

Government of Andhra Pradesh
Department of School Education
State Council of Educational Research & Training
DSC – SCHOOL ASSISTANT PHYSICAL EDUCATION SYLLABUS

1. G.K & current Affairs -	–	05M
2. Perspectives in Education	–	05M
3. Physical Education Pedagogy	–	10M
4. Content	–	30M
Total		<u>50 M</u>
5. Physical Efficiency Test	–	30 M
Total	–	<u>80 M</u>

Part – I

General knowledge and current affairs (Marks: 05)

Part – II

Perspectives in Education (Marks: 05)

1. History of Education :

- The Education in Ancient India - Pre-Vedic and Post-Vedic period, Medieval Education.
- Education in Pre Independent era - Woods Despatch (1854), Hunter Commission (1882), Hartog Committee (1929), Sargent Committee (1944).
- Education in Post Independent era - Mudaliar Commission (1952-53), Kothari Commission (1964-66), Ishwarbhai Patel committee (1977), NPE-1986, POA-1992

2. Teacher Empowerment:

- Need, interventions for empowerment, Professional code of conduct for teachers, Teacher motivation, Professional development of Teachers and Teacher organizations, National / State Level Organizations for Teacher Education, Maintenance of Records and Registers in Schools.

3. Educational Concerns in Contemporary India:

- Democracy and Education, Equality, Equity, Quality in Education, Equality of Educational opportunities.
- Economics of Education, Education as Human Capital, Education and Human Resource Development, Literacy - Saakshar Bharat Mission.
- Population Education, Gender - Equality, Equity and Empowerment of Women, Urbanization and migration, Life skills.
- Adolescence Education
- Value Education – Morel Value and Professional Eathics in Education.
- Health and Physical Education

- Inclusive Education - Classroom Management in Inclusive Education
 - Role of Education in view of Liberalization, Privatization and Globalization
 - Programmes and Projects – APPEP, DPEP, Sarva Siksha Abhiyan, National Programme for Education of Girls at Elementary Level (NPEGEL), Rashtriya Madhyamika Siksha Abhiyan(RMSA), Rashtriya Aveshekar Abhiyan (RAA), KGBVs, Model Schools.
 - Incentives and special provisions – Mid Day Meals, Free Books, Scholarship, Awards, Welfare Hostels, Transportation.
 - Current Trends in Education – Badi pelusthondi, Badi ki Vasta, Mavuru – Mana Badi, Vidyanjali, Swacha Patasala, Inspire, Kalavutsav.
- 4. Acts / Rights:**
- Right of Children to Free and Compulsory Education Act - 2009
 - Right to Information Act - 2005
 - Child Rights
 - Human Rights.
- 5. National Curriculum - Framework, 2005: Perspective, Guiding Principles, Learning and Knowledge, Teaching Learning Process, Assessment, Systemic Reforms.**

Part – III

Physical education pedagogy (Marks: 10)

- Psychology: meaning, definition and nature of psychology – definition of sports psychology – importance of sports psychology. Motivation – definition, importance and types of motivation.
- Stages of growth and development of children – physical, mental, social and communication skill development, psycho-motor learning at different stages. Play -theories of play.
- Meaning, definition, importance and factors influencing on methods of teaching.
- Principles of presentation technique and class management in physical education: commands, class formation, teaching aids: audio visuals.
- 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.
- Lesson plan: concept of lesson plan principles, importance of lesson plan. Preparation of lesson plan in physical education, types of lesson plan– steps in lesson plan.
- 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.
- Time tables – meaning and maintenance of time table, factors influencing time table. Types of physical education periods.

- Meaning and definition of test, measurement and evaluation, importance of test, measurement and evaluation in the field of physical education and sports. Criteria of good test: classification of tests, test administration (pre, during and post) 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
- Tournaments: meaning of tournament and types of tournaments – knock-out (elimination), league (round robin), knock-out cum league, league cum knockout, 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

Part – IV

Physical education content (Marks: 30)

I. Organization and administration of physical education

- Meaning of the terms organization, administration and supervision.
- Guiding principles of organization
- Time-table; factors influencing time-table; types of physical education periods; time allotment for intra-murals, extra murals, play days, demonstrations.
- Budget and accounting – preparation and administration of good budget.
- Records and registers – types of registers – stock, issue, attendance, physical measurement and fitness, cumulative register, health record.
- Supervision – meaning and need; guiding principles of supervision.

II. History of Physical Education

- Historical development of physical education: greece, germany, british period (before 1947), physical education in india (after 1947), contribution of akhadas and vyayamsalas, h.v.p. Mandals, institutions / bodies in physical educations and sports: ymca, lnipe, nsnis, ioa, sai, saf, sgf, pykka, rgka, sats, physical education & sports universities.
- Policies, schemes, awards: bhārata ratna, padmasri, padmabhushan, padmavibhushan, arjuna, dronacharya, rajiv khel ratna, ekalavya, jhansi laxmibai, abhimanya, trophies/ cups in physical education and sports at state/national level.
- Ancient and modern Olympic movement. Origin of olympic movement: aims of olympic movement, the early history of the olympic movement. The significant stages in the development of the modern Olympic movement, educational and cultural values of olympic movement. Origin and history of ancient olympic games. modern olympic games: significance of olympic ideals, olympic rings, olympic flag, ceremonial flag, olympic symbol, olympic protocol for member countries, queens' baton, olympic torch and protocol of modern olympics inaugural and valedictory functions. Different Olympic games: para olympic games, summer olympics, winter olympics, youth olympic games.

- Committees of olympic games: international olympic committee - structure and functions, national olympic committees and their role in olympic movement, olympic medal winners of india till to date.
- various committees and their recommendations

III. Basic Anatomy, Physiology, Kinesiology and Biomechanics

- Structure and functions of cell
- Skeletal system: bones – axial and appendicular skeleton – structure and functions of bones – types of bones
- Muscular system: types of muscles, classification of muscles
- Respiratory system: structure of human respiratory system – mechanism of respiration.
- Digestive system: structure of human digestive system and process of digestion.
- Circulatory system: constituents of blood and its functions, structure and functions of human heart.
- Excretory system: structure and functions of kidneys and skin.
- Nervous system: structure and functions of human brain and spinal cord.
- Endocrine system: functions of glands, pituitary, thyroid, parathyroid, adrenal and pancreas.
- Effects of training on cardiovascular system, effects of training on respiratory system, effects of training on muscular system, fatigue and performance in sports.
- Introduction to kinesiology and sports biomechanics: meaning and definition of kinesiology and sports biomechanics, importance of kinesiology and sports biomechanics in physical education and sports, terminology of fundamental movements, planes and axes, gravity, base, centre of gravity, equilibrium, line of gravity.
- Mechanical concepts: force: meaning, definition, types and its application in sports. Lever: meaning, definition, types and its application in sports. Newton's laws of motion and their application in sports. Projectile: factors influencing projectile trajectory.
- Kinematics and kinetics of human movement: linear kinematics: distance and displacement, speed and velocity, acceleration. Angular kinematics: angular distance and displacement, angular speed and velocity, angular acceleration. Linear kinetics: inertia, mass, momentum, friction. Angular kinetics: moment of inertia, couple, stability.

IV. Health Education and Sports Injuries

- Meaning, definition, dimensions and importance of health; principles of health education. Factors influencing health – heredity, environment and health habits. Coordinated school health programme – health services, health instruction, health records and health supervision
- Common health problems in india, communicable (epidemic & endemic) and non communicable diseases, hygiene – personal, environmental, occupational health, cleanliness and awareness through educational activities.
- Food and nutrition – essential constituents of food – proteins, cho, fats, minerals, vitamins – balanced diet – under nutrition and malnutrition.

- 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
- Meaning and causes of sports injuries. Principles of prevention of sports injuries common sports injuries, symptoms and their treatment, ligament sprain – muscle strain – tennis elbow- golfer’s elbow, lower back strain – dislocation – fractures, runners knee – shin pain – blisters – contusion, abrasion, laceration, hematoma.
- Definition of first-aid, drabc formula (danger, response, airways, breathing & circulation), artificial respiration techniques – mouth to mouth, mouth to nose respiration, first aid for hemorrhage, fracture, sprain and strain, drowning, heat stroke and heat exhaustion; concept of price(prevention, rest, ice, compression and elevation)
- Physiotherapy: definition: guiding principles of physiotherapy, importance of physiotherapy. Treatment modalities: electrotherapy, infrared rays, ultraviolet rays, short wave diathermy, ultra sound.
- Hydrotherapy and massage: hydrotherapy: meaning and methods, criotherapy, thermo therapy, contrast bath, whirlpool bath, steam bath, sauna bath, hot water fomentation. Massage: meaning and importance of massage, indications and contraindications of massage. Types of manipulation, physiological effects of massage.
- Therapeutic exercise: definition, principles and importance of therapeutic exercises. Classification of therapeutic exercise: passive movements (relaxed, forced and passive stretching) active movements(concentric, eccentric and static). Free mobility exercise for shoulder, wrist, fingers, hip, ankle, foot joints and neck exercises.

IV.Yoga in Physical Education

- Introduction: meaning, definition & scope of yoga, aims, objectives and functions of yoga, yoga practices in upanishads and yoga sutra, modern trends in yoga, place and importance of yoga in physical education and sports.
- Early yoga practices: astanga yoga: yama, niyama, asana, pranayama, pratyahara, dharana, dhyana and samadhi. Streams of yoga practices: hatha yoga, karma yoga, bhakti yoga, raja yoga, jnana yoga.
- Basic yogic methods: asana: classification of asanas, sitting, standing, lying, inverted asanas. Benefits of asanas: effects of asanas on general health. Pranayama: importance & impact on muscular, cardio respiratory and nervous system. Relaxation and meditation: importance & impact on body at work and body at rest.. Bandhas: jalandhara, mula, udyana. Mudras: chin,yoga,aswini, anjali, brahma mudra. Kriyas: neti ,nauli, kapalabhati, tratata, dhauthi, bhastrika.
- Yoga education: yoga education for youth empowerment and human resource development. Difference between yogic practices and physical exercises, yoga education centers in India and abroad, competitions in yoga asanas.
- Types and importance of asanas with special reference to physical education and sports. Suryanamaskara of 12 stages
- School games federation of India – national school games – rules for yogasana competitions.

VI.Recreation and Leisure Management

- Basics of recreation: meaning, definition of recreation and leisure management, importance, values of recreation, principles of recreation. Fundamental modes of recreation, qualities and qualifications of leaders of recreation.
- Recreation and play: theories of recreation, theories of play, therapeutic recreation, therapeutic use of activity, recreation for the life, role of recreation and leisure on the human development.
- Types of recreational activities: indoor, outdoor games, music, dance, picnics and excursions.
- Recreational agencies: individual and home agencies, government agencies, voluntary agencies, private agencies, commercial agencies.

VII.Sports Training

- Introduction to sports training: meaning and definition of sports training, aims and objective of sports training, principles of sports training. Methods of sports training: continuous training, interval training, repetition training, fartlek training, resistance training, circuit training, plyometric training. Warm-up and warm-down, athletic diet: pre competition, during competition and post competition.
- Training components, meaning & definition and their development methods: speed, strength, endurance, co-ordination and flexibility.
- Training process: load: definition and types of load. Principles of intensity and volume of load. Meaning and methods of technical training and tactical training.
- Training program and planning: periodization – meaning, aims and types of periodization: preparatory, competition, transitional. Planning: training session, talent identification and development.

VIII.Concepts Of Wellness Management

- Wellness: definition and scope of wellness- wellness continuum and health - dimensions of wellness - physical wellness - emotional wellness - social wellness - spiritual wellness - intellectual wellness and environmental wellness.
- Exercise and wellness: physical wellness, exercise and physical health of different systems of human body, lifestyle diseases in relation to inactivity, nutrition and exercise to physical wellness.
- Stress management: stress : definition of stress, stress and emotional health, stress and physical health- mechanism of stress and related degenerative diseases- inter dependence of spiritual wellness, social wellness and emotional wellness- stress management techniques.
- Fitness and body composition: health fitness components, body composition, muscular endurance, strength, cardio vascular fitness and flexibility, importance of cardio respiratory endurance .obesity and health risk factors, childhood obesity and problems. Body composition indicators and measurements.

IX.Sports Management

- Concept of management: meaning, definition, scope, concept and importance of sports management. Functions of management: planning, organising, staffing, directing and controlling.
- Leadership: meaning, definition & elements of good leadership. Leadership styles, methods. Forms of leadership: autocratic, laissez-faire, democratic, benevolent and dictator. Qualities of administrative leader, preparation of administrative leader & effects of good leadership on organizational performance.
- Financial management: financial management in physical education & sports in schools, colleges and universities. Criteria of good budget, steps of budget making. Model budget for a school. Procedures for purchases and constructions. Records and registers.
- Sports management: sports management in schools, colleges and universities. Planning, directing and controlling school, college and university sports programmes. Establishing a reporting system, evaluation, rewards and punishment system. Event management: organisation of major sports event.

X. Research and Statistics In Physical Education

- Introduction to research: definition of research, need and importance of research in physical education and sports. Classification of research, meaning of research problem, location and criteria of selection of problem, formulation of a research problem, limitations and delimitations.
- Methods of research: various methods of research, need for surveying related literature, literature sources, research proposal.
- Basics in statistics: statistics: meaning, definition, nature, importance and its types. Raw score: grouped data, ungrouped data. Grouped data: discrete and continuous series. Construction of frequency table: class intervals, class distribution. Normal probability curve, skewness and kurtosis.
- Graphical presentation: histogram, bar diagram, frequency polygon, ogive curve, pie diagram.
- Statistical methods in physical education and sports: measures of central tendency: mean, median and mode—meaning, definition, importance, advantages, disadvantages and calculation from group and ungrouped data. Measures of variability: meaning, importance. Computing range, mean deviation, quartile deviation, deciles, percentile and standard deviation. Correlation: computing Karl Pearson product moment correlation and Karl Spearman rank order co-relation.

XI. Officiating and Coaching

- Officiating, meaning, importance and principles of officiating. Qualities and qualifications of good official, duties of officials, system of officiating in games and rules of various games (i.e. Hockey, football, handball, volleyball, basketball, sepak takraw, kabaddi, kho-kho, throw ball, tennis, badminton, ball badminton, cricket, softball and tennikoit). 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.

Part – V

Physical efficiency test (Marks: 30)

- 1. 100 mts run (or) 800 mts run for men, 400 mts run for women**
- 2. Long jump (or) high jump**
- 3. Shot put 16 lbs for men, 8 lbs for women**