# DETAILED SYLLABUS FOR THE POST OF LECTURER IN PHYSICAL EDUCATION (Kerala General Education (DIET)) - Direct Recruitment - DIRECT RECRUITMENT AND BY TRANSFER RECRUITMENT

### (Cat.Nos: 386/2022, 387/2022)

## PART I - General Subject (50 Marks)

## Module 1 : Community Engagement – Resources & Practices

#### **Total: 10 Marks**

#### Unit 1: Community Resources

Resources that enhance or facilitate the lives of people in a community - examples of community resources are factories, educational institutions, cinema halls, libraries, religious places, hospitals, community centers, parks, etc - make use of these resources in education as it develops a sense of value and belonging among students.

#### **Unit 2: Community Engagement**

Community Engagement in Education - and symbiotic relationship that exists between communities and Education Institutions - sustainable networks, partnerships, communication media, and activities - Linking formal learning and the local community

#### Unit 3: Forms of community engagement

Community-student engagement -Researching with the community, sharing knowledge with the community, Designing new curriculum and courses, Involving local practitioners as trainers, Social Innovation by students and the like

#### **Unit 4: Practices for Community engagement**

Engagement practices and activities - formal or informal - include building relationships through collaboration initiatives, community campaigns, <u>Community Survey</u>, <u>Community</u>

services, <u>Excursions</u>, cooperatives, small businesses, consultation meetings & conferences, sports events, cultural events, community development and community research projects.

#### **Unit 5: Rural Community Development**

Social, economic, political and cultural framework of the rural society - Rural Resilience -Rural Institutions Close to Community, Participatory Learning - Approaches and Methods, Community Project Proposals and Project Management, Community living camps, Engagement with - School, Street Committee, Health Centre, Panchayat, SHGs - Programmes

#### Module II : Syllabus for General Subject - ICT in Education

#### **Total: 10 Marks**

#### **Unit 1: Potentials of ICT in Education**

ICT as a means to connect with the world – Pedagogy and ICT – Potentials and Advantages of Approaches to ICT

#### Unit 2: ICT integration in Curriculum transaction

Computer based Curricular planning- ICT Based Model of Curriculum Transaction -Considerations for integrating ICT – Innovations in Curriculum Transaction

#### Unit 3: ICT and Internet Resources for Teaching and Learning

Resources – Access and Creation, resource mobilization – Web-based learning, Social Networking –Virtual learning Environment - Designing e-initiatives

#### **Unit 4: ICT in Classrooms**

Creating Personal learning environments - ICT integrated Inclusive education - Assistive and Adaptive technologies

#### **Unit 5: ICT for Assessment and Evaluation**

Purposes and Techniques of Evaluation, Scope of ICT for evaluation- Innovative Practices in Assessment & Evaluation

#### **Module 3 : PERSPECTIVES OF EDUCATION (10 Marks)**

# PHILOSOPHICAL PSYCHOLOGICAL AND SOCIOLOGICAL PERSPECTIVES OF EDUCATION

#### **Philosophical perspectives of Education**

Role of education in philosophizing the issues of life –Metaphysics, Epistemology, Logic, Phenomenology, Aesthetics and Axiology. Critical appraisal of schools of philosophy in the context of Twenty First Century – aims, content, methods and ongoing changes.

Focus of education in the 21st century. Building perspectives on educational philosophies, Modern schools of Philosophy-Empiricism, Positivism, Relativism.- Post -structuralist views and eclectic views. Comparative study of philosophies and educational contributions of Indian and western thinkers

#### Psychological perspectives of education

Learning and development- Learner Characteristics and Learning styles with special reference to pre- primary, primary, secondary, higher secondary and adult learners Learning in twenty first century classrooms., Characteristics And types, Development – language development, emotional, moral, motor and identity development. Cognitive Functions-Thinking, Reasoning, Problem Solving and Meta-cognition, Personality- types characteristics and development

Intelligence-different types~ Multiple, Cultural, social and emotional, impact on learners. Mental Health-, Factors affecting Mental Health (parents, family environment, society, school practices) - Strategies for enhancing Mental health

#### Sociological perspectives of education

Education for social security, wellness and progress, sustenance and transformation in society. Determinants of social change in the context of globalization.-Constraints on social change in India with respect to caste, ethnicity, class, language, religion, gender, regionalism, political interest

Education and Secularism - Role of teacher in inculcating democracy and international values.-Pluralism – Role of education in creating unity in diversity- Nationalism and education.-Role of Education in addressing cultural lag, privatization, globalization and partnership in social progress – Current trends in social development and transformation of values in society.

#### Module 4 : Teaching aptitude (10 Marks)

#### Teaching aptitude.

- Teaching -characteristics, levels, phases and maxims
- teaching methods, techniques and strategies
- modern trends in professional development and ethics

- technology integration in education
- Research, evaluation and innovations in classroom teaching, -

#### Module 5 : Research Aptitude (10 Marks)

- Research Meaning, Characteristics and Types
- Steps to Research
- Methods of Research
- Aims of Educational Research
- Research Ethics
- Research paper, Article, Workshop, Seminar, Conference and Symposium
- Thesis writings its characteristics and Format

## PART II (50 Marks)

## MODULE 1 HISTORY AND FOUNDATION OF PHYSICAL EDUCATION (4 Marks)

- Physical education- aims and objectives
- Philosophies of education as applied to physical education
- Growth and development of Physical Education in various countries.
- Development of physical education in India during various period.
- Modern trends in physical education.
- Ancient and Modern Olympics games, Asian and Commonwealth games.
- Professional and other courses of physical education in India.
- Qualities, qualifications and responsibilities of physical education personnel at primary, secondary and higher education levels.

• Scope of physical education personnel in the promotion of health, fitness and wellness.

• Hierarchy of organizational set-up in physical education at schools, colleges and university level.

• Role of government, public and private sectors in the promotion of physical education and sports in the country.

- Curriculum development- Concepts and principles of curriculum planning.
- Subject matter for different levels of education primary, secondary and higher education.
- Teaching aids
- Impact of technology in physical education and sports

## **MODULE 2**

## HEALTH AND FITNESS EDUCATION (6 Marks)

- Definition of health and wellness
- Modern concept of health

- Dimensions of health
- Concept of fitness
- Components of fitness- HRPF, PRPF
- School health and community health programs, government policies for promoting health.
- Life style diseases and its prevention
- Malnutrition
- BMI and weight control
- Disease cycle, methods of disease transmission
- First aid and its importance, first aid for shock, burns, drowning, bleeding, wounds and other sports injuries.
- CPR

# MODULE 3 ANATOMY AND PHYSIOLOGY (8 Marks)

- Structure and functions of various systems of the body
- Long term and short-term effects of exercise on various systems of the body
- Muscle- types of muscle and microscopic structure of muscle, mechanism of muscular contraction, transmission of nerve impulse
- Bio-chemical changes due to exercise, aerobic and anaerobic systems during rest sub maximal and maximal work
- Metabolism of energy, direct and indirect methods of measuring energy expenditure
- Physiological aspects of fatigue and recovery
- Influence and effect of exercise under various environmental conditions
- Nutrition for sports performance, balanced diet, caloric requirement for different age groups
- Physiological changes of aging and its consequences, special problems of female athletes
- Ergogenic aids and its impact on sports performance
- Massage- its importance and various techniques of massage
- Common sports injuries and therapeutic modalities and rehabilitation

#### MODULE 4 BIOMECHANICS AND KINESIOLOGY (6 Marks)

- Importance of biomechanics
- Biomechanical analysis of fundamental movements and major sports skills
- Planes and axis of human body
- Joints and their movements
- Muscle attachments: origin and insertion, action and leverage of the principal muscles
- Motion and laws of motion, linear and angular kinematics and kinetics.
- Projectile, friction, spin, impact, elasticity, force and its effects and application in sports
- Lever its mechanical advantage and application in sports
- Posture and postural deformities

- · Centre of gravity, equilibrium and stability
- Fluid mechanics- air and water
- Modern trends in biomechanics

## MODULE 5 RESEARCH, TEST AND MEASUREMENT AND EVALUATION (5 Marks)

- Types of research, scope of research in physical education
- Research problem- formulation and location of the problem
- Preparation of a research proposal

• Preparation of research report, writing style, format, technical standard, bibliography and abstract

- Importance of test, measurement and evaluation in physical education and sports.
- Principles and processes of evaluation in physical education.
- Criteria for selecting a test
- Procedure for administrating a test.
- Classification of test and construction of standard knowledge and skill tests.
- Tests for fitness- Physical fitness, motor fitness, motor ability, health related fitness tests.
- Test for fitness components- strength, endurance, speed, flexibility and coordinative abilities.
- Major sports skill tests
- Anthropometric Measurements- land marks and measurement of various body segments, height, sitting-height, weight, diameters, circumferences, skinfolds, body mass index
- Somatotype.
- Grading and rating scales- purpose, types and methods of grading
- Testing of physiological factors- Blood pressure, breathing frequency vital capacity, heart rate, pulse rate, body temperature and body composition.

• Tests for psychological variables- Anxiety, aggression, team cohesion, achievement motivation, mental-toughness, and self-efficacy.

## **MODULE 6**

## **TRAINING METHODOLOGY (6 Marks)**

- Sports training- aims, objectives and principles.
- Training load- concept of load and adaptation, relationship of load and recovery, super compensation
- Overload, its causes, symptoms and remedial measures.
- Strength- its characteristics, types of strength, factors determining strength and methods to develop strength.
- Endurance- its characteristics, types of endurance, factors determining endurance and methods to develop endurance.
- Speed- its characteristics, types of Speed, factors determining Speed and methods to develop speed.
- Flexibility-its characteristics, types of flexibility, factors determining flexibility and methods to develop flexibility.
- Coordinative abilities- its characteristics, types of coordinative abilities,

factors determining coordinative abilities and development of coordinative abilities.

• Technique and tactical preparation- its characteristics and importance. technique training and its implication in various phases. Tactics and strategy.

• Planning- importance, types of planning and principles of planning.

• Periodization- types of periodization. Concept of different periods - Preparatory, competition and transitional.

• Talent identification- methods, criteria, factors and phases of talent identification.

• Recreation- meaning, importance and effect.

• History and Rules and regulation of major sports and games and its governing bodies

## MODULE 7 SPORTS MANAGEMENT (5 Marks)

- Management- its principles and theories.
- Scope of management in physical education and sports.
- Functions of management
- Organizations- types and organizational set up of various sports associations, clubs.

• Guiding principles for organizing physical education & sports programmes in institutions.

- Personnel management, Human resource management, office management
- Skills of management, Qualities and qualification of sports manager
- Financial management- objectives, purposes, principles and scope.
- Planning and preparation of budget.
- Mechanics of purchase and auditing.
- Supervision, Techniques of supervision.
- Duties and responsibilities of a supervisor.
- Facility management- planning, procuring and maintenance of facilitiesindoor and outdoor facilities. Planning and management of sports infrastructure.
- Leadership meaning, types and qualities of a leader

## MODULE 8 PSYCHOLOGY AND PEDAGOGY (10 Marks)

• Meaning, nature and scope of Sports psychology, its importance in the field of physical education and sports.

- Education Psychology
- Growth and development of individual
- Theories of learning.
- Individual differences among learners
- Process of teaching and learning
- Concepts of inclusive education and understanding children with special needs.

- Motivation types, techniques and guidelines for building motivation.
- Psychological factors affecting sports performance- Emotions, Anxiety aggression, stress, self confidence, concentration, mental practice and goal setting.
- Personality- meaning of personality, personality traits of sports persons.

• Cognitive process in physical activity, perception, thinking, imagination and memory in physical activities.

• Cohesion and its importance in sports

• Motor learning- factors affecting motor learning, motor development in various period of childhood and adolescence.

• Transfer of learning and its types with its implication in sports.

• Psychological aspects of competition- determinants of competitive behavior, psychological characteristics of pre-competition, competition and post competition, long and short-term preparation for competition.

- Psycho-regulative technique for activation and relaxation
- Presence of others, spectators and sports performance.

**NOTE:** - It may be noted that apart from the topics detailed above, questions from other topics prescribed for the educational qualification of the post may also appear in the question paper. There is no undertaking that all the topics above may be covered in the question paper