Company, Philadelphia and London), 1952.

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPEC 403	DSE-I Sports Journalismand Mass media (Elective)	60

COs

- Build public relation and empower the confidence to ask resourceful questions.
- Creative use of writing, imaginative use of sound and astute use of pictures.
- Write precise briefs or reports and technical documents.
- · Actively participate in group discussion / meetings / interviews and prepare & deliver presentations
- Encourage critical thinking about sport Journalism.

Unit	Content	
Unit I	Introduction: Meaning and Definition of Journalism, Ethics of Journalism – Canons of journalism- Sports Ethics and Sportsmanship – Reporting Sports Events. National and International Sports News Agencies. (12)	
Unit II	Sports Bulletin: Concept of Sports Bulletin: Journalism and sports education – Structure of sports bulletin– Compiling a bulletin – Types of bulletin – Role of Journalism in the Field of Physical Education: Sports as an integral part of Physical Education – Sports organization and sports journalism – General news reporting and sports reporting. (12)	
Unit III	Mass Media: Mass Media in Journalism: Radio and T.V. Commentary – Running commentary on the radio – Sports expert's comments. Role of Advertisement in Journalism. Sports Photography: Equipment- Editing – Publishing. (12)	
Unit IV	Report Writing on Sports: Brief review of Olympic Games, Asian Games, Common Wealth Games World Cup, National Games and Indian Traditional Games. Preparing report of an Annual Sports Meet for Publication in Newspaper. Organization of Press Meet. (12)	
Unit V	Journalism: Sports organization and Sports Journalism – General news reporting and sports reporting. Methods of editing a Sports report. Evaluation of Reported News. Interview with and elite Player and Coach.(12)	
to N	ctical assignments to observe the matches and prepare report and news of the same; visit News Paper office and TV Centre to know various departments and their working. lection of Album of newspaper cuttings of sports news. (12)	
**Activitio	 1. Lecture 2. Tutorials 3. fieldwork 4. Library work 5. Seminars 6. Assignment 7. Self-studies 	

- 1. Ahiya B.N. (1988) Theory and Practice of Journalism: Set to Indian context Ed3. Delhi :Surjeet Publications
- Ahiya B.N. Chobra S.S.A. (1990) Concise Course in Reporting. New Delhi: Surjeet Publication Bhatt S.C. (1993) Broadcast Journalism Basic Principles. New Delhi. Haranand Publication Dhananjay Joshi (2010) Value Education in Global Perspective. New Delhi: Lotus Press.
- 3. Kannan K (2009) Soft Skills, Madurai: Madurai: Yadava College Publication
- 4. MohitChakrabarti (2008): Value Education: Changing Perspective, New Delhi: Kanishka Publication,.
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MPPC 401

(Total Number of Periods)

MPPC 401 Laboratory Practical

60

COs

- Understanding Application of Instrument based Psychological Tests for the sport person.
- Understanding Application of Questionnaire base test for the sport person.
- Physiology of Exercise practicals like Pulse rate, Heart rate, Blood pressure, Haemoglobin & Vital Capacity test in physiological lab environment.
- Sports Biomechanics and Kinesiology Anthropometry measurements, Mechanical analysis of various athletic skills.

Content

Sports Psychology:

Psychological Tests: Types of Psychological Test: Instrument based tests: Reaction timer, Finger dexterity board, Depth perception box. Questionnaire: Sports Achievement Motivation, Sports Competition Anxiety, Personality Profile test, I.Q.test, Attitude test, Reaction time, hand eye coordination test.

Physiology of Exercise:

Pulse rate, Heart rate, Blood pressure, Haemoglobin, Vital Capacity.

Sports Biomechanics and Kinesiology:

Anthropometry measurements, Mechanical analysis, Study of two injury cases.

Sl.No.	SportsPsyc hology	PhysiologyofE xercise	SportsBiomecha nicsandKinesiol ogy	ProjectR eport	Viva- voce	Tota
20		20	10	10	10	70
**Activ	rities	 Demonstra Tutorials fieldwork sports and Assignmen Self-practic 	game Seminars tt			

Note: Two Practical for each subjects.

The student will submit the project report in his/her own handwriting at the time of exam.

Code of th Course/Su		(Total Number of Periods)
MPPC 40	MPPC 402 Project Practical (Management and Organisat	60
	(Management and Organisat	1011)
COs		
• T	develop skills and competencies to organize school an	d community games and sports.
• T	empower Pupil-Teachers to inspire their students to ac	tively participate in Physical Exercises, Game
• 0	ganisation necessary skills like National Flag, Opening ganization of Sports / Athletic Meet, Tournament, Orga	and Closing Ceremonies, Practical of the
Conter	t	
	r, Conference, Debate, Class Formation, Flag ho ion. Demonstration, Clinic, Time table, Picnic, Tour	

(Note Book of Any Five and Conduct any one for Examination)

National Flag: Meaning, concept and significance of National Flag, Symbolism of Tri-colour and Wheel. Code of hoisting or lowering of Flag, Dimensions of the Flag & tri-colour proportions. Honour of the Flag and its use. Penalty of misusing or dishonouring the Flag..

Opening and Closing Ceremonies: Schedule and formality of Opening Ceremony- Unfurling

of Flag, Flame igniting, Oath, March-Past of players/teams, Salutation, Declaration of Opening of the Meet.Brief address by the guests, announcement of beginning of competition Victory & Prize distribution Ceremony- Planning of schedule for victory ceremony.

Closing Ceremony: Assembly of sports-persons, March-Past, Salutation, re-assembly, brief address of the guests, Declaration of results and distribution of Prizes/ Certificates, Vote of thanks, Ceremonial Flag-lowering, Flame extinguishing, Declaration of Closing of the Meet.

Practical of the organization: Sports / Athletic Meet, Seminar, Conference, Debate, Class Formation, Tournament, Exhibition, Demonstration, Clinic, Time table, Picnic, Tour, Organization of Sports Festival, Play Day, Social Party games, etc. should be organized.

Distr	Distribution of marks for ga		me Examination is given below: Actual Event Conducting		Viva-	Total	otal
		Book	Organization of Event	Ability	voce		
		20	20	20	10	70	
**Ac	tivities	1.	Demonstration				
		2. 3. 4. 5. 6.	Tutorials fieldwork sports and game Assignment Self-practice	Seminars			

Note:Practical Note Book of Any Five and Conduct any one for Examination

The student should be submit the Note Book in his/her own handwriting.

Code of the Course/Subject	Title of the Course/Subject	(Total Number of Periods)
MPPC 403	MPPC 403 Coaching Lesson (FOREIGN GAME)	60

COs

- To develop skills and competencies to organize school and global community games and sports.
- The students need to develop proficiency in taking coaching classes in foreign games under school situation. In view of this, the students shall be provided with coaching experience.

	Content								
school duratio	The students need to develop proficiency in taking coaching classes in foreign games under school situation. In view of this, the students shall be provided with coaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class they are going to handle at school and college level.								
semester the mean the dur	Each student teacher is expected to take at least five lessons during the course of the fourth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these lessons, the duration should slowly increase and all the parts of the lesson covered progressively.								
	Lesson	Knowledge		ation is given belo Use of audio-	Class Control	Total			
	plan	of subject	aptitude	visual aids	(Student	10141			
					Creativity/Ability)				
	10	20	20	10	Creativity/Ability) 10	70			

Code of the Course/Subject Title of the Course/Subject

(Total Number of Periods)

MPPC 404

MPPC 404 CLASS ROOM TEACHING LESSON (LESSONS ON THEORY OF DIFFERENT FOREIGN SPORTS & GAMES)

60

COs

- Student gets History of the game, Measurement and Preparation of the Fields, Equipment and materials required.
- Lessons on theory of Different foreign sports & games.
- The students need to develop proficiency in taking teaching lessons as per selected Foreign games and sport or game specialization. In view of this, the students shall be provided with selected or specialized game teaching experience.

Content

The students need to develop proficiency in taking teaching lessons as per selected foreigngames and sport or game specialization. In view of this, the students shall be provided with selected or specialized game teaching experience. The duration of the lesson to be conducted by these students shall be in the range of 30 to 40 minutes depending on the class time they are going to handle at school and college level.

Each student teacher is expected to take at least five lessons (Four internal and one external) during the course of the fourth semester. The lessons will be supervised by the faculty members and experts who would discuss the merits and demerits of the concerned lesson and guide them for the future. In these teaching lessons, the duration should slowly increase and all the parts of the lesson covered progressively.

Sl.No.	ution of ma Lesson plan	Knowledge		is given below: Use of audio- visual aids		Total
	10	20	20	10	10	70
**Activities		2. Tu 3. fiel 4. spo 5. As	monstration torials ldwork orts and game S signment If-practice	Seminars		

Note:

- i. Where ever details of any activities are not mentioned, it is expected to elaborate skills by the competent bodies of local Universities/ Autonomous Colleges.
- ii. Practical Examination shall be conducted by internal and external examiners.

APPENDIX-I

Marks	100 Mtrs.InSe	200 Mtrs.inSec	800Mtr Mtrs.inMir	nutes	in Minutes
iviai KS	conds	onds	&Seconds	&H &Seconds i	lurdle nSeconds
10	12.5	26.5	2.40	4.50	17.5
9.5	12.7	26.7	2.42	4.53	17.6
9	12.9	26.9	2.44	4.56	17.7
8.5	13.1	27.1	2.46	4.59	17.8
8	13.3	27.3	2.48	5.02	17:9
7.5	13.5	27.5	2.50	5.03	18.0
7	13.7	27.7	2.52	5.08	18.2
6.5	13.9	27.9	2.54	5.11	18.4
6	14.1	28.1	2.56	5.14	18.6
5.5	14.3	28.3	2.58	5.17	18.8
5	14.5	28.5	3.00	5.20	19.0
4.5	14.6	28.7	3.02	5.23	19.1
4	14.7	28.9	3.04	5.26	19.2
3.5	14.8	29.1	3.06	5.29	19.3
3	14.9	29.3	3.08	5.32	19.4
2.5	15.0	29.5	3.10	5.35	19.5
2	15.1	29.7	3.12	5.38	19.6
1.5	15.2	29.8	3.14	5.41	19.7
1	15.3	29.9	3.16	5.42	19.8
0.5	15.4	30.0	3.18	5.47	19.9
0	15.5	30.1	3:20	5:50	20.0

Athletic Performance Conversion Scoring Table (Men) Running Events

APPENDIX-II

Athletic Performance Conversion Scoring Table (Women) Running Events

Mar	ks100 Mtrs. inSecondsinS	200 Mtrs. Seconds Min	800Mtrs.in .&seconds	100Mtrs. HurdleinSeconds	
10	15.0	31.5	3.00	19.5	
9.5	15.2	31.7	3.03	19.6	
9	15.4	31.9	3.06	19.7	
8.5	15.6	32.1	3.09	19.8	
8	15.8	32.3	3.12	20.0	
7.5	16.0	32.5	3.15	20.2	
7	16.2	32.7	3.18	20.4	
6.5	16.4	32.9	3.21	20.7	
6	16.6	33.0	3.24	21.0	
5.5	16.8	33.5	3.37	21.5	
5	17.0	33.8	3.30	22.0	
4.5	17.2	34.0	3.33	22.2	
4	17.4	34.2	3.36	22.4	
3.5	17.6	34.4	3.34	22.6	
3	17.8	34.6	3.42	22.8	
2.5	18.0	34.8	3.45	23.0	
2	18.2	34.0	3.48	23.2	
1.5	18.3	34.2	3.52	23.4	
1	18.4	34.4	3.55	23.6	
0.5	18.5	34.6	3.58	23.8	
0	18.6	34.7	4:00	24.5	

APPENDIX-III

		_		_
Marks	ShotPut	HammerThrow	DiscusThrow	JavelinThrow
	(7Kg.260Gram)i	in Meters	inMeters	inMeters
	nM.			
10	0.00	25.00	22.00	<i>EE</i> 00
10	8.60	35.00	33.00	55.00
9.5	8.40	34.00	32.00	48.00
9	8.10	33.00	31.00	46.00
8.5	7.90	32.00	30.00	44.00
8	7.50	31.00	29.00	42.00
7.5	7.20	30.00	27.50	40.00
7	6.80	29.00	26.00	37.00
6.5	6.40	28.00	24.50	34.00
6	6.00	26.50	23.00	31.00
5.5	5.90	25.00	21.50	28.00
5	5.80	23.50	20.00	25.00
4.5	5.70	22.00	19.00	24.50
4	5.60	21.00	18.00	24.00
3.5	5.50	20.00	17.00	23.50
3	5.40	19.00	16.00	23.50
2.5	5.35	18.00	14.00	22.50
2	5.30	17.00	13.00	22.06
1.5	5.25	16.00	12.50	21.50
1.5	5.20	15.00	12.00	21.00
0.5	5.15	14.50	11.50	20.50
0.5	5.10	14.00	11.00	20.00
U	5.10	14.00	11.00	20.00

AthleticPerformanceConversionScoringTable(Men)ThrowingEvents

APPENDIX-IV

Athletic Performance Conversion Scoring Table (Women)Throwingand Jumping Events

10 9.5 9 8.5 8 7.5	8.50 8.30 8.10 7.80 7.50 7.20	30.00 29.00 28.00 26.50 25.00	35.00 33.50 32.00 30.50	4.00 3.90 3.80	1.30 1.28 1.26
9 8.5 8	8.10 7.80 7.50	28.00 26.50	32.00 30.50	3.80	
8.5 8	7.80 7.50	26.50	30.50		1 26
8	7.50				1.20
		25.00		3.70	1.24
75	7.20		29.00	3.60	1.22
7.5		23.50	27.50	3.50	1.20
7	6.80	22.00	26.00	3.40	1.18
6.5	6.40	20.50	24.50	3.30	1.15
6	6.00	19.00	23.00	3.20	1.10
5.5	5.60	17.50.	21.50	3.10	1.05
5	5.20	16.00	20.00	3.00	1.00
4.5	5.05	15.00	19.00	2.95	0.95
4	4.90	14.50	18.00	2.90	0.90
3.5	4.75	14.00	17.00	2.85	0.85
3	4.60	13.50	16.00	2.80	0.80
2.5	4.45	13.00	15.50	2.75	18.5
2	4.30	12.50	15.00	2.70	0.76
1.5	4.20	12.00	14.50	2.65	0.74
1	4.10	11.50	14.00	2.60	0.72
0.5	4.00	11.00	13.50	2.55	0.70
0	3.90	10.90	13.00	2.50	0.68

APPENDIX-V

Marks	LongJump inMeters	HopStepJump inMeters	HighJump inMeters	PoleVault inMeters
10	6.00	13.60	1.50	3.40
9.5	5.90	13.40	1.48	3.37
9	5.80	13.20	1.46	3.34
8.5	5.70	13.00	1.44	3.30
8	5.60	12.80	1.42	3.25
7.5	5.50	12.60	1.40	3.20
7	5.40	12.40	1.38	3.15
6.5	5.30	12.20	1.36	3.10
6	5.20	12.00	1.34	3.05
5.5	5.10	11.80	1.32	3.00
5	5.00	11.60	1.30	2.90
4.5	4.95	11.50	1.28	2.85
4	4.90	11.40	1.26	2.80
3.5	4.85	11.30	1.24	2.75
3	4.80	11.20	1.22	2.70
2.5	4.75	11.10	1.20	2.65
2	4.70	11.00	1.18	2.60
1.5	4.65	10.90	1.16	2.55
1	4.60	10.80	1.15	2.50
0.5	4.55	10.70	1.14	2.45
0	4.50	10.60	1.13	2.40

Athletic Performance Conversion Scoring Table (Men) Jumping Events

 ${\it Table-1:} Semesterwise distribution of hours perweek$

Semester	Theory	Practicum	Total			
Ι	16	20	36			
II	16	20	36			
III	16	20	36			
IV	16	20	36			
Total	64	80	144			
Minimumof72teaching hoursperweekisrequiredinfiveorsixdaysina week						

Table- 2:Number ofcredits persemester

Semester	Theory	Practicum	Total
Ι	16	10	26
II	16	10	26
III	16	10	26
IV	16	10	26
Total	64	40	104
Minimumof36teaching hoursperweekisrequiredinfiveorsixdaysina week			