

Semester - I

Part-A : Theoretical Course						
Course Code	Title of the Papers	Total Lectures per week	Credit	Internal Marks	External Marks	Total Marks
Core Course						
R(22)-DP-101	History and Principles of Physical Education	4	4	30	70	100
R(22)-DP-102	Foundations of Physical Education	4	4	30	70	100
R(22)-DP-103	Basic Anatomy and Physiology	4	4	30	70	100
R(22)-DP-104	Recreation and value education	4	4	30	70	100
Part-B : Practical Course						
R(22)-DP-105	Track and Field– Running events *Gymnastics/ *Swimming (*Any one)	6	4	30	70	100
R(22)-DP-106	Badminton, Cricket, Football, Kabaddi, Throwball	6	4	30	70	100
R(22)-DP-107	Minor Games	6	4	30	70	100
R(22)-DP-108	Project work : on Flag Hoisting & March-Past) and any one of the following Calisthen ics, Dumb-bell, , , Hoops, Lezium,, , Umbrella, Wands, Kolatam, Flower sticks	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester-II

Part-A : Theoretical Course						
Course Code	Title of the Papers	Total lectures per week	Credit	Internal Marks	External Marks	Total Marks
Core Course						
R(22)-DP-201	Yoga Education	4	4	30	70	100
R(22)-DP-202	Health Education and Environmental Studies	4	4	30	70	100
R(22)-DP-203	Methods of Physical Education	4	4	30	70	100
R(22)-DP-204	Adapted Physical Education and Corrective Exercises	4	4	30	70	100
Part-B : Practical Course						
R(22)-DP-205	Track and Field –Jumping Events *Gymnastics /*Swimming (*Any one)	6	4	30	70	100
R(22)-DP-206	Ball Badminton, Handball, Hockey, Kho-Kho ,Softball	6	4	30	70	100
R(22)-DP-207	Aerobics, Chess, Mallkhambh, Shooting, Yoga	6	4	30	70	100
R(22)-DP-208	Project Work: Teaching Practice, Coaching lesson plans in games in I & II semesters, General Lesson Plans in Activities from Semester I & II. Out of 10 lessons 9 Internal & 1 External and 10 lessons at Schools.	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester-III

Part-A : Theoretical Course						
Course Code	Title of the Papers	Total Lectures per week	Credit	Internal Marks	External Marks	Total Marks
Core Course						
R(22)-DP-301	Sports Training	4	4	30	70	100
R(22)-DP-302	Child Psychology and Sociology	4	4	30	70	100
R(22)-DP-303	Information Technology in Physical Education	4	4	30	70	100
R(22)-DP-304	Officiating and coaching	4	4	30	70	100
Part-B : Practical Course						
R(22)-DP-305	Project Work: Records on Track and Field – Throwing Events *Gymnastics /*Swimming (*Any one)	6	4	30	70	100
R(22)-DP-306	Basketball, Table –Tennis, Tennikoit , Tennis, Volleyball	6	4	30	70	100
R(22)-DP-307	Boxing, Fencing, Judo, Karate, Taekwondo, Bharathiyam, Combatives, Dands & Baithaks, National Songs, Surya Namaskaram, Martial Arts, Astanga Yoga.	6	4	30	70	100
R(22)-DP-308	Particular lesson plans in any one game from Semester I,II & III. 5 lessons (4 Internal & 1 External)	6	4	30	70	100
Total		40	32	240	560	800

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

Semester-IV

Part-A : Theoretical Course						
Course Code	Title of the Papers	Total Lectures per week	Credit	Internal Marks	External Marks	Total Marks
Core Course						
R(22)-DP-401	Sports injuries and Rehabilitation	4	4	30	70	100
R(22)-DP-402	Organisation and Administration of Physical Education	4	4	30	70	100
R(22)-DP-403	Test and Measurement in Physical Education	4	4	30	70	100
R(22)-DP-404	Nutrition and Naturopathy	4	4	30	70	100
Part-B : Practical Course						
R(22)-DP-405	Specialization in Athletics	6	4	30	70	100
R(22)-DP-406	Project Work: Record submission on Game of Specialization: Badminton, Ball Badminton, Basketball , Cricket, Football Handball, Hockey , Kabaddi, Kho-Kho, Softball, Tennis,, Throwball, Tennikoit, Table Tennis, Volleyball (Any one of these)	6	4	30	70	100
R(22)-DP-407	Teaching Practice in Sports Specialization: coaching lesson Plan in Track and Field / Swimming /Gymnastics (Any one of these)	6	4	30	70	100
R(22)-DP-408	Teaching practice in Game of specialization: Coaching lessons: Badminton, Ball Badminton, Basketball , Cricket, Football Handball, Hockey , Kabaddi, Kho-Kho, Softball, Tennis, Throwball, Tennikoit, Table Tennis, Volleyball (Any one of these)	6	4	30	70	100
	Total	40	32	240	560	800
Grand Total for four semesters		160	128	960	2240	3200

Note: Total Number of hours required to earn 4 credits for each Theory Course are 68-80 hours per semester whereas 102-120 hours for each Practicum Course.

SCHEME OF EXAMINATION

SEMESTER-I

Paper Code	Internal	External	Total Marks
R(22)-DP-101	30	70	100
R(22)-DP-102	30	70	100
R(22)-DP-103	30	70	100
R(22)-DP-104	30	70	100
R(22)-DP-105	30	70	100
R(22)-DP-106	30	70	100
R(22)-DP-107	30	70	100
R(22)-DP-108	30	70	100
TOTAL	240	560	800

SEMESTER-II

Paper Code	Internal	External	Total Marks
R(22)-DP-201	30	70	100
R(22)-DP-202	30	70	100
R(22)-DP-203	30	70	100
R(22)-DP-204	30	70	100
R(22)-DP-205	30	70	100
R(22)-DP-206	30	70	100
R(22)-DP-207	30	70	100
R(22)-DP-208	30	70	100
TOTAL	240	560	800

SEMESTER-III

Paper Code	Internal	External	Total Marks
R(22)-DP-301	30	70	100
R(22)-DP-302	30	70	100
R(22)-DP-303	30	70	100
R(22)-DP-304	30	70	100
R(22)-DP-305	30	70	100
R(22)-DP-306	30	70	100
R(22)-DP-307	30	70	100
R(22)-DP-308	30	70	100
TOTAL	240	560	800

SEMESTER-IV

Paper Code	Internal	External	Total Marks
R(22)-DP-401	30	70	100
R(22)-DP-402	30	70	100
R(22)-DP-403	30	70	100
R(22)-DP-404	30	70	100
R(22)-DP-405	30	70	100
R(22)-DP-406	30	70	100
R(22)-DP-407	30	70	100
R(22)-DP-408	30	70	100
TOTAL	240	560	800

R(22)-DP-101 : HISTORY AND PRINCIPLES OF PHYSICAL EDUCATION

- Unit- 1** Meaning and Definition of Education and Physical Education, Aim and Objectives of Physical Education, Role of Physical Education in General Education.
- Unit-2** Historical Development of physical education in India: Pre and post Independent India in world (Greece, Germany)
- Unit-3** Policies, Schemes, Awards: Bharata Ratna, Padmasri, Padmabhushan, Padmavibhushan, Arjuna, Dronacharya, Rajiv Khel Ratna, Ekalavya, Jhansi Laxmibai, Abhimanya,, Trophies/ Cups in Physical Education and Sports at State/National level.
- Unit-4** Institutes bodies for Physical Education and Sports in India (YMCA, LNUPE, SAI, NSNIS, IOA, AIU, SGFI, CABPE, PYKKA, RGKA, SAAP, Physical Education & Sports Universities,))

References:

- 1) Nixon, E.E. & Cozen, F.W. *An Introduction to Physical Education*, Philadelphia.W.B. Saunders Co. 1969.
- 2) Obertuffer; *Delbert Physical Education*. New York, Harper & Brothers Publisher, 1970.
- 3) Sharman, J.R. *Introduction to Physical Education*, New York, A.S. Barnes & Co. 1964.
- 4) William J.F. *The Principles of Physical Education*, Philadelphia, W.B. Saunders Co 1964.
- 5) Deshpande, *S.H. Physical Education in Ancient India*. Amravati, Degree College of Physical Education 2014
- 6) M.L.Kamalesh, *Principle and History of Physical Education & Sports*, Friends publications, Delhi.

R(22)-DP-102 : FOUNDATIONS OF PHYSICAL EDUCATION

- Unit-1** Physical Education in relation to Humanities (Pedagogy, Psychology, Sociology, Statistics)
- Unit-2** Physical Education in relation to Science Disciplines: Anatomy, Physiology, Anthropometry, Kinesiology, Biomechanics, Nutrition.
- Unit-3** Heredity Traits, Unsynchronized development, Growth and Development at various levels - pre-adolescence, adolescence, adulthood, Differences in boys and girls, Classification of body types : Kretchmer's and Sheldon classification.
- Unit-4** Learning - meaning and definition, Theories of Learning - Trial and Error Theory, Conditioned Response Theory, Insightful Learning, Laws of Learning: Law of Readiness, Law of Use and Disuse, Law of Effect, Law of Recency, Law of Frequency, Types of Learning - Primary, associate, concomitant, Transfer of Learning, Learning Curve

References:

- 1) Harold M. Barrow, Man and Movement: *Principles of Physical Education*. 2nd edition, London, Kempton pub. 1977.
- 2) Ramesh Chandra Pradhan, *Foundation of Physical Education* New Delhi sports pub. 2011
- 3) Retune B. Frost, *Physical Education Foundation Practices Principles*, London, Addison- Worley. Pub. Cont. 1975.
- 4) Sharma S.N., *Philosophical and Sociological Foundation of Education*, New Delhi, Kanishka pub. Distributors, 1995.
- 5) D.G. Wakharkar, *Physical Education and Sports In India*, Amravati Shree H.V.P.M. Pub., 1988.
- 6) Bucher Charles A. *Foundation of Physical Education*, St. Louis: The C.V. Mosby Co., 1972.

R(22)-DP-103 : BASIC ANATOMY AND PHYSIOLOGY

- Unit- 1** Meaning, Definition and importance of Anatomy and Physiology
Cell : Definition and importance, structure and functions of cell.
- Unit-2** Skeletal System: Bones, in Axial and Appendicular skeleton , structure , functions and types of bones – types of joints – structural and functional classification, movements around joints, effects of exercise on skeletal system.
Muscular System: Structural and functional classification of muscles, characteristics of muscles, fatigue and performance, palpated muscles around shoulder, elbow, hip and knee joint, Effects of Exercise on muscular system.
- Unit-3** Digestive system: Structure of digestive system, process of digestion, effects of exercise on digestive system.
Respiratory system: Structure of human respiratory system, mechanism of respiration, oxygen debt and second wind, effects of exercise on respiratory system.
Circulatory System: Composition and functions of blood, structure and functions of human heart, effects of exercise on circulatory system.
- Unit-4** Excretory system: Structure and functions of skin and kidneys, effects of exercise on Excretory system.
Nervous system: Structure and functions of human brain and spinal cord.

References:

- 1) Karpovich. Peter V. *Physiology of Muscular Activity* London. W.B. Saunders Co. 1059.
- 2) Morehouse, L.E. & Miller, J. *Physiology of Exercise* St. Louis The C.V. Mosby Co. 1967.
- 3) Lamb, G.S. *Essentials of Exercise Physiology*. Delhi, Surjeet Publication, 1982.

R(22)-DP-104 : RECREATION AND VALUE EDUCATION

- Unit-1** Meaning and Importance of Recreation in physical education, Principles of recreation in physical education, qualities and qualifications of recreation leader, worthy use of leisure time activities and their educational values
- Unit-2** Organisation of recreational activities, individual and home agencies, government agencies, voluntary agencies, private agencies and commercial agencies: qualities of the recreation leader.
Meaning and importance of picnic, Benefits of picnic, organisation of picnic, Essential constituents of good picnic.
- Unit-3** Inculcation of Human Values, Ethical values, Spiritual values through Sports.
- Unit-4** Social values, ethical values of officials and coaches on sports ground, ethical behaviour in sports and sportsman spirit, ethical judgment.

References:

- 1) Bucher Charles A, *Foundation of Physical Education* St. Louis: The C.V. Mosby Co., 1072.
- 2) Johnson, R.C. *Measurements in Physical Education & Athletic*, New York, Mac. Milan & Co. 1980.
- 3) Nixon, E.E. & Cozen, F.W. *An Introduction to Physical Education*, Philadelphia. W.B. Saunders Co. 1969.
- 4) Obertuffer; *Delbert Physical Education*, New York, Harper & Brothers Publisher, 1970.
- 5) Sharman, J.R. *Introduction to Physical Education*, New York, A.S. Barnes & Co. 1964.
- 6) William, J.F. *The Principles of Physical Education*, Philadelphia, W.B. Saunders Co. 1964.
- 7) Jackson Roger, *Sports Administration Manual*, Canada, Roger Jackson & Associate Ltd., 2005.
- 8) Butler, G.D., *Introduction to community recreation*
- 9) Jacks L.P. : *Education through recreation*
- 10) Nash J.B. : *Philosophy of Recreation*
- 11) Fitzgerald : *Community organisation for recreation*
- 12) Gangwar B.E: *Organisation, administration & Methods of physical education*, A.Ppublishers, Jalandhar, 2005

Semester-II - Theory Course

R(22)-DP-201 : YOGA EDUCATION

- Unit- 1** Meaning, Definition, Importance of Yoga. Streams of Yoga: Karma Yoga, Raja Yoga, Jnana Yoga, Bakti Yoga, Hatha yoga and their values; Development of Yoga in India
- Unit-2** Effects of yogasanas on various systems of the body: Muscular system, respiratory system, digestive system, circulatory system; Types and importance of asanas with special reference to physical education and sports. Suryanamaskara of 12 stages
- Unit-3** Meaning and importance of Ashtanga Yoga - Yama, Niyama, Asana, Pranayama, Pratyahar, Dharna, Dhyan, Samadhi
- Unit-4** Bandhas:Moolabandha, Udyana Bandha, ,Shatkriyas,
Mudras: Yoga mudra, Chinmayamudra, Aswani mudra, Brahma mudra

- References:**
- 1) Duggal, Satyapad: *Teaching Yoga* (the Yoga Institute, Santacruz, Bombay, 1985)
 - 2) Swami Satyananda : *Yoga Education for Children Saraswati* (Bihar School of Yoga, Munger, 1990)
 - 3) Gawande, E.N.: *Value oriented Education* (Sarup & sons, New Delhi - 110002)
 - 4) Nagendra, H.R. and Nagarathna R: *New Perspectives in Stress Management* (V.K.Yogas, Bangalore, 1988)
 - 5) Udupa, K.N.: *Stress and its Management by Yoga* (Motilal Banarsidass, Delhi)
 - 6) Ghorote, M.L.: *Applied Yoga*, Lonavala.
 - 7) BKS Iyengar, *Light on Yoga*
 - 8) Swami Ramdev – *Pranayama, Suryanamaskar*

R(22)-DP -202 : HEALTH EDUCATION & ENVIRONMENTAL STUDIES

- Unit- 1** Meaning, Definition, Dimensions and Importance of Health; Principles of Health Education. Factors influencing health – Heridity, Environment and Health Habits. Coordinated school health programme – Health services, Health instruction, Health records and Health supervision
- Unit-2** Common Health Problems in India, Communicable and Non-Communicable Diseases, Hygiene – Personal, Environmental, Occupational Health, Cleanliness and awareness through educational activities.
- Unit-3** Environmental Studies - Meaning, natural and men made Hazards. Environmental pollution – Meaning, Definition, prevention and control of Air, Water, Soil and Sound Pollution.
- Unit-4** Natural Calamities – Cyclone, Tsunami, Earthquake – Their prevention and safety measures. WHO, UNICEF, UNESCO and other agencies

References:

- 1) Moss and *et. al.* “**Health Education**” (National Education Association of U.T.A.)
- 2) Nemir A. “**The School Health Education**” (Harber and Brothers, New York).
- 3) Frank H. Walter H., Turners School Health Education, the C.Y. Mosby Company, Saint Louis-1976
- 4) Agrawal, K.C. **Environmental Biology** (Bikaner: Nidhi publishers Ltd.) 2001.
- 5) Miller T.G. Jr., **Environmental Science** (Wordsworth publishing Co.)
- 6) Odum,E.P. **Fundamental of Ecology** (U.S.A.: W.B. Saunders Co.) 1971.
- 7) Townsend C. **Essentials of Ecology** (Black well science)

R(22)-DP -203 : METHODS OF PHYSICAL EDUCATION

- Unit- 1** Meaning, Definition, Importance and Factors Influencing on Methods of teaching
- Unit-2** Principles of Presentation Technique and Class Management in physical education:
Commands, Class Formation, Teaching aids : Audio visuals
- Unit-3** Methods of classification of students: McCloy method, YMCA method.
Method of teaching: Command Method, Lecture Method, Demonstration Method, Discussion Method, Part Method, Whole Method, Part-Whole Methods, Whole part whole method and their application in minor, major, rhythmic calisthenics and Gymnastics
- Unit-4** Lesson Plan – Concept of lesson plan, Principles, importance of lesson plan. Preparation of Lesson Plan in Physical Education – Steps in lesson plan.

- References:**
- 1) Bossing, N.L. Progressive, *Methods & Teaching Secondary Schools*.
 - 2) Knap, C. & Hagma. E.P. *Teaching Methods for Physical Education*, New York: McGraw Hill Book Co. Inc 1958.
 - 3) Kozman H.C. Cassidy R. & Jackson C. *Methods in Physical Education* London: W.B. Saunders Co. 1960.
 - 4) Tirunarayanan, C. & Hariharan, S. *Methods in Physical Education* Karaikudi: South India Press, 1969.
 - 5) Dhanunjoy shaw – Seema kaushik – *Lesson planning, Teaching methods & class management in Physical Education*, KSK, Delhi
 - 6) Kamalesh, *Methods in Physical Education*
 - 7) J.P.Thomas, *Physical Education Lesson*.

R(22)-DP -204 : ADAPTED PHYSICAL EDUCATION AND CORRECTIVE EXERCISES

- Unit- 1** Adapted Physical Education- Meaning, Definition, Objectives and Importance
- Unit-2** Concept and Significance of Good Posture: Postural Deformities, Lordosis, Kyphosis, Kypholordosis, Scoliosis, Knockknees, Bow legs, flat foot and their Remedies, Corrective Exercises for Postural illnesses and deformities
- Unit-3** Classification of various disabilities (Different abled) – physically challenged, mentally challenged, visually challenged, hearing impaired, Principles of adapted Physical Education programme
- Unit-4** Co-curricular activities for the disabled - Indoor/ Outdoor programmes, rhythmic and dance activities, aquatic activities, fitness testing of disabled child

References:

- 1) Author David Jean Pyfer, *Adapted Physical Education and Recreation* V. 5th ed. S.T Louis Mostly College pub. 1985.
- 2) Pomerocy Janet, *Recreation for the Physically Handicapped* N. York The Macmillan Comfogy 1964
- 3) Gandhi P. K. & S.R. Mohisini, *The Physically handicapped and the Government* Delhi Seema pub. 1982
- 4) Graham Uplon , *Physical and creative activities for the mentally Handicapped* New York. Cambridge University Press.
- 5) Bryant J. Craatty, *Adapted Physical Education for Handicapped Children and Youth*, London Lever Pub. Comfort 1980

Semester-III - Theory Course

R(22)-DP-301 : SPORTS TRAINING

- Unit- 1** Meaning, Definition, Importance, Characteristics and Principles of Sports Training. Brief introduction on Detraining and Retraining.
- Unit-2** Training Load and Adaptation Process; Overload - Causes, Symptoms and Preventive Measures, recovery and its benefits.
- Unit-3** Definition and Types of Flexibility, Strength, Endurance, Speed and Coordinative Abilities
- Unit-4** Training methods : Continuous training, Interval training, Repetition training, fartlek training, resistance training, circuit training, plyometric training.
- Methods of developing Fitness Components - Flexibility, Strength, Endurance, Speed and Coordinative Abilities, Talent Identification and nurturing of talent

References:

- 1) Harre, Dietrich, *Principles of Sports Training* (Berlin: Speculated, 1982).
- 2) Dick W. Frank. *Sports Training Principles* (London: Lepus Books, 1980).
- 3) Jensen, R. Clayne, and Fisher A.G. *Scientific Basis of Athletic Conditioning* (Philadelphia: 1979).
- 4) Matvyew, L.P. *Fundamental of Sports Training* (Moscow: Progress Publishers, 1981).
- 5) Cratty, J. Brayant *Perceptual and Motor Development in Infants and Children* (N.J.: Englewood Cliffs, Prentice Hall, Inc. 1979).
- 6) Singh, H. *Sports Training, General Theory and Methods* (Patiala: NSNIS, 1984).
- 7) Uppal, A.K., *Sports Training* (New Delhi: Friends Publication, 1999).
- 8) Bompa, *Series of strength training*
- 9) K.R.S.Reddy & Srinivasan – *Science of Sports Training*, Swastik publications, New Delhi.

R(22)-DP-302 : CHILD PSYCHOLOGY AND SOCIOLOGY

- Unit-1** Meaning, Definition and Nature of Psychology, Child Psychology, Educational Psychology and Sports Psychology
Importance of Sports Psychology. Motivation – Definition, Importance and types of motivation.
- Unit-2** Stages of Growth and Development of Children - Physical, mental, social and communication skill development, psycho-motor learning at different stages.
Play-Theories of play.
- Unit-3** Meaning, Definition and Importance of Sociology and Sports Sociology; Culture and Sports, Socialization and Sports, Gender and Sports
- Unit-4** Social Mobility – Sports Professionalization – Role of social factors on sports performance

References:

- 1) Blair. Jones and Simpson, *Educational Psychology*, McMillan Co., New York, 1962.
- 2) Cratty. B. J., *Psychology and Physical activity*. Eaglewood Cliffs. Prentice Hall, 1968.
- 3) Crow and Crow, *Educational Psychology*. Eurasia Publishing House, N. Delhi, 1979.
- 4) Kamlesh, M.L. *Psychology in Physical Education and Sport*. Metropolitan Book Co., N. Delhi. 1998.
- 5) Mathur. S.S., *Educational Psychology*. Vinod Pustak Mandir, Agra, 1962.
- 6) Skinnner, Charles. E., *Education Psychology*. Prentice Hall of India, N. Delhi, 1984.
- 7) Loy, John W., Kenyon, Gerald S. & McPherson, Barry D. *Sports Culture and Society* (Philadelphia: Lea & Febiger, 1981).
- 8) Ball, Donald W. and Loy John W. *Sport and Social Order; Contribution to the sociology of sport*, (London: Addison Wesley Publishing Co., Inc., 1975).
- 9) Loy John. W. McPherson, Barry D., and Kenyon Gerald, *Sport and Social System* (London: Addison Wesley Publishing Company Inc., 1978).
- 10) Edward Larry. *Sociology of Sport* (Illinois: The Dorsey Press, 1973).
- 11) Cratty, Brayant, J. Social *Dimensions of physical Activity* New Jersey: Englewood Cliffs, Prentice Hall Inc., 1967.
- 12) Benjamain Dumiville – *Child Psychology*, Lokesh thani, Sports publications
- 13) Dharam viz – *Sports and society readings in sociology of sports*.

R(22)-DP-303 : INFORMATION TECHNOLOGY IN PHYSICAL EDUCATION

- Unit- 1** Introduction to Computer System: definition, Characteristics, Principles, Parts of Computer and their functions, Generations, Input and Output Devices, Operating Systems, Memory (RAM, ROM)
- Unit-2** WINDOWS: Meaning and Features of Windows, , Start and Shutdown Computer, Creating Folders and Short cut Icons. Saving, Copying and Deleting Files,. Use of Note Pad and Paint Brush.
- Unit-3** MS OFFICE: MS Word, MS Excel and MS Power point and introduction to Internet
- Unit-4** Computer Applications in Physical Education: principles of development of self instruction materials special reference to school children, principles of designing e-learning modules

References:

- 1) Chauhan Sunil, Saxena Akash, Gupta Kartika, *Foundation of Computer*, (Firewall Media, 2006)
- 2) *Computer Fundamentals*. Pradeep K. Sinha & Priti Sinha, 4th edition, BPB Publication
- 3) *Computers in Your Future*, Marilyn Meyer & Roberta Baber, 2nd edition, Prentice Hall India
- 4) *Computers Today*. Suresh K. Basandra, Galgotia publication, upgraded edition-2008
- 5) Irtegov, D. *Operating System Fundamentals*. Firewall Media. 2004.
- 6) Milke, M Absolute *Beginner's Guide to Computer Basics*, Pearson Education Asia 2007.
- 7) *NIIT Basics of Networking* Prentice - Hall of India Pvt. Ltd, 2004

R(22)-DP-304 : OFFICIATING AND COACHING

- Unit- 1** Officiating, Meaning, importance and principles of officiating. Qualities and qualifications of good official, Duties of Officials. (Hockey, Football, Handball, Volleyball, Basketball, Tabletennis, Kabaddi, Kho-Kho, Throwball, Tennis, Badminton, Ball Badminton, Cricket, Softball and Tennikoit), System of officiating in games.
- Unit-2** Rules of various games, Layout of courts and fields of games.
Track and field – layout of track and field, rules of track and field events – Runs, Jumps, Throws
Systems of officiating in track and field events.
- Unit-3** Coaching definition, principles and physiology of coaching, qualities and qualification and responsibilities of a good coach.
- Unit-4** Coaching camps, Skill, Technique, Tactics and strategies, System of playing games, selection of team, Brief description of teaching, coaching and training

References:

- 1) Cratty, B.J., *Psychology and Physical activity*. Eaglewood Cliffs. Prentice Hall, 1968.
- 2) Crow and Crow, *Educational Psychology*. Eurasia Publishing House, N. Delhi, 1979.
- 3) Kamlesh, M.L. *Psychology in Physical Education and Sport*. Metropolitan Book Co., N. Delhi. 1998.
- 4) Skinnner, Charles. E., *Education Psychology*. Prentice Hall of India, N. Delhi, 1984.
- 5) Loy, John W., Kenyon, gerald S. & McPherson, Barry D. *Sports Culture and Society*, Philadelphia: Lea & Febiger, 1981.
- 6) Ball, Donald W. and Loy John W. *Sport and Social Order; Contribution to the sociology of sport*, London: Addison Wesley Publishing Co., Inc., 1975.
- 7) Loy John. W. McPherson, Barry D., and Kenyon Gerald, *Sport and Social System*, London: Addison Wesley Publishing Company Inc., 1978.
- 8) Edward Larry. *Sociology of Sport*, Illinois: The Dorsey Press, 1973.
- 9) Cratty, Brayant J. *Social Dimensions of Physical Activity*, New Jersey: Englewood Cliffs, Prentice Hall Inc., 1967.

Semester-IV - Theory Course

R(22)-DP- 401 : SPORTS INJURIES AND REHABILITATION

- Unit- 1** Meaning and Causes of Sports Injuries. Principles of prevention of sports injuries
- Unit-2** Common Sports Injuries, symptoms and their treatment, Ligament sprain – Muscle sprain – Tennis elbow- Golfer’s elbow, lower back strain – Dislocation – Fractures, Runners knee – Shin pain – Blisters – contusion, Abrasion, Laceration, Haematoma, contusion.
- Unit-3** Definition of First-Aid, DRABC formula (Danger, Response, Airways, Breathing & Circulation), Artificial respiration techniques – Mouth to mouth, mouth to nose respiration, CPR(Cardio Pulmonary Resuscitation), First Aid for Haemorrhage, Fracture, Sprain and Strain, Drowning, Heat Stroke and Heat Exhaustion; Concept of PRICE(Prevention, Rest, Ice, Compression and Elevation)
- Unit-4** Rehabilitation - Meaning, Objectives and importance of Rehabilitation; Rehabilitation Modalities - Cold, Heat, Water, Radiation.

References:

- 1) Ann. Lowlin. *Women’s Fitness Program Development* Human, Kinetics. 2002.
- 2) Bengt O. Eriksson *et. al*, *Sports Medicine*, Guinness Publication, 1990.
- 3) Christine M. Drews, *Physiology of Sports and Exercise*, Human Kinetics, USA, 1999.
- 4) David R. Mottram, *Drugs in Sports* (4th Ed) Routledge Taylor and Francis Group, 2005.
- 5) Erikson, B.O. *et al*, *Sports Medicine*, Guinness Pub. Great Britain, 1990.
- 6) Jain, Rachna, *Sports Medicine*, KSK, New Delhi, 2002.
- 7) Jeyaprakash, C. S., *Sports Medicine*, J.P. Brothers Pub., New Delhi, 2003.
- 8) Khanna, G.L., *Exercise Physiology & Sports Medicine*, Lucky Enterprises, Delhi, 1990.
- 9) Mathew O.K. & Fox E.L, *Physiological Basis of Physical Education and Athletics*, W.B. Saunders Co: Philadelphia, 1971.
- 10) Pandey, P.K., *Outline of Sports Medicine*, J.P. Brothers Pub., New Delhi, 1987.
- 11) Pandey, P.K., *Sports Medicine*, Khel Sahitya Kendra, New Delhi, 1998.

R(22)-DP- 402 : ORGANIZATION AND ADMINISTRATION OF PHYSICAL EDUCATION

- Unit- 1** Meaning, importance and principles of administration and organization; Factors influencing on good administration; Types of good Administration; Qualifications and qualities of good administration. Organisational setup at different levels: Schools, Colleges, Universities, Mandal, District, State & National
- Unit-2** Facilities and standards of Physical Education: Play fields, (Different play areas) Gymnasium, Swimming pool. Purchase & Care of sports equipments, Maintenance of Stock, Maintenance of records and Registers, Cash register, Tapal register, Stock Issue register, Attendance Register, Physical Fitness records, Health records and achievement records. Process of Verification, Write-off and Condemnation of Stock
- Unit-3** Tournaments: Meaning of tournament and types of tournaments – Knock-out (Elimination), League (Round Robin), Knock-out cum league, League cum knock-out, Double league, Double knockout, Challenge. Method of drawing Fixtures: Seeding, Special Seeding. Rotation Method, Stair case method. Intramural and Extramural and their importance, Sports Day/ Play Day
- Unit-4** Time tables – Meaning and maintenance of Time table, factors influencing time table. Types of Physical Education periods. Budget : Meaning and importance of Budget, Budget income, expenditure and rules regarding expenditure, Preparation and Administration of Budget.

References:

- 1) Broyles, Frank J. & Rober. Hay D. *Administration of sports, Athletic Programme*: A Managerial Approach, New York, Prentice hall Inc. 1979.
- 2) Bucher. Charles A. *Administration of Physical Education and Athletic Programme* St. Louis. The C.V. Mosby Co. 1983.
- 3) Singh, Sujana, *Organization of Physical Education* Ropar Jeet Publication, 1973.
- 4) Thomas J.P. *Organization & Administration of Physical Education* Madras, Gyanodayal Press, 1967.
- 5) Voltmer, Edward F. and Esslinger, Arther A. *The organization and Administration of Physical Education*: New York: Prentice Hall Inc. 1979.

R(22)-DP- 403 : TEST AND MEASUREMENT IN PHYSICAL EDUCATION

- Unit- 1** Meaning and definition of Test, Measurement and evaluation, Importance of Test, Measurement and Evaluation in the field of physical education and sports.
- Unit-2** Criteria of good test: Classification of tests, Test Administration(Pre, During and Post)
- Unit-3** Tests for different variables Speed – 50metre dash, Maximum speed -30metres dash with flying start, cardio vascular endurance – Cooper’s 12 minutes run - walk test, Muscular endurance – Bent knee sit-ups – Explosive power – Standing Broad jump
- Unit-4** Anthropometric Measurements: Height, Weight, Arm length, Leg length. BMI and its classification.

References:

- 1) ACSM’s *Health / Fitness Facility Standards and Guidelines*, New York: Human Kinetics, 1992.
- 2) Barrow, Harold M. and McGhee, Rosemary, *A Practical Approach to Management in Physical Education*” Philadelphia: Lea and Fibiger 1979.
- 3) Clarke, H. Harrison.: *Application of Measurement to Health and Physical Education*, New Jersey: Prentice Hall Inc. 1976.
- 4) Safrit, Margaret J: *Introduction to Measurement in Physical Education and Exercise Science*, St. Louis: Mosby, 1995.

R(22)-DP – 404 : NUTRITION AND NATUROPATHY

- Unit- 1** Sports Nutrition, Concept of Nutrition, Types of Nutrients, Balanced Diet
- Unit-2** Obesity - Causes and Prevention; Weight Management through Life style Modification. Malnutrition
- Unit-3** Naturopathy - Meaning, Definition and Principles of Naturopathy; Methods of Nature Cure, Fasting, Mud Therapy and Hydrotherapy
- Unit-4** Application of Naturopathy, technique for various diseases like cold, cough, fever, constipation, diarrhea

References:

- 1) Brown, JE. (2005). *Nutrition*, Now Thomson, Wordsworth.
- 2) Corbin, C.B., G.J. Welk, W.R. Corbin, K.A. Welk (2006) *Concepts of Physical Fitness: Active Lifestyle for Wellness*. McGraw Hill, New York, USA.
- 3) Graham, G. (2001), *Teaching Children Physical Education: Becoming a Master Teacher*. Human Kinetics, Champaign, Illinois, USA. Hoeger,
- 4) Hoeger (2007) *Fitness and Wellness*, 7th Ed. Thomson Wadsworth, Boston, USA.
- 5) Kamlesh, M. L. & Singh, M. K. (2006) *Physical Education* (Naveen Publications).
- 6) Kansal, O.K. (2008) *Text book of Applied Measurement, Evaluation & Sports Selection. Sports & Spiritual Science* Publications, New Delhi.
- 7) Lumpkin, A. (2007) *Introduction to Physical Education, Exercise Science and Sports Studies*, McGraw Hill, New York, U.S.A.

Semester-I -Practicum : R(22)-DP-105

Track & Field – Running Events

Layout of Track

Technique and Rules of Sprints, Middle distance, Long distance, Relays, Hurdles

Gymnastics / Swimming (Any one)-

Gymnastics: Floor exercises (Boys & Girls) Horizontal bar – (Boys), Balancing Beam (Girls)

Swimming: Skills & rules of swimming – Free style (50Mts & 100Mts) for (Boys and Girls)

Semester-I -Practicum : R(22)-DP-106

Badminton, Cricket Football, Kabaddi & Throwball

Skills, rules & Lead-up Games

Semester-I -Practicum : R(22)-DP-107

Minor Games: Intelligence games, Tag games, Relay Games & Ball Games

Semester-I -Practicum : R(22)-DP-108, Project Work :

Calisthenics, Dumbell, Flag Hoisting, Hoops, Lezium, March past, Umbrella, Wands, Kolatam and Flower Sticks

Semester-II -Practicum : R(22)-DP-205

Track & Field – Jumping Events

Marking of field events and rules of Jumps

Technique and Rules of Long Jump, High Jump, Triple Jump, Polevault

Gymnastics /Swimming (Any one)

Gymnastics: Vaulting horse (Boys &Girls) Pyramids – (Boys & Girls)

Swimming: Skills & rules of swimming – Breast Stroke (50Mts & 100Mts) (Boys) and Breast Stroke (50 Mts & 100Mts) (Girls.)

Semester-II -Practicum : R(22)-DP-206

Ball Badminton, Handball, Hockey, Kho-Kho and Softball

Skills, rules & Lead-up Games

Semester-II -Practicum : R(22)-DP-207

Aerobics, Chess, Malkhambh, Shooting, Yoga

Semester-II - Teaching Practice R(22)-DP-208 Project Work :

Teaching Practice : Coaching lesson plans in Games in I & II Semesters - 10 lessons of 40 Minutes duration each (9 internal & 1 External) at Schools

General Lesson plan : 10 Lessons of 40 min duration each (9 Internal & 1 External)

Semester-III -Practicum : R(22)-DP-305

Project Work :Track & Field – Throwing Events

Marking Throw sectors and rules of Throws

Technique and Rules of Shotput, Discus, Javelin, Hammer,

Gymnastics / Swimming (Any one)

Gymnastics: Pommel horse (Boys) Gymnastic Positions, Combination of Rhythmic Activities -

Rope, Ribbon (Girls)

Swimming: Skills & rules of swimming – Butter Fly (50Mts) (Boys and girls)

Semester-III -Practicum : R(22)-DP-306

Basketball, Table Tennis, Tennikoit, Tennis & Volleyball

Semester-III -Practicum : R(22)-DP-307

Boxing, Fencing, Judo, Karate, Taekwondo, Bharathiyam, Combatives, Dands & Baithaks, National Songs, Surya Namaskaram, Martial Arts, Astanga Yoga.

Semester-III -Teaching Practice-R(22)-DP-308

Particular Lesson plan : 5 Lessons(in class room/out door) of 45 minutes of duration each in any one of the activity from R(22)-DP-306 & R(22)-DP-307 (4 internal and 1 External) and any 5 lessons in R(22)-DP-306 & R(22)-DP-307

Semester-IV -Practicum : R(22)-DP-405

Specialisation in Athletics: Candidates have to exhibit proficiency and officiating ability in any one of the events in Athletics of I, II & III Semesters. Record and Viva - Voce.

Semester-IV -Practicum : R(22)-DP-406 Project Work :

Game of Specialization: candidate has to show proficiency in any one of the games from I, II & III semesters. Record and Viva - Voce.

Semester-IV -Practicum : R(22)-DP-407

Teaching Practice in sports specialization: Coaching lesson plan in any one of the track & Fields events / Swimming/Gymnastics. (5 Lessons of 45 Minutes duration each. 4 Internals & 1 External)

Semester-IV -Teaching Practice: R(22)-DP- 408

Teaching Practice in game of Specialization: Coaching lessons in any one of the game from I,II & III Semesters (5 Lessons of 45 Minutes duration each. 4 Internals & 1 External)

Table-1 : Semester wise distribution of hours per week

<i>Semester</i>	<i>Theory</i>	<i>Practical</i>	<i>Teaching Practice</i>	<i>Total</i>
<i>I</i>	<i>16</i>	<i>24</i>	<i>00</i>	<i>40</i>
<i>II</i>	<i>16</i>	<i>18</i>	<i>6</i>	<i>40</i>
<i>III</i>	<i>16</i>	<i>18</i>	<i>6</i>	<i>40</i>
<i>IV</i>	<i>16</i>	<i>18</i>	<i>6</i>	<i>40</i>
<i>Total</i>	<i>64</i>	<i>78</i>	<i>18</i>	<i>160</i>
<i>Minimum of 36 teaching hours per week is required in five or six days in a week</i>				

Table-1 : Number of credits per semester

<i>Semester</i>	<i>Theory</i>	<i>Practical</i>	<i>Teaching Practice</i>	<i>Total</i>
<i>I</i>	<i>16</i>	<i>16</i>	<i>00</i>	<i>32</i>
<i>II</i>	<i>16</i>	<i>12</i>	<i>04</i>	<i>32</i>
<i>III</i>	<i>16</i>	<i>12</i>	<i>04</i>	<i>32</i>
<i>IV</i>	<i>16</i>	<i>12</i>	<i>04</i>	<i>32</i>
<i>Total</i>	<i>64</i>	<i>78</i>	<i>12</i>	<i>128</i>
<i>Minimum of 36 teaching hours per week is required in five or six days in a week</i>				