ANNEXURE-II

SCHEME AND SYLLABUS FOR RECRUITMENT TO THE POSTS OF SENIOR LECTURERS IN D.I.E.T AND LECTURERS IN D.I.E.T

SCHEME OF EXAMINATION FOR POST CODE NO'S. 1 TO 18:

Written Examination (Objective Type)	No. of questions	Duration (Minutes)	Maximum Marks
Paper. I. General Studies and General Abilities	150	150	150
Paper. II **Part A:** Concerned Subject -I Education theory and practice	75	150	150
Part B: Concerned Subject -II	75		150
		Total Marks	**450**

SCHEME OF EXAMINATION FOR POST CODE NO. 19

Written Examination (Objective Type)	No. of questions	Duration (Minutes)	Maximum Marks
Paper. I. General Studies and General Abilities	150	150	150
Paper. II **Part A:** Concerned Subject –I Physical Education Content	75	150	150
Part B: Concerned Subject -II Physical Education Pedagogy	75		150
		Total Marks	**450**

Name of the Papers	Language of Examination
Paper-I: General Studies and General Abilities	Bilingual i.e., English and Telugu
Paper-II: Concerned Subject (P.G. Level)	Bilingual i.e., English and Telugu for all Subjects except Languages *

SYLLABUS

PAPER-I

FOR POST CODE NO'S. 01 TO 19:

GENERAL STUDIES AND GENERAL ABILITIES

1. Current affairs – Regional, National and International.
2. International Relations and Events.
3. General Science; India's Achievements in Science and Technology.
4. Environmental issues; Disaster Management- Prevention and Mitigation Strategies.
5. Economic and Social Development of India and Telangana.
6. Physical, Social and Economic Geography of India.
7. Physical, Social and Economic Geography and Demography of Telangana.
8. Socio-economic, Political and Cultural History of Modern India with special emphasis on Indian National Movement.
9. Socio-economic, Political and Cultural History of Telangana with special emphasis on Telangana Statehood Movement and formation of Telangana state.
10. Indian Constitution; Indian Political System; Governance and Public Policy.

11. Social Exclusion; Rights issues such as Gender, Caste, Tribe, Disability etc. and inclusive policies.
12. Society, Culture, Heritage, Arts and Literature of Telangana.
13. Policies of Telangana State.
14. Logical Reasoning; Analytical Ability and Data Interpretation.
15. Basic English. (10th Class Standard)

PAPER- II

FOR POST CODE NO'S. 01 to 18:

Part A: CONCERNED SUBJECT -I EDUCATION: THEORY AND PRACTICE

I. Education as a Discipline and a field of Knowledge; Education as a Theoretical System and Practice; Education as Moral and Ethical Practice; Education for Character and Personality development; Education as Enlightenment. Education in Ancient Indian Knowledge Systems; Education in Colonial and Post-colonial India; Educational Implications of Vedanta, Buddhism, Jainism, Islam and Christianity. Educational Ideas of Swami Vivekananda, Rabindranath Tagore and Sri Aurobindo.

II. Education as Freedom; Education for Critical Consciousness - Personal and Social Development. Educational Philosophies of Mahatma Gandhi, Jyothi Rao Phule, Dr. B.R. Ambedkar, John Dewey and Paulo Freire, Constitution of India: Vision and Preamble.

III. Epistemological Foundations of Education; Mind, Reason, Logic and Thinking in children; Scientific and Religious Knowledge and Experience; Intellectual Developments during Renaissance and Enlightenment period in Europe and Critique on Eurocentric Colonial Models of Thinking in Education. Education Implications of Idealism, Pragmaticism, Naturalism, Realism, Existentialism.

IV. Culture, Socialization, Modernity and Education; Equality, Equity, Diversity, Plurality & Inclusion; Citizenship Education; Liberalization, Social Change and Education; Democracy and Education; National Integration and International understanding; Peace Education and Education for Human Development. Educational Opportunities, Social Justice and Education; Education for the disadvantaged and weaker sections of society; Public vs Private Education; Learning crises in Contemporary India; Privatization of Education; Public Policy in Education; Teacher Autonomy, Accountability and Responsibility. Sustainable Development and Environmental Education; Basics in Economics of Education and Educational Finance.

V. Understanding Children and their Cultural and Individual Differences; Growth and Development; Infancy to Old age; Psychology of Human Development: Child Development – Social, Cognitive, Language / Linguistic, Emotional, Moral and Aesthetic Areas; Motivation, Learning and Development; Personality and Understanding Self, Memory, Cognition, Creativity and Intelligence; Educating and addressing the needs of Exceptional Children and children with Disabilities including Sensory, Physical, Social and Emotional and Mental Challenges; Principles and Types of Guidance, Counselling and Mentoring; Early Childhood Care and Education and Children's Education at Foundational Stage.

VI. Pedagogical Process, Teaching – Learning Methods and Innovative Practices in Education; Disciplines of Knowledge; Curriculum Processes and Organization of Knowledge; Skill development and Vocational Education; Measurement, Assessment and Evaluation in Education; Evaluation and Assessment of Children and Teacher's Performance and Evaluation of Quality in Education; Logical and Statistical Reasoning in Educational Research; Critical Thinking and Creative Imagination in Children; Application of ICT, AI and Digital Technologies in Education; Technological Initiatives in Education – NPTEL, NISHTA, Swayam, Swayamprabha; Learning Outcomes and Academic Standards.

VII. Mother Tongue, Multilingualism and Language Policy; Adult, Non-Formal and Life-long Education; Media and Communication in Education; Health, Yoga and Physical Education; Education for National Integration and International Understanding. Educational Leadership, Administration and Management.

VIII. Professional Development, Mode and Types of Continuous Professional Development; National Professional Standards for Teachers. Professional Organization of Teacher Education. National and State Institution and Organizations related to Teacher Education (NCERT, NIEPA, NCTE, UGC, MHRD, NIOS, CBSE, SCERT, etc.,); Curriculum Frameworks for School and Teacher Education – NCF, 2005, NCFTE, 2009, National Policy on Education, 2020.

IX. Understanding Community Development and Education; Different Approaches and Strategies for Community Development; Community Engagement – Needs Assessment – Collaboration – Sustainability and Evaluation.

X. Basic components of research- meaning, characteristics, process of research. Proposal writing for a research study and reporting research findings, identification of problem, variables, hypothesis, sampling, methods of conducting qualitative and quantitative research; Collection of data, Processing of data, Analysis of Data, Statistical Tools and Techniques for Analysis of Data.

PAPER-II
Part B: CONCERNED SUBJECT-II

For Post Code No.1:- Senior Lecturer, DIET in Pre Service Teacher Education / In service Programme Field Interaction Innovation & Co-ordination / District Resource Unit/ Planning & management / Educational Technology / Work Experience / Curriculum Material Development & Evaluation

For Post Code No.2:- Lecturer in service Training Field Interaction and Co-ordination, Work, Experience, Curriculum Material Development & Evaluation and District Resource Unit (DRU),

For Post Code No.3:- Lecturer in Education ,

For Post Code No.4:- Lecturer in Education (Urdu Medium),

Teacher Education

1. Foundations of Teacher Education-Concept, Nature, Aims and Scope of Teacher Education, Teacher Education as a Discipline of Knowledge and Professional enterprise; Philosophical and Sociological Foundations of Teacher Education. Political Economy of Teacher Education. Teacher and Society: Role of Teacher in Social Reconstruction; Teacher as Agent of Social Change; Teacher Education and Community Development.
2. Historical Development of Teacher Education in India: Pre- and Post-Independence period; Teacher in Vedic, Buddhist and Ancient India; Teacher in Medieval and Colonial India; Maculay's minutes and Bentick resolution of 1835 ; Adam's report and its recommendations ; Wood's Despatch of 1854 ; Lord Curzen's educational Policy, Growth of national consciousness, National Education movement; Recommendations of Indian Education Commission 1882, its influence on the Subsequent development of Education c) Essential features of Sadler commission report – 1917; Terms of reference & recommendations of Hartog Committee 1928-1917 ; Sargent Report 1944 ; Wardha Scheme of education 1937 Contemporary issues of Education; Kothari commission 1964-66 ; University Education Commission 1948-1949 ; Secondary Education

commission 1952-53 ; New Education policy1986 and POA 1992 ; Universalization of Education, SSA, RMSA, RUSA, MDM, RTE 2009

3. Structure of Teacher Education: Objectives of Teacher Education at Different Levels; Recommendations of NCERT (NCF, 2005); NCFTE (2009); NEP 2020; Problems of Teacher Education in India and Remedial Measures; Pre-Service Teacher Training Programme Commission; Agencies of In-service programme: NCERT, NCTE, RIE, SIE, SCERT, IASE, CTE, DIET, Academic Staff College (ASC)/MMMTTC and Extension Department.; Teacher Education through open and Distance learning.
4. Teacher Education and Curriculum; Taxonomy of teacher behaviour; Principles and models of Teacher Education Curriculum; research and innovations in teacher education; Techniques of teacher training, core teaching, micro-teaching, interaction analysis; Designing Positive Learning Environment; Evaluation of student teaching; Appraisal of Teacher Performance;
5. Teacher Effectiveness; Concept, Determinants, Identification and Characteristics of teacher Effectiveness; Teacher Motivation; Organization of Practice Teaching for developing an Effective Teacher (Block and Intermittent; Practice Teaching Internship- its Organization and Problems; Supervision of Practice Lessons: Observation, Assessment and Feedback to Student Teacher Recent trends and Research Activities in Teacher Education
6. Pre-Service and In-Service Teacher Education-Objectives and components of pre-service teacher education, In-service teacher education: Need, structure, challenges. Role of DIETs, CTEs, SCERT, NCERT, NUEPA in professional development. Planning, organizing, and evaluating in-service programs, Use of ICT and blended learning in teacher development. Teacher Education through online and distance mode.
7. Quality Assurance and Regulation in Teacher Education-Role and functions of NCTE, NAAC, UGC, SCERT, Accreditation, recognition, and assessment of TEIs; Issues of quality, accountability, and transparency-TET (Teacher Eligibility Test), NET/SLET and other qualification standards, Teacher performance appraisal and career progression.
8. Innovations, Research and Global Trends in Teacher Education- Reflective teaching and action research, Mentoring, peer coaching, and teacher learning communities; Competency-based teacher education, inclusive education, digital pedagogy. Contemporary challenges: Teacher shortage, equity, professional identity.
9. Educational Leadership; Concept, Nature and Significance of Educational Leadership; Theories of educational leadership; Leader as a teacher and Teacher as a leader; Role of Group Dynamics and Human Relations.
10. Research in Teacher Education: Approaches in Teacher Education Research; Qualitative and Quantitative Research Methods and techniques; Statistical Analysis of data and interpretation.

PAPER-II PART-B CONCERNED SUBJECT-II

FOR POST CODE NO.5:-LECTURER IN ENGLISH

ENGLISH

PART – A (CONTENT)

Unit – I: History of English: - Origin and descent of the English Language**;** features: Old, Middle and Modern English; the evolution of Standard English.

Literary Movements, Genres, Schools, and Concepts: - Renaissance-Reformation, Metaphysical Poetry, Neo-classicism, Puritanism, Restoration, Romanticism, Victorian age, Realism - Naturalism, Expressionism, Symbolism,

Modernism, and Post-Modernism. Structuralism, post-structuralism, feminism, post-colonialism, diaspora, race, gender, and caste. English literary criticism from Philip Sidney to Mathew Arnold**, New** Criticism, Formalism, Archetypal Criticism, New Historicism, Psycho-analytic criticism, Reader-Response Criticism. Literary Genres: Poetry, Fiction, Prose Drama (Origins and Development, Elements, Form, and Types)
Varieties of Language: Dialect, Idiolect, Style; Register, Jargon, Slang, Pidgin, Creole; British English and American English and the major differences between them.

Unit – II: Forms of Poetry: Sonnet**, Elegy, Ode, Epic, Ballad, Lyric, Dramatic monologue,** and Allegory

Stanza Forms: - Heroic Couplet, Blank Verse, Spenserian Stanza, Terza Rhyme and Free Verse
Figures of Speech: Euphemism, Hyperbole**,** Irony**,** Metaphor, Metonymy, Oxymoron, Paradox, Personification, Simile**,** and Synecdoche.

Poetry:

1. John Milton: *Paradise Lost (part one)*
2. Alexander Pope: ;“The Rape of the Lock”
3. William Wordsworth: ;“Tintern Abbey”
4. John Keats: Ode to a Nightingale
5. W.B. Yeats: The Second Coming
6. Geoffrey Chaucer: The General Prologue to the Canterbury
7. John Donne: Canonization
8. Francis Bacon: Of Marriage and Single Life
9. P.B. Shelley: Ode to the West Wind
10. Mathew Arnold: “Dover Beach
11. T.S. Eliot: The Waste Land
12. Amir Khusrau: Gazal 857 (Alas for this life.....) From In the Bazaar of Love: Translated by Paul Losensky & Sunil Sharma
13. V.S. Naipaul: Mimic Men
14. Makhdoom Mohiuddin: The Heart of Silence
15. Emily Dickinson: Because I could not Stop for Death
16. Robert Frost: West Running Brooke
17. Maya Angelou: Phenomenal Woman
18. Vikram Seth: Unclaimed
19. Sarojini Naidu: The Gift of India
20. Judith Wright: Eve to her daughters
21. Tiffani Higgins: Dance, Dance while the Hire Collapses
22. Gabriel Okara: Piano and Drums

Unit – III: Types of Fiction: Allegorical; Epistolary; Gothic; Historical; Picaresque; Psychological; Regional Novel; Utopia; Dystopia; Detective Novel; Junk Fiction; Science Fiction**;** Space Fiction**;** Meta fiction**;** Short Stories.

Elements of Literature: - Atmosphere, Character**,** Imagery**,** Narrative Technique**,** Plot**,** Point of View, Setting**,** Story, Symbolism, and Tone

Prose: Theory of prose; types of prose; types of prose style; autobiography/biography and memoir; travelogue; periodical essay; personal essay; Poetic pose; philosophical prose

Bacon: Of Studies
Charles Lamb – Dream Children
Doctor Johnson – Letter to Lord Chesterfield
RL Stevenson – An Apology for Idlers
J. B. Priestley—On Doing Nothing
Henry David Thoreau – Civil Disobedience

Fiction/Novel:

1. Daniel Defoe: Robinson Crusoe
2. Jane Austen: Emma English
3. Rudyard Kipling: Thrown away
4. D.H. Lawrence: Sons & Lovers
5. Mahaswetha Devi: Mother of 1084
6. Mark Twain: The Adventures of Huckleberry Finn
7. Shyam Selvadurai: Funny boy
8. Mulkraj Anand: Untouchable
9. R.K. Narayan: The Man-Eater of Malgudi
10. Margaret Atwood: The Edible Woman
11. Albert Camus: The Stranger
12. Salman Rushdie: Midnight's Children

Unit - IV: Types of Drama: Theory of drama, elements of **drama, tragedy, comedy, tragic comedy, expressionist drama, drama** of **ideas, poetic drama, closet drama, the** problem play, and the drama of the absurd.

Drama:

1. William Shakespeare: The Tempest
2. George Bernard Shaw: Saint Joan
3. Harold Pinter: The Dumb Waiter
4. Christopher Marlowe: Dr. Faustus
5. Oscar Wilde: The Importance of Being Earnest
6. Alan Ayckbourn: Mother Figure
7. Jonathan Swift: Gulliver's Travels
8. William Congreve: The Way of the World
9. Rabindranath Tagore: The Post Office
10. Girish Karnad: Hayavadana
11. Kalidasa: Sakuntala and the Ring of Recollection. Translated by Barbar Stoler Miller (From the plays of Kalidasa: Theatre of memory)
12. Neil Simon: The Odd Couple
13. Derek Walcott: Dream on Monkey Mountain
14. Oriel Gray: The Torrents
15. Samuel Beckett: Waiting for Godot

Unit – V: Literary Criticism and Theory: New Criticism**,** Marxist Criticism**,** Archetypal Criticism, Psychoanalytic Theory, Post-Colonial Theory, Reader Response Theories; and Feminist Theory.

Elaine Showalter "Feminist Criticism in Wilderness"
Roland Barthes "The Death of the Author"

PART – B (Pedagogy)

Unit - VI: Concept and Nature of the English Language; Philosophy and theories of Language Learning & Learning Process; Acquisition vs. Learning; Factors Affecting Language Learning;Learning Disabilities; Academic Standards, Aims and objectives of teaching English; Development of English in India: Policies: NPE (MIL), Three-Language Formula, and NCF 2005, NCF 2009, NCF 2023, SCF 2011; Vision NEP 2020; Status of English in India as a second language and as a global language; Second Language acquisition theories and models (Social and Psychological); Multilingualism in ELT

Learning Styles: Definition, Cognitive, Sensory, Affective/Temperament Learning Styles, (Personality Learning Styles); Willing's Learning Styles; Kolb's Learning Styles; Gardener's Multiple Intelligences; Mind Mapping; Learner Autonomy; Constraints of Learner Autonomy

Unit - VII: Understanding Language and Producing Discourses: Developing Listening& Speaking Skills: Process, factors, sub-skills, strategies and comprehension. Tasks for developing Listening and Speaking Skills; Discourse Analysis and Discourse Studies; developing reading and writing skills: Types, sub-skills, strategies and Practicing Critical Reading and Creative expressions in speaking and writing. Tasks for developing reading and writing skills. Forms and features of Academic Writing Language Learning Strategies (LLS) Definition, Early and Modern Research on LLS, The Good Language Learner Research; Rebecca Oxford's Classification of LLS: Direct Strategies and Indirect Strategies.

Unit - VIII: Approaches, Methods, and Techniques of Teaching English: Concept of Approach, Methods, and Techniques; Paradigm Shift; Methods of Teaching English: Survey method, Grammar Translation method, Direct method, Dr. West's Method, and Bilingual Method, Total physical response , Suggestopedia, Total Physical Response, Community Language Learning and Blended learning; Approaches of Teaching English: Structural and Situational Approach, Communicative Approach, Constructivist Approach, Collaborative Approach, Eclectic Approach and Humanistic approaches; Remedial, Reflective, and Reciprocal Approaches; strategies, techniques and activities.

Planning the Classroom Transaction in Teaching English: Academic Standards, Competencies, and Discourses; Annual Plan, Unit plan, Lesson Plan; Developing Teaching-Learning Material; Classroom Approaches. Reflective Teaching; Micro-teaching: Concept, phases, and plans; developing period plans for textual components of the English language; Project work and reporting; Study skills: Note-making and note-taking, using SQ3R and graphic organizers; Reference skills: Use of dictionary and encyclopedia; use of ICT in Teaching and learning English; Digital, multilingual, multimedia-integrated classroom transaction. All the aspects of Research and data analysis for research article and thesis.

Unit - IX: Curriculum Development and Textbooks: Curriculum and syllabus; Curriculum design—principles of curriculum construction; Curriculum Design Approaches; Models of Curriculum development; philosophy and guiding principles for the development of English textbooks with reference to NCF 2005, NCF 2023, NCFTE 2009, 200SCF 2011, NEP 2020 and the position papers; Syllabus designing and textbook development process; Reviewing present English textbook

Evaluation: Concept & Types of assessment and evaluation; CCE: Meaning and significance; typology of questions; blueprint and preparation of question paper; Characteristics of a good test; Analysis and Interpretation of Test Scores (SAT)

Unit - X:

Proficiency A:

Phonetics and Pronunciation: The different speech organs and their role in producing sounds**;** vowels and consonants—their place and manner of articulation; The cardinal vowel scale**;** the concept of phoneme and the allophones; Stress and Intonation.

Vocabulary: - Word formation: prefix, suffix, compounding; Phrasal verbs, idioms & proverbs; synonyms, antonyms, homophones & homonyms - Spelling rules - Discourse markers**.**

Grammar: Parts of speech; Auxiliary system: Tenses, modals, Active and passive Voice; Clauses; Sentences; Syntactic devices; Reported speech; Degrees of comparison; Agreement/concord; Punctuation; Questions, question tags; and Figures of speech

Proficiency B:

Professional Development of English Teacher: Concept of Professional Development; Self-appraisal; 21st century skills for teaching English Language; Professional Skills: Job application, resume writing, oral presentation skills, interview skills, group discussion; Business letters: format/style/types; letters of enquiries, order, and complaint; replies; notices, memos, agenda, and minutes; Technical writing: proposal, product and process writing, writing a user manual, and business reports. Brown- Era; Purple- Needs to be discussed; Red- Addition; Blue- edited; Green- in M.A

PAPER-II PART-B CONCERNED SUBJECT-II

FOR POST CODE NO.6:- LECTURER IN TELUGU

భాష - విద్య (తెలుగు)

Part-A - తెలుగు భాష - సాహిత్యాలు

1) భాష ఉత్పత్తి - నిర్వచనాలు, స్వభావము; ధ్వని - ఉత్పత్తి, భాషా నిర్మాణం, భాషా ఉద్దేశ్యాలు, తెలుగు భాష-లిపి, భాషాక్షరాలు, శాసన భాష, గ్రాంథిక భాష, వ్యవహారిక, మాండలిక, ప్రామాణిక, వ్యవహారిక భాషలు, భాషోధ్యమ్యం - తెలుగు భాష ప్రస్తుత పరిస్థితి, ప్రపంచ భాషల వర్గీకరణ, బహు భాషిత్వం.

2) వ్యాకరణాంశాలు, భాషా భాగాలు, పదం, పదాంశం, వాక్యం, వాక్యభాగాలు - బేధాలు, వ్యుత్పత్త్యర్థాలు, నానార్థాలు, పర్యాయ పదాలు, ప్రకృతి-వికృతులు, సంధి, సమాసం, జాతీయాలు, సామెతలు, పదబంధాలు, పొడుపు కథలు.

3) తెలుగులో సాహిత్య ప్రక్రియలు - ఇతిహాసము, పురాణము, ప్రబంధము, కావ్యము, నాటకము, శతకం, నవల, కథ గేయం, గేయ నాటకం, జానపద సాహిత్యం, యక్షగానం, వచన కవిత్వం, మినీ కవిత్వం, హైకూ/నానీలు, జీవిత చరిత్ర, స్వీయ చరిత్ర, వ్యాసం, లేఖ మొదలగునవి.

4) తెలుగు సాహిత్య ఆవిర్భావ వికాసాలు - ప్రాఙ్నన్నయ యుగం, కవిత్రయం, శివకవులు - నన్నెచోడుడు, పాల్కురికి సోమనాథుడు, శ్రీనాథుడు, పోతన, కృష్ణదేవరాయులు, అష్టదిగ్గజాలు, వేములవాడ భీమకవి.

ఆధునిక కాలం - గురుజాడ అప్పారావు, విశ్వనాథ సత్యనారాయణ, కాళోజీ, సురవరం ప్రతాపరెడ్డి, దాశరథి, సి.నారాయణ రెడ్డి, శ్రీశ్రీ

5) ఆధునిక సాహిత్యం - సామాజిక ఉద్యమాల ప్రభావం, భావ, అభ్యుదయం, విప్లవ, దిగంబర కవితోధ్యమాలు, స్త్రీవాద, దళితవాద, మైనారిటీ వాదం, బి.సి. వాద ధోరణులు మొదలగునవి.

సాహిత్య శిల్పం - మౌఖికాంశాలు, కావ్యము, నాటకాల లక్షణాలు, అలంకారాలు, చంధస్సు, రసము, శైలి, పాకము, రీతి, శబ్ద వృత్తులు.

ప్రాచ్య పాశ్చాత్య విమర్శనాధ్యక్షథాలు.

తెలుగు భాషపై ఇతర భాషల ప్రభావము.

Part-B - తెలుగు భాష - సాహిత్యాలు

బోధన అభ్యసన శాస్త్రం

1) భాషా నైపుణ్యాలు - బోధనా నైపుణ్యాలు
మాతృభాష బోధనా లక్ష్యాలు - కనీస అభ్యసన స్థాయిలు.
అభ్యసన సామార్థ్యాలు - విద్యా ప్రమాణాలు.
భాషా విషయక అధికరణాలు - వివిధ కమీషన్‌లు.
కమిటీలు - N E P-2020 సిఫార్సులు భాషా విషయక అంశాలు - R T E 2009
భాషా విషయక అధికరణాలు.

2) పిల్లలు - భాషా సంపాదన - ప్రాచ్య, పాశ్చాత్య దృక్పథాలు.
బోధనా మాధ్యమంగా తెలుగు - త్రిభాషా సూత్రం.
అధికార భాషగా తెలుగు - మాతృభాషగా, ద్వితీయ, తృతీయ భాషలుగా తెలుగు బోధనోద్దేశ్యాలు,
తెలుగు బోధాన పద్ధతులు.

3) తెలుగు విద్యా ప్రణాళిక, విషయ ప్రణాళిక, వార్షిక ప్రణాళిక, యూనిట్ ప్రణాళిక, పాఠ్య ప్రణాళిక.
తెలుగు బోధన - సంప్రదాయ, ఆధునిక పద్ధతులు : ఉపగమాలు, వ్యూహాలు, పద్య, గద్య,
వ్యాకరణ, వ్యాస ఉపవాచక పాఠ్య పథకాల తయారి.

4) భాషాభివృద్ధి కార్యకలాపాలు - వనరులు, సంస్థలు.
భాషా బోధన ఉపకరణాలు (సామాగ్రి) - సహ పాఠ్య కార్యక్రమాలు, గ్రంధాలయాలు,
పఠనాలయాలు, భాషా క్రీడలు, భాషా విహార యాత్రలు, పత్రికా నిర్వహణ, సారస్వత సంఘాలు,
భాషాభివృద్ధికి వివిధ సంస్థలు, భాషా సంఘాల కృషి.
భాషా వ్యవహార రూపాలు - లేఖ, కరపత్రం, వార్తాపత్రిక, డైరీ, స్వీయ వివరాల రచన,
సంపాదకులకు లేఖలు, సమీక్ష, వ్యాఖ్యానం.
ప్రస్తుత పాఠశాల స్థాయి తెలుగు పాఠ్య పుస్తకాల తయారీ : నేపథ్యం, పాఠ్య అమరిక క్రమం,
విద్యా ప్రమాణాల సాధన.

5) మూల్యాంకనం - నిరంతర సమగ్ర మూల్యాంకనం, భాషా విషయక మూల్యాంకనం,
సామర్థ్యాధారిత మూల్యాంకనం, తెలుగు భాషలో ప్రశ్నల వర్గీకరణ, ప్రశ్నాపత్రాల తయారీ -
బ్లూపింట్, విద్యా ఉపలబ్ధి సాధన, నికష (SAT) - పరీక్షల ఫలితాల విశ్లేషణ, వివరణ.

PAPER-II-PART-B-CONCERNED SUBJECT-II

FOR POST CODE NO.7:- LECTURER IN URDU

URDU

Part - A

1۔اردوزبان کی تاریخ: ہندآریائی کی تاریخ۔مغربی ہندی اوراس کی بولیاں۔مشرقی ہندی اوراس کی بولیاں۔
اردوزبان کا آغاز (مختلف نظریات)

2۔اردوادب کاقدیم دور: دکن میں اردوزبان کا آغاز اورارتقاء۔بہمنی دور۔عادل شاہی دور۔قطب شاہی دور۔مغل دور۔(ولی اورسراج اورنگ آبادی)

3۔اردوادب کے اہم دبستان: دبستان دلی۔دبستان لکھنؤ

4۔ترقی پسندتحریک

5۔اردوکی شعری اصناف: **مثنوی:** فن اورروایت۔اہم مثنوی نگار: میرحسن،نسیم
غزل: فن اورروایت۔اہم غزل گو: میرؔ،غالبؔ،حسرتؔ
قصیدہ: فن اورروایات: اہم قصیدہ گو: سوداؔ،ذوقؔ
مرثیہ: فن اورروایات: اہم مرثیہ نگار: انیسؔ،دبیرؔ
نظم: فن اورروایات: اہم نظم نگار: حالیؔ،اقبالؔ،فیضؔ،مخدومؔ
متفرق شعری اصناف: رباعی۔دوہا۔ماہیا۔شہرآشوب۔قطعات

6۔اردوکی نثری اصناف: **داستان:** فن اورروایت: اہم داستانیں
سب رس،باغ وبہار،فسانہ عجائب
ڈراما: فن اورروایت۔اہم ڈرامے: انارکلی،دروازے کھول دو
ناول: فن اورروایت: اہم ناول نگار: ڈپٹی نذیراحمد،مرزاہادی رسوا
افسانہ: فن اورروایت: اہم افسانہ نگار: پریم چند،راجندرسنگھ بیدی

7۔قواعد: 1)زبان کی دوشکلیں: تقریری اورتحریری
2)نثری زبان کی 2 شکلیں۔
1)عام زبان 2)ادبی زبان
3)اوقاف کے استعمال کے طریقے
4)ترکیب صرفی اورترکیب نحوی (تعریف۔مثالیں)
5)مختلف المعنیٰ،ہم آواز الفاظ۔(تعریف۔مثالیں)
6)ایک ہی معنی میں آنے والے کئی الفاظ۔(تعریف۔مثالیں)
7)متضاد الفاظ۔(تعریف۔مثالیں)

8۔غیرافسانوی ادب: **انشائیہ:** فن اور روایت۔اہم انشائیہ نگار: خواجہ حسن نظامی۔رشید احمد صدیقی

خاکہ: فن اور روایت۔اہم خاکہ نگار: مرزا فرحت اللہ بیگ، سعادت حسن منٹو

سوانح عمری: فن اور روایت۔حالؔی، شبلؔی، جوش ملیح آبادی

سفرنامہ: فن اور روایت صالحہ عابد حسین، مجتبیٰ حسین

مکتوب نگاری: فن اور روایت اہم مکتوب نگار: غالب، مولانا ابوالکلام آزادؔ

9۔اردو صحافت۔آغاز وارتقاء: **اہم صحافی:** سرسید احمد خان، مولانا ابوالکلام آزاد

10۔تحریکات ورجحانات: ایہام گوئی، جدیدیت مابعد جدیدیت، علی گڑھ تحریک، ترقی پسند تحریک

11۔تنقید: **تنقیدی دبستان:** تاثراتی، جمالیاتی، مارکسی، سائنٹفک، نفسیاتی

اہم نقاد: حالؔی، شبلی، آل احمد سرور، احتشام حسین، کلیم الدین احمد، گوپی چند نارنگ، شمس الرحمٰن فاروقی

12۔اردو کے اہم ادارے: انجمن پنجاب، فورٹ ولیم کالج، دلی کالج، جامعہ عثمانیہ، دارالترجمہ جامعہ عثمانیہ، ادارہ ادبیات اردو، مولانا آزاد نیشنل اردو یونیورسٹی، علاقائی/ریاستی اردو اکیڈمیاں

PART - B

13۔ ہندوستان میں اردو زبان کا موقف:

1۔ ہندوستان میں اردو زبان کا کردار۔تقسیم ہند سے قبل و تقسیم ہند کے بعد

2۔اردو بحیثیت زبان اول، دوم اور سوم۔اردو بین الاقوامی سطح پر

قومی تعلیمی پالیسی 2020، NCF فریم ورک 2023۔

تدریسِ اردو اور اکتسابِ اردو میں درپیش challenges، ریاست تلنگانہ میں اردو کا موقف۔

14۔ تدریس زبان کا جائزہ:

1۔زبان کی تدریس کے مختلف طریقہ کار: تعمیری طریقۂ کار اور کثیر لسانی طریقۂ کار

15۔ لسانی مہارتوں کی تحصیل:

زبان کی بنیادی مہارتوں کی تفصیل اور اس کی ذیلی مہارتیں:

1۔گفتگو کرنا 2۔سننا 3۔پڑھنا 4۔لکھنا

16۔ تدریسی و اکتسابی آلات وتوضیحات:

1۔درسی کتب۔پرنٹ میڈیا۔میگزین۔اخبار۔کلاس لائبریری۔ترسیلی ٹکنالوجی۔سمعی وبصری آلات بشمول Call Programmes، ریڈیو۔ٹیلی ویژن (TV)، فلم۔

2۔ہم نصابی سرگرمیوں کی منصوبہ بندی (مثلاً مباحثہ، ورک شاپ، سمینار وغیرہ۔

Language Laboratory

17۔ جانچ(Evaluation) تشخیص:

جانچ کے اقسام:

a۔Formative Evaluation(تشکیلاتی تشخیص)

b۔Summative Evaluation(مجموعی تشخیص)

c۔Diagnostic Evaluation(تشخیصی تشخیص)

d۔Unit Test

(i)۔Subjective Question(موضوعی سوالات)

(ii)۔Objective type Question(معروضی سوالات)

e۔Cumulative Record

18۔ قواعد

اوقاف کے استعمال کے طریقے:

اساتذہ درج ذیل رموز واوقاف پر توجہ دیں۔

ندایہ ! (خوشی وتعجب کے لئے)

واوین ” “

نقطوں کی علامت ••••••••

وقف کامل(hyphen) ۔

Quotation ” “

_ Dash

‘ apostrophe

علامت رابطہ/colon :

حقیقت وقفہ/Semicolon ;

استفہامیہ ! Exclamatary

علامت تفصیلیہ :-

قوسین/bracket ( )

سوالیہ ؟

سکتہ/comma ،

ختمہ(full stop) .

PAPER-II, PART-B-CONCERNED SUBJECT-II

FOR POST CODE NO. 8:- LECTURER IN MATHS

FOR POST CODE NO. 9:- LECTURER IN MATHS (URDU)

MATHS

1. Algebra: Theory of Equations: Relations between roots & coefficients, symmetric functions of roots; Complex Numbers: Argand diagram, De Moivre's theorem, nth roots of unity, applications. Matrices & Determinants - Properties, rank, inverse, solution of linear equations (Cramer's rule, matrix method). Abstract Algebra-Groups, subgroups, cyclic groups, rings, elementary properties; Sequences & Series - A.P., G.P., H.P., binomial, exponential & logarithmic series.

2. Calculus & Analysis: Limits & Continuity: Standard limits, continuity and differentiability; Differentiation: Higher derivatives, Leibniz theorem, applications (tangent, normal, maxima & minima, curvature); Integration - Indefinite integrals, definite integrals, reduction formulae, applications (area, volume, length of curve); Differential Equations - Formation, order & degree, first-order equations, linear differential equations with constant coefficients; Real Analysis - Sequences and series of real numbers, tests of convergence, uniform continuity, Real Analysis – sequences ad series of real numbers tests of convergence, uniform continuity.

3. Geometry & Trigonometry: Coordinate Geometry (2D): Straight lines, pair of straight lines, circles, parabola, ellipse, hyperbola; 3D Geometry: Planes, lines, spheres, cone, cylinder, shortest distance between lines; Trigonometry - Multiple and sub-multiple angles, inverse trigonometric functions, solution of triangles.

4. Probability, Statistics & Linear Algebra: Probability - Addition & multiplication theorems, conditional probability, Bayes' theorem; Random Variables & Distributions: Binomial, Poisson, Normal distributions; Statistics - Measures of central tendency, dispersion, correlation, regression; Vector Algebra & Vector Calculus - Dot and cross products, scalar and vector triple product, gradient, divergence, curl, line and surface integrals (basic applications); Linear Algebra - Eigenvalues & eigenvectors, Cayley–Hamilton theorem, diagonalization, quadratic forms, linear transformations

5. Discrete Mathematics & Applied Mathematics: Discrete Structures - Sets, relations, functions, mathematical logic, truth tables; Combinatorics - Mathematical induction, permutations & combinations, principle of inclusion–exclusion; Graph Theory - Eulerian & Hamiltonian graphs, trees, shortest path problems.; Number Theory-Divisibility, congruences, Euler's theorem, Fermat's theorem - Linear Programming- Formulation, graphical method, simplex method (basic problems).

6. Nature Scope and Historical Evolution of Mathematics: Evolution of Mathematical ideas and concepts in ancient India, contributions of Indian Mathematicians and global thinkers – Aryabhata, Bhaskaracharya, Varahamihira, Ramanujan Pythagoras and Euclid: Nature of Mathematical knowledge – Axioms and Postulates, Conjectures, Proofs in Mathematics: inductive – deductive reasoning, theorems, Mathematical modelling; Importance of Mathematics knowledge in everyday life, NEP 2020 Vision of Maths Education

7. Aims Values and Objectives of Teaching Mathematics at Secondary stage: Instructional objectives (Bloom's revised taxonomy), Critical thinking, problem solving Creativity, aesthetics. Learning outcomes and competencies. Linkages of Mathematics with other school subjects and place in school curriculum. Inculcation of values through teaching of Mathematics.

8. Instructional Strategies Learning Resources and Approaches in Mathematics: Lecture, inductive–deductive, problem-solving, heuristic method; Constructivist Approaches: Activity-based learning, discovery learning, inquiry-based learning, project method.; Models of Teaching: Concept Attainment Model, Problem-

Based Learning (PBL), Flipped Classroom; Mathematical Communication - Use of mathematical language, symbols, representations; Integration of ICT - GeoGebra, simulations, AI-based tools, platforms gamification for mathematics teaching; Use of technology, interdisciplinary integration, flexibility in pedagogy.

9. Planning & Assessment: Mathematics Curriculum: NCF - 2005 & NEP 2020 guidelines. Lesson & Unit Planning: learning outcomes, CLO–PLO mapping.; Assessment in Mathematics: tools (tests, assignments, problem sheets). Continuous and Comprehensive Evaluation (CCE). Competency - based assessment (rubrics, portfolios, performance tasks). Diagnostic & remedial teaching holistic assessment, 360 Degree assessment.

10. Professional Development & Contemporary Issues in Mathematics Education; Professional Growth of Mathematics Teachers-Reflective practice, action research, teacher learning communities; Innovations in Mathematics Education- STEM/STEAM integration, design thinking, competency-based learning pathways; Contemporary Challenges- Reducing math anxiety, connecting math to life skills, vocational integration; Global Trends- Outcome-based education (OBE), international benchmarks (PISA, TIMSS); Indian Knowledge Systems (IKS)-Vedic mathematics, ethnomathematics, indigenous problem-solving techniques; NEP 2020 Aspect- Lifelong learning, research orientation, continuous professional upgradation, integrating Indian context with global standards.

PAPER-II PART-B-CONCERNED SUBJECT-II

FOR POST CODE NO.10:- LECTURER IN SCIENCE
FOR POST CODE NO.11 LECTURER IN SCIENCE (URDU MEDIUM)
SCIENCE
PART 1 – CONTENT

1. **Environmental Education:** Components and properties of air, Air pollution; Water resources, water supply, Rain water harvesting, waste-water disposal systems, quality of water, water pollution; Nutrients in food, storage, wastage; Household service providers, professions; Family relations, migrations; Transportation present and past and its impacts; causes of Climate changes, effects, global warming; Types of governments, facilities and schemes; constellations with zodiac signs, Solar system, Technology, ISRO projects; Agriculture, Hybridization, irrigation types, Cropping patterns, Animal husbandry; Recreation and Eco-tourism.
2. **Plant world:** Plant and its parts, types of leaves, flowers, fruits, flower parts; Plant cell and its organelles; Plant tissues; different plant systems, transportation, photosynthesis in plants; Sexual, asexual reproduction; Nutrition, Taxonomy of Plants, Ecosystem Biodiversity; Economic botany, Biotechnology and genetic engineering.
3. **Animal World:** Organs and Organ Systems including man - Animal cell and its organelles, Structure and Functions Digestive, Respiratory, Circulatory, Excretory, Nervous, Control and Co-ordination, Sensory perception Endocrine glands and Reproduction. Need for reproductive health and prevention of STD, birth control- Need and methods of contraception and MTP, Amniocentesis, infertility and assisted reproductive technologies - IVF - ET - ZIFT, GIFT,

production of food from animals. Animals around us, oviparous, viviparous; Domestic, wild, extinct animals.

4. **Physics:** Fundamentals of light, heat, sound, electricity, magnetism. Types of matter, mixture, solutions, separation of substances; Physical, Chemical changes; Force, Gravitation, Friction, laws of motion; thermodynamics. Mechanics: Application of Simple Machines in daily life situations, Scalars and Vectors; Types of motion, Forces and frictions. Newton's laws of motion, laws of fluids, types of Energies. Conservation of energy, work and power, center of mass. Centre of gravity for regular and irregular objects, stability and equilibrium, universal law of Gravitation, relation between 'g' and 'G', circular motion.
5. **Chemistry:** Atomic Structure: Electromagnetic spectrum, atomic spectrum, Characteristics of electron, proton and neutron, Rutherford's model of an atom, nature of electromagnetic radiation, Plank's quantum mechanics, explanation of photo electric effect, features of atomic spectra and Bohr's theory of structure of atom. Acids and Bases, Salts: Neutralization, crystallization, complex, Oxidation and reduction, rancidity. Types of solutions; solubility, ionization, Concentration; Oxidation number concept. Metals, Non-metals; periodic classification of elements, chemical bonding, Carbon and its compounds; Coal and Petroleum.

Part 2 – Pedagogy

6. **Nature and Scope**: Meaning, concept, structure, nature of science; Development of science (historical to recent), branches of science, values of science; Objectives of science at school level as per NCTE, TGSCERT and NCERT; Development of scientific attitude; Meaning, nature and scope of Environmental Science (EVS); Objectives and values of EVS, National Curriculum Framework, 2005, State Curriculum Framework, 2011, National Policy on Education, 1986 and National Education Policy, 2020.;science as information or inquiry, correlation of science.
7. **Approaches, Methods and strategies Of Teaching and Learning:** (Montessori, didactic, object teaching, project method and activity method); Instructional strategies of teaching – problem-solving, differentiated instruction, flipped classroom and inquiry-based; Innovative teaching practices - constructive learning, adaptive learning, reflective learning, blended learning, task-based learning and gamification. collaborative, cooperative, experiential learning.
8. **Curriculum**: Significance of curriculum in science at elementary level; Principles and Approaches of curriculum construction; Recommendations of Education commissions in curriculum construction, Activity approach, Constructive approach. Professional development of teachers ,21st century skills, competencies and practices.
9. **Instructional Planning and Resources**; Significance and types of planning (annual, unit, period); Development of competency-based lesson plan; Hands

on experiences; Audio-visual aids and Low-cost teaching aids; ICT; Community resources; Popular science book and Science encyclopaedia; Science Museum, Science laboratory and Botanical gardens; Popularising Science - Science projects, Science clubs, Eco-clubs, Science fairs and exhibition, Seminars. National Talent Search Scheme, Council for Science and Industrial Research, India Council for Agricultural Research, Indian science congress association.

10. **Assessment and Evaluation in Science Teaching:** objectives of Evaluation, Process of evaluation. Assessment (Diagnostic what why and how); assessment for learning; assessment of learning; assessment in learning; assessment as learning. Continuous and comprehensive Evaluation (scholastic &non scholastic) Aspects. Formative & summative evaluation in science. feedback and remedial, measures performance-based assessment based on learning indicators. Tools and techniques of assessment, recording and reporting. Pedagogical shift; Research in Science Education.

PAPER-II PART B- CONCERNED SUBJECT-II
FOR POST CODE NO.12:- LECTURER IN SOCIAL STUDIES,
FOR POST CODE NO 13: LECTURER IN SOCIAL (URDU MEDIUM),
SOCIAL STUDIES

(Part - A: Content: Social Studies Curriculum)

1. **a. Geography:** Earth – Regions of Earth / Universe of the Earth, Oceans and Continents, Movement of the Earth; Climate; Natural realms of the world energy from the sun – solar isolation radiation, heat balance, Introduction to maps, latitude, longitude and time; Map projections – Topographical maps, remote sensing and analysis; Life on Earth; Bio-diversity and Conservation; Forests and their utilization, Environment Protection Acts of forests

   b. Indian Geography: Geographical Diversity in India; Physical features; minerals and mining; climate atmosphere, rivers and water resources; agriculture land forms, Drainage; Natural vegetation and Wildlife; energy resources; irrigation; transport & communication; Biodiversity and conservation; India – location structure and physiography, natural hazards and disasters.

   c. Human Geography: The World Population- Distribution, Density and Growth Human Development, Transport and Communication; International Trade; Human Settlements; Land, Water, Minerals and Energy Resources; Sustainable Development

   d. Geography of Telangana: Rivers, Irrigation, Projects, Crops, Tourism, Population, Mineral Wealth and Industries, Tribals life, Re -organization of districts.

2. **World History:** Mesolithic and Neolithic age; Evolution of River Valley civilizations; Mesopotamian civilization; Egyptian civilization; Ancient Roman & Greek civilization; England Revolution, (Glorious Revolution) French Revolution, Socialism in Europe, Rise of Nationalism in Europe, Russian Revolution, Nazism- Rise of Hitler, fascism, Italy, mousseline; Civil Rights, Human Rights, Anti-Nuclear and Anti-War movements.

   Globalization, Marginalization and Environmental Movements, Movement of Women for Social Justice and Human Rights

3. **Indian History:** India: Indus Valley civilization, Aryan civilization, Dravidian civilization; Harappan civilization, Kings, farmers and towns; Early States and Economics (600 BCE – 600 CE). Kinship caste and class – early societies (600

BCE – 600 CE); Thinkers, Beliefs and Buildings – cultural development (600 BCE – 600 CE); Great Travelers' Perceptions of the Indian Society; Bhakti- Sufi Traditions: Changes in Religious Beliefs and Devotional Texts; Prominent Dynastic of India; Peasants, Zamindars and the state; Agrarian society and the Mughal Empire; Colonialism its impact in India: Revolts and Moments from 1857 to 1947; Social movements in India:Nationalism in India.

4. **Political Science:** Framing the Indian Constitution- Various Aspects of Indian Constitution, Nationalism, Secularism, Federalism, Citizenship, Fundamental Rights, Fundamental duties; Directive Principles and Constitutional Amendments; Forms of government, unitary, federal, parliamentary and presidential; The Parliamentary System, Legislature, Executive, Judiciary and Local Government; Constitution of India – local self – governments; Election Process in India. National and State Political Parties; Unity in Diversity; Social Scientists – Political thinkers; Policy making institutions of India; Policy process – Role of media, political parties and pressure groups; The End of Bipolarity; Contemporary Centers of Power; International Organizations; Security in the Contemporary World; Environment and Natural Resources, Globalization; International relations and organizations: UNO, UNESCO, UNICEF; Covenants of Human Rights; Contemporary issues of the world; Implementation of policies / schemes with reference to central and state governments.
5. **Economics:** Introduction, Types of Economies; Law of demand and supply: Utility theories; Market Equilibrium; Theory of Firm under Perfect Competition and monopoly; Macroeconomics: Factors of Production; National Income Accounting – Per capita income, standard of living and population; Determination of income and employment; Indian Economy; Five-year plans, Agriculture, Industries and Service Sector in India; Inequalities, Poverty, Unemployment, Organized and Unorganized sectors; Rural Development and Employment, People as a Resource, Food Security, Agriculture,

   Farming; Market structure and analyses, Demand, Supply, Price, Capital and production; Inflation and deflation, Trade cycles; Budget of India – Types – Capital Account and Revenue Account; Public Finance – Revenue and Taxation: Direct, Indirect GST, CGST etc ; Money and Banking, ; RBI, Open Economy: Banking and Financial Institutions; Balance of Payments ; Village Industry and Village Occupations; Economic reforms and their consequences in India; Liberalization, Privatization and Globalization: Impact on Indian Economy; Environment and Sustainable Development with equity, Consumer Rights Food Security; Human Resources, Human Capital Formation, National Skill Development Corporation; Impact of Technology on Livelihood; Economy of Telangana: Budget Welfare Schemes, Skill Development Programs, Impact of Technology of livelihood.

(Part - B: PEDAGOGY)

6. **Nature and Significance of Social Sciences:** Scope, retrospect and prospect of Social Sciences, Disciplines of Social Sciences and their inter relation. Interdisciplinary and multi-disciplinary nature of Social Sciences. Social Sciences vs Social Studies, Social Science Education envisaged in NEP 2020. Prominent Social scientists and thinkers.

   Aims and Objectives of Teaching Social Sciences at Secondary Stage: Learning Objectives - Bloom's Taxonomy, Revised Taxonomy. Framing of Learning Objectives, Academic Standards. Values of Teaching Social Sciences. Psychology of Teaching Social Sciences; Planning for Teaching Social Science: year plan, Unit plan, lesson Plan, Period plans

7. **Curriculum in Social Science**: Curriculum Frame Work: Concept and Principles; Curriculum Organization, Development and Construction; Distinction between

Curriculum and Syllabus. Approaches of Curriculum Construction; From Subject Centered to Behaviorist to Constructivist Approach in Curriculum development; SCF – 2011; Recommendations of NCFSE -2023 and NEP 2020; Teacher as a Curriculum developer - Localized curriculum, Place of Artisans knowledge systems in curriculum, Local Innovations and Innovative Practices of Social science - Indian knowledge system (IKS) and Social Science.

8. **Approaches, Methods:** Learning Experiences in Teaching - learning Social Science, and Planning for Effective Instruction: Inductive, Deductive, Problem solving, Lecture cum Demonstration, Activity, Field visit, Discovery, Project and Discussion Methods for learning of Social Sciences; Hands-on activities, Role play, Inquiry approach, Concept mapping, Collaborative & Cooperative learning; Holistic and Multidisciplinary approach Critical, Creative and Analytical pedagogy in Social Sciences; Emerging trends and Innovations in Teaching of Social Sciences; Concept attainment, Expository, Inquiry driven approach, Concept mapping and Graphic organizer, Augmentation and AI in learning; Learning exclusive of Pre-conceptions and Mis-conceptions; Flipped learning and Blended learning; Designing a conducive learning environment; Teaching Strategies and classroom Management, Reflective practices in classroom Processes.
9. **Learning Resources**: Designing Instructional Materials in Social Sciences: Social science Labs; Teaching Aids; Textbooks; ICT in Social Sciences, Social science museums including Virtual labs; Identification and use of learning resources in social science from the environment such as natural resources Soil, Rocks, Vegetation, Crops, Minerals and Human resources; Print Resources- Text books, Journals and Magazines, Autobiographies, Biographies and Archives; Moving beyond the textbooks - contextualization of content; Dale's Cone of Experience; Audio - Visual, Print and electronic resources in social science; Multimedia and ICT resources, online and digital resources; Digital repository and AI - based digital resource; Social science Projects, Clubs, fairs, Exhibitions and visits places of Historical and Geographical importance.
10. **Professional Development of Social Science Teachers at Secondary Stage:** Qualities, Skills and Competencies required for a Social Science Teacher; Professional Development Practices; Recognizing an expert teacher; Teacher professionalism; Technology Integration in teaching – learning Formal Professional development practices; workshops, conferences courses that are designed to help teachers learn new skills and strategies; Informal Professional Practices- Reading Professional Literature, participating in online forums, & collaborating with colleagues; Professional Growth, Professional Ethics and Code of Teachers

Issues and Challenges of Teaching Social Science: Action Research in Social Science Teaching; Use of Local / Community Knowledge and Learning own Experiences in the Teaching Learning Process (Constructivist's Perspective); Inclusion as a Curricular Strategy (Social Inclusion / Exclusion); Contribution to Human Knowledge; Teaching the Learning-Disabled Children (Educational Exceptional) in Social Sciences.

Assessment and Evaluation in Social Science: Contsinuous and Comprehensive Evaluation (CCE), Tools and Techniques of Evaluation: Achievement and Diagnostic Tests; Strategies for Continuous Assessment; Significance of School Based Assessment-Formative and Summative Assessment; Formal, Informal and 360^{o} Assessment; Performance Assessment. -Strategies for Self and Peer Assessment; Types of test items and preparation of Scoring key; Administration of Tests and analysis of results through Statistical Treatment.

PAPER-II PART B- CONCERNED SUBJECT-II
FOR POST CODE NO.14:- LECTURER IN PHILOSOPHY
PHILOSOPHY

1.Philosophy of Education

Philosophy-Meaning, Nature and Scope, Education- Meaning, Nature and Scope, Scope of philosophy of Education, Modes of Philosophical inquiry: Metaphysical, Epistemological and Axiological.

2. Indian perspectives of Education

Indian philosophical systems and their educational implications – Nyaya, Vaisesika, Samkhya, Yoga, Mimamsa and Vedanta. Buddhism, Jainism and Charvaka.

3. Western schools of thought and their educational implications

Idealism, Naturalism, Pragmatism, Existentialism and Realism.

4. Contemporary philosophical thoughts of Education

Analytical philosophy, Logical positivism, Progressive philosophies, Process philosophy with reference to Bauman Liquid Modernity.

5. Contributions of Indian Thinkers to Education

Sri Aurobindo, Rabindranath Tagore, Mahatma Gandhi, Swami Vivekananda, Dayananda Saraswathi, Jiddu Krishnamurthy, Pandit Madanmohan Malaviya, Mahatma Jyotirao Phule, Dr.B.R. Ambedkar.

6. Contributions of Western thinkers to Education

Plato, Aristotle, J.J.Rousseau, John Dewey, Willian James, Bertrand Russell, Ivan illich, Paulo Freire.

7. Values and ethics of Indian Religions during contemporary times

Hinduism, Islam, Christianity, Sikhism, Human values of religions in India.

8. Education and Indian Constitution:

Preamble and its Educational Philosophy, Freedom, Democracy and Right to Education, RTE Act 2009, Human Rights perspectives (HRC-1948), Child Rights perspectives (CRC-1992).

9. Commissions and committees on Education: Pre-independent, post-independent and contemporary.

Pre-independent: Charter act, Hunter commission, Sargent commission, Macaulay's minutes.

Post-independent: University Education Commission/ Radhakrishna Commission (1948-1949), Secondary Education Commission/Mudaliar Commission (1952-1953), Indian Education Commission/ Kothari Commission (1964-1966), Eswarbai Patel Committee (1977), Malcolm Adiseshaiah Committee (1978), National Education Policy (1986), Ramamurthy Committee (1992), Acharya Janardan Reddy Committee (1993), Professor Yashpal Committee (1994), National Knowledge Commission, NCF-2005 for school education, NCFTE 2009 for Teacher education, NEP -2020.

10. Issues in Education: Educational Interventions and reports.

APPEP, DPEP, SSA, RMSA, Samagra Shiksha Abhiyan, ASER reports, World bank reports on Learning crisis, World Bank reports on Learning poverty, Outcome based learning.

PAPER-II PART-B CONCERNED SUBJECT-II

FOR POST CODE NO.15:-LECTURER IN PSYCHOLOGY

PSYCHOLOGY

1. **Introduction to Psychology:** Concept, Nature, Scope, Goals and branches of Psychology (Pure and Applied), Approaches of Psychology: Behaviouristic, Cognitivist, Humanistic and Constructivist Approaches; Methods of Studying Human Behaviour. Understanding Consciousness in Psychology.
2. **Child Development and Child Psychology:** Growth and Development: Concept of Growth, Development and Maturation, Biological Basis of Behaviour – Nervous Systems and its Organization – the Structure of Neuron, Central Nervous System – Brain and Spinal Cord, Localization of Brain Functions, Autonomic Nervous System. Hormonal Basis of Behaviour – the major Endocrine Glands and their functions. Principles of Development, Stages of Development (Prenatal to Old Age)- Development-Developmental Tasks and Hazards, Factors influencing Growth and Development, Constructs of Childhood.
3. **Dynamics of Adolescent Psychology:** Physiological and Psychological Changes during Adolescence-Impression Formation and Attribution-Pre-discrimination and Psychology of Gender Formation-Aggression and Prosocial Behaviour-Characteristics Development and Discipline–Religious, Human and Spiritual Development-Needs of Adolescence, Mental Health and well-being, Issues and Challenges in Adolescence-Role of parents, teachers, peer and Society, Adolescent issues - Substance Abuse, Delinquency, Consequences of Maladjustment.
4. **Learning and Motivation:** Nature and Concept of Learning, Types of Learning and different kinds of learning (Verbal, Motor, Stimulus, Response Learning), Learning Curve, Factors influencing Learning ;Learning Styles ; Metacognition, Collaborative Learning and Cooperative Learning; Creating Inclusive Learner Friendly Environment; Creativity and Aesthetic Development; Thinking and Problem Solving-Thinking and Types of Thinking, Concept Formation, Reasoning, Creative thinking; Aesthetic Development; Problem Solving; Theories of Learning with their Educational Implications: Classical and Operant Conditioning, Gestalt/Insightful Theory of Learning, Bandura's Social Learning and Constructivist Learning, Bruner's Theory of Instruction, Transfer of Learning; Motivation: Concept of Needs, Drives, Incentives and Motives, Types of Motives, Maslow's Theory of Motivation, Achievement Motivation and its Assessment. Motivation and Goal Orientation, Learned Helplessness, Frustration and Conflicts of Motives.
5. **Memory, Forgetting and Attention:** Meaning of Memory, Types and theories of Memory, Factors influencing Memory and Methods of Measuring Memory; Forgetting: Meaning and Causes of Forgetting, Theories of Forgetting, Forgetting Curve, Strategies of improving Memory; Attention, Sensation and Perception: Meaning and Types of Attention, Factors or determinants of Attention; Meaning of Perception, Characteristics of Perception, Process involved in Perception, Difference between Perception, Sensation and Attention, Principles of Perceptual Organization, Factors influencing Perception.
6. **Intelligence, Individual Differences and Personality:** Concept and Nature of Intelligence, Types of Intelligence; Intelligence Tests, Theories of Intelligence, Role of Heredity and Environment; Individual Differences: Meaning, Types and Determinants of Individual Differences, Role of Hereditary & Environment, Areas of Individual Differences - Interests, Aptitude, Achievement, Intelligence, Learning and Personality; Personality - Concept and Nature of Personality, Self-Concept, Self-Confidence, Self-Esteem, Self-Awareness, Theories of Personality and their significance, Factors influencing the development of Personality and Assessment of Personality – Projective and Non-Projective Tests and Techniques, Indian Perspectives of Personality.

7. **Classroom Management and Group Dynamics:** Creating an Affective and Positive Learning Environment-, Diversities in Students-Behavioural Problems- Dealing with Discipline problems. Classroom Management Techniques; Time Management; Teacher Competencies; Leadership Styles; Group Dynamics: Nature and Formation of Groups, Characteristics and Types of Groups, Characteristics of Class as a Group, Group relationship in the Class; Attitudes: Nature and Components of Attitudes, Content, Structure and Functions of Attitudes-Factors influencing attitude; Attitude Formation, Measurement of Attitude; Importance of Pro-Social Behaviour. Role of Teacher and School in promoting positive attitude among students; Meaning and Nature of Adjustment and Maladjustment, Mental Health & Well-being, Role of Teacher and parents in Promoting Mental Health & Well-being
8. **Children with Special Needs:** Concept of Exceptionality and Exceptional Children. Concept meaning, identification, characteristics, types(categories)and educational services for Intellectually Challenged, Physically Challenged, Visually Challenged, Hearing Challenged, ASD, ADHD, Learning Difficulties, Under Achievers (slow learners) Neglected Group of Children, Juvenile Delinquent, Gifted Children, Emotional and Academic exceptional
9. **Guidance and Counselling:** Concept, Meaning, Need, Scope, Principles and Types of Guidance and Counselling, Characteristics of Counsellor, Basic Counselling Skills for Teachers, Communication Skills, Designing Action Plan, Behavioural Problems in children, Problems faced by children at home and school; Emotional disturbances and sources, Promoting Self-discipline - Social Skills, Emotional regulation, support to enhance strengths and resolve weaknesses, Significance of Guidance and Counselling in the field of Education, Counselling children with children with special needs.
10. **Psychological Testing, Research and Statistics:** Meaning of Test, Measurement Assessment and Evaluation. Meaning, Nature, Significance, Characteristics and Classification of Psychological Tests. Test Construction - General steps in constructing a test, Item Writing, Item Analysis, Quantitative Item Analysis, Validity, Reliability, Norms, Error in Testing, Application of Psychological Tests; Research in Psychology: Experimental and non-experimental research; Measures of Central Tendency, Measures of Variability, Graphical Representation of Data, Basic Descriptive and Inferential Statistics.

PAPER-II PART-B CONCERNED SUBJECT-II

FOR POST CODE NO.16:-LECTURER IN PLANNING AND STATISTICS

PLANNING AND STATISTICS

1: Concept and Scope of Educational Planning

1. Meaning, Nature, and Significance of Educational Planning
2. Approaches to Educational Planning: Manpower, Social Demand, Cost-Benefit, Normative, and Systems Approach
3. Levels of planning: National, State, Institutional

2: Theories, Models, and Techniques of Educational Planning

1. Theories of Educational Planning: Human Capital Theory, Rate of Return, Manpower Forecasting
2. Models: Perspective Planning, Strategic Planning, Contingency Planning, Micro- and Macro-Level Planning
3. Resource Planning: Financial, Physical, And Human Resources

3: Educational Planning Process and Policy Linkages

1. Steps in Educational Planning: Situational Analysis, Goal Setting, Resource Allocation, Implementation, Monitoring

2. Relationship Between Educational Policy and Planning
3. Role of National and State Bodies: NITI Aayog, MHRD/MoE, NCERT, SCERT
4. Planning In Light of Major Policies: Kothari Education Commission; NPE, 1968; NPE, 1986; POA, 1992; NEP, 2020.

4: Educational Finance and Resource Allocation

1. Principles of Educational Finance
2. Cost Analysis in Education: Unit Cost, Direct and Indirect Costs
3. Public-Private Partnerships in Education Financing

5: Monitoring, Evaluation, and Emerging Trends in Educational Planning

1. Need and Importance of Monitoring and Evaluation
2. Tools and Indicators for Evaluation (Input, Process, Output, Outcome Indicators)
3. Role of MIS (Management Information Systems) and EMIS (Educational MIS)
4. Emerging Trends: Decentralized Planning, Community Participation, Technology-Enabled Planning, Evidence-Based Decision-Making

6: Basics in Statistics

1. Concept of Data, Meaning of Distribution, Concept of a Variable, Types of Variables and Scales of Measurement.
2. Descriptive Statistics: Measures of Central Tendency, Measures of Variation, Skewness and Kurtosis.
3. Concept of Z-Score, Characteristics of Z-Score, Concept of Normal Distribution, Characteristics of Normal Distribution, Applications of Normal Distribution, Importance of Normal Probability Curve (NPC) In Educational Research.

7: Correlation

1. Meaning and Concept of Correlation, Concept of Linear and Non-linear relationship, Scatter diagram,
2. Correlation Coefficients: Product moment Correlation, Rank Correlation, Interpretation of Correlation Coefficient. Testing the Significance of Correlation Coefficient,
3. Special Correlation Coefficients: Bi-Serial Correlation, Point-Biserial and Phi-Coefficient of Correlation.
4. Importance and Application of Correlation in Educational Research.
5. Concept of Partial Correlation and Multiple Correlation.

8: Inferential Statistics - I

1. Concept of Sampling Distribution, Sampling Distribution of a Statistic, Standard Error.
2. The Hypothesis testing Process, Errors in hypothesis testing. One-tailed and Two-tailed tests. Concept of level of Significance.
3. t-test: One sample t-test, Independent Sample t–test, Paired Samples t-test.
4. Concept of Analysis of Variance (ANOVA), One-way ANOVA, Two-way ANOVA. Concept and types of Post- Hoc Analysis.

9: Inferential Statistics – II

1. Chi-square Test: Chi-square Test as a Test of Goodness of fit, Chi-Square Test as a test of Independence.
2. Kruskal Wallis Test, Utility and Applications in Educational Research.

3. Mann-Whitney U test, Utility and Application of Mann-Whitney test in Educational Research.

10: Multivariate Data Analysis techniques:

1. Concept of Multivariate Data Analysis, Characteristics of Multivariate Data Analysis Techniques.
2. Concept of Regression, Meaning of Linear Regression, Concept of Simple Linear Regression, Importance and Utility of Simple Regression in Educational Research.
3. Concept of Multiple Regression, Concept of Regression Coefficient, Interpretation of Regression Coefficient, Importance and Utility of Regression in Educational Research.
4. Factor Analysis, Utility and Application of Factor Analysis in Education

PAPER-II PART-B CONCERNED SUBJECT-II

FOR POST CODE NO.17:- LECTURER IN ART EDUCATION

ART EDUCATION

Unit 1—Concept of Art&Art Education

Meaning and concepts of art and art education; nature and scope at Foundation, Preparatory and Middle stages; A brief history of Arts (ancient to contemporary); classical aesthetics (Bharatmuni); selected views of Indian and European philosophers; Indian aesthetic traditions (classical, folk, modern); Creativity; Lowenfeld's stages of artistic development; Art as therapy for mental wellness and its classroom application.

Unit 2—Understanding the Role of Art Education at Elementary Level of School Education

The role and importance of arts in the development of: Cognitive, Psychomotor and Affective domains. Art Education and life skills; Art Education and Creativity; Art

Education and Emotional well-being; Arts Education and Inclusive Education; Art Education and Social Wellness; Art Education and Values; Art Education and Learning Echo system in schools; Art Education and STEAM; Art Education and Design Thinking; Educational significance; Art Education observation

and problem-solving; arts-based pedagogy at preparatory/middle stages; perspectives of Indian &international thinkers; using folk/regional arts as classroom resources; Indian Knowledge System and Art education.

Unit 3—Visual Arts:2D and 3D forms, Methods, Materials & Techniques

Categories of the art; (I) Visual Arts, (ii)Performing Arts and (iii) Literary Arts. What constitutes visual arts: Painting, Print making, Sculpture, Photography, Ceramics, Installation, Applied & Decorative arts; Indian folk/traditional art forms in 2D and 3D (Madhubani, Warli, Pattachitra, Kalamkari, Gond, Phad, Saura, Mandana, Rangoli, tribal murals etc.); methods & techniques of 2D and 3D art forms (watercolor, ink, block/linoleum printing, clay modelling, paper crafts, mask and puppet making, paper collage, mixed collage etc.); visual narratives (scrolls, storyboards, comic strips); Introduction to the computer based/digital art.

Unit 4—Performing Arts: Music, Dance, Drama & Puppetry

Concept of Performing Art; types of Performing Arts; brief introduction of; (i) Music, (ii) Dance,

(iii) Drama & (iv) Puppetry; Role of performing arts in elementary level of school education; basics of the Vocal and Instrumental Music (Hindustani & Carnatic

concepts) ; Dance forms (folk/regional, classical and contemporary etc.); theatre practice (role-play, mime, storytelling, classroom drama, contemporary theatre etc.); Age and stage relevant Puppetry; finger puppets, stick puppets, shadow puppets, object based puppets, basics of string puppetry etc. and its classroom applications; functional understanding of different methods and techniques of performing arts; basics of Stage setups; working knowledge of light and sound; planning performing-arts activities stage specific curricular objectives; introduction to use of computer skills for different performing arts; recording and documenting performances for school website/s.

Unit 5—Introduction to Indian Cinema & Media Arts

Brief introduction to the art of Indian cinema (silent to contemporary); cinema as pedagogical resource; regional cinema perspectives; new media arts (digital art, visual compositions, videography, photography, installations, performance art, light and sound compositions, creative movements etc.); functional knowledge of viewing, selecting and using documentaries, films and short videos for the quality learning.

Unit-6. Art Integrated Learning (AIL) – Use of Art Experience as Pedagogical Tool

Concept of Arts as Pedagogy; recommendations of NEP-2020 on Arts as pedagogy; Arts as experiential learning; Art for engaging the 3H (Head, Hand and Heart); role and importance of Art as Pedagogy at elementary level of school education. Art Integrated Learning for the joyful learning; Art Integration for the concrete learning of the abstract concepts; for creative thinking skills; AIL for the inclusive learning environment; AIL for collaborative learning; AIL for healthy teacher taught relations; AIL for holistic learning (cognitive, psychomotor and affective domains).
Practical skill of planning and conducting; AIL lessons for learning different school subjects such as: mathematics, sciences, social sciences, languages etc.; Art of display of the art expressions/ products/ sheets etc.in the classroom; use of visuals as course content; hands-on experience of visual and performing arts, specific to the region as minimum; skill of linking the cultural and historical monuments/ places with the curriculum; planning subject lessons while integrating the cultural heritage (such as; local festivals, arts & crafts, food, national and regional days, traditional costumes and weaves etc.)with curriculum; use of art for softening the subject boundaries.

Unit 7—Assessment in Art Education

Purposes & nature of assessment in art; importance of formative & summative methods of assessment; difference between process and product-based assessment; tools of assessment—rubrics, portfolios, checklists, rating scales, anecdotal records, displays, oral & written tasks; peer and self-assessment; assessment through the Art Integrated Learning; documenting progress and preparing holistic report cards for the different stages of elementary education.

Unit 8—Practicum-Creative Workshops, Exhibitions & Field Trips

Plan and execute school exhibitions; thematic displays; festival presentations and campus beautification; plan and organize art& craft workshops on Visual and

Performing Arts for Middle stage; planning a school trip to an Art Gallery/Museum and to Artist Studio; recording of a performance; designing posters for the different events; special celebrations; designing a traditional craft- textile based; practical experience of any two visual and two performing arts of your region or India.

Portfolio Activities: Submit a practicum portfolio containing:

10 original art works (showing range of media/ styles); 5 documented classroom art activities with lesson plans and reflective reports; 2 visit reports (museum/ gallery/ theatre/ 4 workshop reports (participation, summary & reflective learning e.g., clay modelling, block printing, puppetry, theatre/dance). Assessment: Portfolios evaluated for creativity, process documentation, pedagogical linkage, reflection and presentation.

PAPER-II PART-B CONCERNED SUBJECT-II

FOR POST CODE NO.18:-LECTURER IN EDUCATION TECHNOLOGY

EDUCATION TECHNOLOGY

1: Introduction in Educational Technology

1. Educational Technology: Concept and Types; Forms of Educational Technology; Challenges for Educational Technology.
2. Meaning, Nature, Importance of Information Technology, Communication Technology & Information and Communication Technology (ICT) and Instructional Technology,
3. Meaning and Uses of Systems Approach in Instructional design
4. ICT in Education: Concept, Significance and Need of ICT in Education
5. First Generation ICT models – technology driven; Second Generation ICT Models –Pedagogy driven.

2: Digital Technologies in Education

1. Introduction and Need for Digital Technologies in Education
2. Creating Dynamic Equitable Learning Environments (DELE)
3. Learning Attributes of the Digital Learners
4. Challenges of Digital Technologies in Education
5. Digital story telling; Combining Media to tell a story – Scripting; Creating Photo Essays and Video documentation as a source of Information and a Learning Process.

3: Instructional Strategies and Models

1. Programmed Instruction; Computer Assisted Instruction (CAI); Project Based Learning (PBL); Collaborative Learning.
2. E-learning; Blended Learning; Flipped Learning.
3. Electronic Teaching Portfolio; Assistive Technology for Children with Special Needs (CWSN).
4. Models of Development of Instructional Design (ADDIE, ASSURE, Dick and Carey Model Mason's)

4: Technology Integration

1. Integrating Technology into Instruction: Teacher training, Technology Access, Using Technology with Instruction, Mobile phones, Google Tools, and Assistive Technology.
2. Using Web 2.0 Technology in the Classroom – Podcasting, Blogging, Tagging, Really Simple Syndication (RSS), Social Networking, Digital Games and Simulations.

5: Computers

1. Fundamentals of Computers: Characteristics, types and Applications of Computers; Hardware, Software, Computer Memory, Viruses and its Management.

2. Computer Networks and Internet;
3. MS Office Applications: Main features and uses of MS Word, MS Excel, MS Access, MS PowerPoint.

6: Communication and Classroom Interaction

1. Concept and Meaning of Communication
2. Process and types of Communication
3. Barriers and Facilitators of Communication
4. Flanders Interaction Analysis Categories System (FIACS)

7: Instructional aids for Educational Technology

1. Role, uses & Criteria for Selection of Instructional Aids
2. Classification of Instructional aids: visual and Audio-Visual aids.
3. Projected aids & non-projected aids.

8: E- Learning, online Education and Ethical Issues

1. E-learning Concept, Methods, and Media (LMS, Virtual Universities, Massive Open Online Course (MOOCs), Indian MOOCs, Types of MOOCs: cMOOCs, xMOOCs & LMOOCs).
2. Augmented reality, Virtual reality, Artificial Intelligence.
3. Cloud Computing & Internet of Things - Meaning, Importance and uses.
4. Ethical issues & safety in ICT- (Teaching, Learning and Research, Cyber bullying, Cyber Security Literacy & Data Protection, Online Identity and Privacy).

9: ICT in Teaching-Learning & Assessment

1. Concept, Approaches to Integrating ICT in Teaching and Learning: Technological
2. Developing Functional Skills to use Discipline Specific ICT tools (Geogebra, PhET, Stellarium, Open Street Map, Marble, Turtle Art).
3. ICT and Assessment- Electronic Assessment Portfolio – Concept and Types; E-Portfolio Tools.
4. ICT Applications for Continuous and Comprehensive Evaluation (CCE).

10: Emerging Trends and Future Directions

1. Basic of Educational Data Mining and Learning Analytics
2. Digital Divide and Accessibility Issues
3. Future Skills for Educators and Learners (21st - Century Skills)
4. Open Education Resources (Creative Commons, Concept, and Application).
5. Recent Developments in AI Technologies and their Applications to Education.

PAPER-II

FOR POST CODE NO.19:- LECTURER IN PHYSICAL EDUCATION

Part A: CONCERNED SUBJECT -I PHYSICAL EDUCATION CONTENT

i) PHYSIOLOGY OF EXERCISE

a. Definition of Physiology, Exercise Physiology and importance of Exercise Physiology in sports.

Skeletal Muscles and Exercise: Macro & Micro Structure of the Skeletal Muscle, Types of Muscle fibres and their characteristics, Chemical Composition, Chemistry of Muscular Contraction, Sliding Filament theory of Muscular Contraction. Muscle

Tone, Heat Production in the Muscle, and Effects of exercise and training on the muscular system.

b. **Cardiovascular System and Exercise:** Structure of the Heart, Heart Valves, and Direction of. the Blood Flow, Conduction System of the Heart, cardiac Circulation, Cardiac Cycle, Heart Rate, Stroke Volume, Cardiac Output, and Heart Rate and Stroke Volume interactions. Effects of exercise and training on the cardiovascular system.
c. **Respiratory System and Exercise:** External and Internal Respiration, Mechanism of Respiration, Respiratory Muscles, Minute Ventilation, Ventilation at Rest and During Exercise. Exchange of Gases in Lungs and Tissues, Control of Ventilation, Ventilation and Anaerobic Threshold, Oxygen Recovery, Lung Volumes and Capacities, Anatomical Dead Space. Effects of exercise training on the respiratory system.
d. **Metabolism and Energy Transfer:** Metabolism: Definition and types Anabolism and Catabolism, Anaerobic Metabolism: ATP, PC or Phosphagen System, Anaerobic Glycolysis, Aerobic Metabolism: Aerobic Glycolysis, Fat Metabolism. Metabolism during Rest and Exercise.
e. Climatic conditions and Ergogenic aids: Variations in Temperature and Humidity, —Thermoregulation, —Sports performance in hot, Cool, and humid climates, high altitude, acclimatization, and circadian rhythm. Ergogenic Aids: Pharmacological, Hormonal, and Physiological aspects and their effects on sports performance. Doping and WADA.

ii) APPLIED STATISTICS IN PHYSICAL EDUCATION AND SPORTS

a. Applied Statistics: Meaning, Definition, types, Functions, need, and importance of Statistics. Meaning of the terms, Population, Sample, Data, and types of data. Variable: Definition and types of Variables, Discrete and Continuous. Parametric and non-parametric statistics.
b. Measures of Central Tendency: Construction of a frequency table. Meaning, Definition, Importance, Computation, Advantages, and Disadvantages of Measures of Central Tendency. — mean, median, and mode.
c. Measures of Dispersions and scales: Meaning, Purpose, Calculation and Advantages of Range, Quartile Deviation, Mean Deviation, Standard Deviation, Probable Error. Scales: Meaning, Purpose, Computation, and Advantages of t-ratio, 6 Sigma scale, Z Scale, and Hull scale.
d. Probability Distributions and Graphs: Normal Curve. Principles of the normal curve, Properties of the normal curve. Meaning of probability: Divergence from normality. Skewness and Kurtosis. Graphical Representations in Statistics: Line diagram, Bar diagram, Histogram, Frequency Polygon, Ogive Curve, and Pie Diagram
e. Inferential and Comparative Statistics: Tests of significance, t-test, F ratio, chi-square test, level of confidence, and interpretation of data. Meaning of correlation, coefficient of correlation, calculation of coefficient of correlation by the product-moment method, and the rank difference method. Concept of ANOVA and ANCOVA.

iii) FITNESS AND LIFE STYLE MANAGEMENT

a. **Concept of Fitness:** Definition and meaning of Fitness, Different Kinds of Fitness, Physical Fitness, Skill-Related and Health-Related Physical Fitness. Relationship of fitness and health fitness to develop health of an individual, Wellness revolution: Lifestyle and Health fitness relationship, Meaning of active lifestyle, Physical inactivity and associated health risks, Diabetes, Hypertension, Atherosclerosis, Arthritis.

b. **Meaning of Health, Health-related fitness components:** Body Compositions, cardiovascular fitness, Muscular Endurance, strength, flexibility, and the benefits of health-related fitness. Benefits of Health Fitness Components: Meaning of health-related and Physical fitness components. Exercise protocols for the health fitness components, Body Composition, concepts of body weight and components of body weight, Assessment of body composition, Obesity, Meaning of Obesity and risk factors, of Obesity and over fatness- Muscular and joint flexibility-risk factors associated with poor muscular and Joint flexibility**.**

c. **Nutrition:** base for human performance-Carbohydrates, Fats, and Proteins. Recommended intake for Normal persons and exercising individuals. Vitamins, Minerals, and Water. Osteoporosis and Calcium, Minerals, and Performance. Optimal nutrition for exercise, Energy value of different important foods, Food Pyramid, fluid replacement before, during, and after exercise for temperature regulation and injury prevention, carbohydrates and electrolytes during exercise.

d. **Stress:** meaning and types of stress, Physical and mental stress-Harmful effects of overtraining and excessive exercise on health, Mental stress and painful effects of mental stress on health. Anxiety, Depression, insomnia, Compulsive obsessive behaviours, Stress relief through exercise, and stress management protocols.

e. **Health Behaviour:** Self-efficacy and health behaviour, Behavioural modification for wellness, social support, and health of an individual, Lifestyle and other related aspects of activity during childhood. Facts on childhood obesity and activity.

iv) YOGIC SCIENCES

a. **Yoga -Meaning**: Definition, Scope and importance of Yoga, Essentials For Yoga Practices; Age, Diet, Stomach Emptying bowels, bathing, Clothes, Sun Bathing, No Straining, Place, Time, Awareness, Sequence. Contra-indication, Counter Pose, Breathing, and Relaxation. Basic Systems of Yoga with importance - Ashtanga Yoga: Yama, Niyama, Asana, Pranayama, Pratyahara, Dharana, Dhyana, Samadhi. Streams of Yoga: Hatha Yoga, Raja Yoga, Karma Yoga, Bhakti Yoga, and Gnana Yoga.

b. Asanas, Kriyas, Bandhas, and Mudras: Asana: Definition,
Classification, Sitting, Standing, Lying, & Inverted Asanas. Benefits of Asanas, Asanas and Loosening Exercises, Surya Namaskar —Description and benefits of kriyas: Meaning, Neti, Nauli, Dhauti, Kapalabhati, Trataka, Bhastrika, Benefits.

Bandhas: Jalandhara, Udyana, Mula, and Maha Bandha, their Importance. Mudras: meaning, Definition, Purpose, types of Mudras.

c. **Pranayama:** Meaning, Definition, Tradition, Types, Importance & Impact of Pranayama on naadis. Chakras: Meaning, Definition, and types, Effects of Pranayama on major chakras.

d. **Meditation:** Meaning, Definition, and Benefits. Types of Meditation: Passive, active, Saguna, and Nirguna Meditation. Meditation and Health, Meditation Stress Management. Concentration: Meaning, Definition, and Benefits.

e. **Yoga and sports:** Effects of Yoga on Physiological Systems: Respiratory, Circulatory, Digestive, Nervous, and Excretory Systems. Place of Yoga as Supplementary, Compensatory, Regenerative, and Yogic Power. Role of Yoga in Sports: Promotion of Mental Well-being, Role of Yoga in Making a Sports Person. State and National Games of India - Rules for Yogasana Competitions.

v) SPORTS BIOMECHANICS AND KINESIOLOGY

a. Kinesiology and Biomechanics: Meaning, nature, importance, and scope of applied kinesiology and Sports Biomechanics. Meaning of Axis and Planes, Dynamics, Statics, Kinematics, Kinetics, gravity, Center of Gravity, Line of gravity, and base of the body. Vectors and Scalars.

b. Muscle action: Origin, Insertion, and action of Muscles around the shoulder, Elbow. Hip, Knee, and muscles of Abdomen &Trunk.
c. Motion and Force: Meaning and definition of force. Types of Motion: Linear motion, angular motion, and General motion. Uniform& non-uniform motion. Laws of Motion: law of Inertia, Law of acceleration, and law of reaction. Force: definition and types of force: Centripetal Force, Centrifugal Force, Sources of force, components of Force, Factors of Force. Pressure and friction, Buoyancy and Spin.
d. Projectile and Levers: Freely falling bodies, Projectiles: Principles of Projectiles: Stability, equilibrium, and its Types. Factors Affecting on Equilibrium. Definition of Work, Power, and Energy. Mechanical Energy: kinetic energy, potential energy, and strain energy. Levers: Definition and Types of Levers and Their Practical Application. Mechanical Advantage. Fluid Resistance, Aerodynamics.
e. Analysis of Movement: Kinesiological, Biomechanical Video Analysis. Methods of analysis—Qualitative, Quantitative, Predictive methods.

vi) SPORTS MEDICINE, ATHLETIC CARE, AND REHABILITATION

a. Sports Medicine: Meaning, definition, and importance of Sports Medicine, Definition and Principles of therapeutic exercises.
b. Injuries: acute, sub-acute, chronic. Advantages and Disadvantages of PRICE, PRINCE (Protection, Rest, Ice, NSAIDS (Non-Steroidal anti-inflammatory), Compression, and Elevation therapy, Aquatic therapy
c. Posture: Values of Good posture, Causes of Bad posture, Normal curve of the spine and its utility, Deviations in posture: Kyphosis, lordosis, flat back, Scoliosis, round shoulders, Knock Knees, Bow legs, Flat foot. Causes for deviations and treatment, including exercises. Posture test, Gait, and types.
d. Rehabilitative exercises: Passive, Active, Assisted, resisted exercise for Rehabilitation, Stretching, PNF techniques and principles. Gait training, Swiss ball exercises.
e. Massage: history of massage—Massage as an aid for relaxation, Principles of massage, Physiological, Chemical, Psychological effects of massage, Contra indications of Massage, Classification of Massage 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: Vibration and shaking.
f. Sports Injuries care, treatment, and support: Principles about the prevention of Sports injuries—care and treatment of exposed and unexposed injuries in sports, Therapeutic modalities: Cryo, thermo, Hydro, Electro therapies, Strapping, Taping and Bandages, supporting, aiding techniques for equipment for upper extremities and Lower extremities and spine.

vii) HEALTH EDUCATION AND SPORTS NUTRITION

a. **Health education:** Meaning, Definition of Health, Health Education. Concept, Dimensions, and Determinants of Health. Health Instructions, Aims, Objectives, and Principles of Health Education. Health Service, Health supervision.
b. **Health problems in India**:
Communicable Diseases: Tuberculosis, Measles, Mumps, Rabies, Polio, whooping cough, Hepatitis, Ebola, Swine flu, Dengue, Malaria, and STD: Gonorrhoea, HIV/Aids, Syphilis.

Non-communicable diseases: Cancer, Osteoporosis, Asthma, Hypertension, Diabetes. Obesity, Malnutrition, Adulteration in food, Environmental sanitation, Explosive Population, Personal and Environmental Hygiene in schools.

School Health Services: Objectives of school health service, Role of health education in schools, Nutritional service, Health appraisal, Healthful school environment, first-aid and emergency care.

Health Agencies: Red Cross, WHO, St. John Ambulance, UNICEF, UNESCO.

c. **Hygiene and Health:** Meaning of Hygiene, Types of Hygiene, dental Hygiene, Effect of Alcohol on Health, Effects of Tobacco, Life Style Management, Management of Hypertension, Obesity, Stress.
d. **Sports Nutrition:** Meaning and Definition of Sports Nutrition, Role of nutrition in sports, Basic Nutrition guidelines.
   Nutrients: Carbohydrate, Protein, Fats, Vitamins, Minerals, Water, Dehydration and fluids replacement, Classification of food, organic food, Carbohydrate loading, Hyponatremia. Role of carbohydrates, Fat, and protein on Sports Performance.
e. **Nutrition and weight:** Concept of BMI (Body Mass Index), Obesity, its hazards, dieting versus exercise for weight control, maintaining a Healthy Lifestyle, Weight management program for a sporty child, Role of diet and exercise in weight management, Design a diet plan — exercise schedule for weight gain and loss.

viii) OFFICIATING AND COACHING

a. **Officiating:** Meaning, importance, and principles of officiating. Qualities and qualifications of a good official, Duties of Officials, System of officiating in games, and Rules of various Games (i.e., Swimming, Gymnastics, 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.
b. **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. Officiating in Track and Field.

Part B: CONCERNED SUBJECT -II PHYSICAL EDUCATION PEDAGOGY

i) SPORTS PSYCHOLOGY

Meaning – Scope – Need and Importance: Introduction to psychology – sports psychology Meaning, Definition, Nature, need, and Importance of sports psychology in physical education- Development of sports psychology in India and Abroad - Emotions – Meaning and Definition of emotions - types of emotion, The effect of emotion on performance, reasons, and control of emotions in sports.

Personality and Motivation: Personality – meaning, definition, nature of personality – types of personality – classification of personality – well-built sports personality. Motivation – nature, meaning, definition of motivation – need and importance of motivation in sports and games – types of motivation - Intrinsic and extrinsic motivation and sports performance.

Emotional States and Aggression: Emotional states: Aggression – hostility – Aggression, meaning, definition, and nature of aggression – role of aggression in sports – types of aggression – degrees/models of aggression – reasons and control of aggression in sports.

Anxiety and Stress: Anxiety- Meaning, definitions, nature, role of anxiety in sports competitions – types of anxiety – reasons and control of anxiety in sports

Stress – Meaning and definitions - physical stress – mental stress – reason and control of stress with physical activity and exercise.

Emotional status – Arousal and Activation: Emotional status – Arousal and Activation – meaning, definitions – need and importance of arousal and activation in sports competitions – episodes of activation – drive theory – stages of drive theory – role of drive theory in sports performance - recurrent emotions and cognitive accompaniment to activation in sports.

ii) RESEARCH METHODS IN PHYSICAL EDUCATION AND SPORTS SCIENCES

Introduction: Meaning, Definition, Nature, Scope, and importance of research in Physical Education. Classification of Research: Basic, Applied, and Action Research, Location of Research Problem, Criteria for selection of a Research problem, and Qualities of a good researcher.

Methods of Research: Descriptive Methods of Research: Survey, Case study. Historical Research, Steps in Historical Research, Sources of Historical Research: Primary Data and Secondary Data, Historical Criticism - Internal and External.

Experimental Research: Experimental Research: Meaning, Nature and Importance, Variable: Definition, Types of Variables, Experimental Design: Single Group Design, Reverse Group Design, Repeated Measure Design, Static Group Comparison Design, Equated Group Design and Factorial Design.

Sampling: Meaning and Definition of Sample and Population. Types of Sampling: Probability Methods: Systematic Sampling, Cluster sampling, Stratified Sampling, Area Sampling and Multistage Sampling. Non-Probability Methods: Convenience

Sampling, Judgment Sampling, and Quota Sampling.

Research Proposal and Report: Chapterization, of Thesis / Dissertation: Front Materials, Body of Thesis, Back materials, Method of Writing Research Proposal, Thesis / Dissertation: Method of writing an abstract, full paper for presenting at a conference, and publishing in journals, Mechanics of writing Research Report, Footnote, and Bibliography.

iii) EDUCATIONAL TECHNOLOGY IN PHYSICAL EDUCATION AND SPORTS

Concept, Nature, and Scope of Educational Technology: Forms of educational technology: teaching techniques and Scope of Educational technology, instructional technology, and behavioural technology; Transactional usage of educational technology: integrated, complementary, supplementary stand-alone (independent); programmed learning stages; media application stage, and computer application stage.

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 the instructional system: Communication: Modes, Barriers, and Process of Communication.

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 the Development of Self Learning Material.

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: Telecasts and Video recordings, Strengths and limitations, Use of Television and CCTV in instruction and Training, Video Conferencing, SITE (Satellite Instructional Television, Experiment) experiment, countrywide classroom project, and satellite-based instructions. Use of animation films for the development of children's imagination.

New Horizons of Educational Technology: Recent innovations in the area of ET interactive video - Hypertext, video-texts, optical fiber technology, laser disk, computer conferencing. 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 Educational Technology in Physical Education.

iv)SPORTS TECHNOLOGY

Sports Technology: Meaning, definition, Importance of technology in Sports, General Principles and purpose of instrumentation in sports, Technological impacts on sports.

Science of Sports Materials: Adhesives- Nano glue, nanomoulding technology, Nano turf. Footwear production, Factors and applications 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 modelling foam.

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. Use of computers and software in Match Analysis and Coaching.

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: Running, Throwing, and Jumping Events. Protective Equipment: Types, Materials, and Advantages. Sports equipment with nano technology: Advantages.

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 floodlight and measuring luminous. Video Coverage: Types, Size, Capacity, Place, and Position of Camera in Live coverage of sporting events. Use of computers and software in material analysis and coaching.

v) COMMUNICATION TECHNOLOGY AND JOURNALISM IN PHYSICAL EDUCATION AND SPORTS

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, challenges in integrating ICT in Physical Education. and Education Scope of ICT: Teaching Learning Process, Publication Evaluation, Research and Administration. ICT Integration in the Teaching and 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.

Fundamentals of Computers: Characteristics, Types & Applications of Computers, Hardware and of Computer: Input, Output & Storage Devices, Software of Computer: Concept & Types, Computer Memory: Concept & Types of Viruses, their Management, Concept, Types & Functions of Computer Networks, Internet and its Applications, Web Browsers & Search Engines, Legal & Ethical Issues. MS Office Applications **-** MS Word and: Main Features & its Uses in Physical Education, MS Excel and MS Access - Main Features & their Applications in Physical Education, MS Access: Creating a Database, Creating a Table, Queries, Forms & Reports on Tables

and their Uses in Physical Education, MS PowerPoint: Preparation of Slides with Multimedia Effects and MS Publisher: Newsletter & Brochure.

E-Learning & Web-Based Learning: E-Learning: Meaning and Definition – Need and importance of E - learning in physical Education and sports Web-Based Learning: Meaning, importance, and types of web-based learning in physical education and sports Visual Classroom: Visual thinking: Visual learning – benefits of the visual classroom in physical education and sports

Sports Journalism: Meaning and Definition of Journalism, Ethics of Journalism – Canons of Journalism – Sports Ethics and Sportsmanship –Reporting Sports Events. National and International Sports News Agencies. Mass Media in Journalism: Radio and TV Commentary –Running commentary on the radio –Sports expert's comments. Role of Advertisement in Journalism. Sports Photography: Equipment-Editing–Publishing.

Report Writing on Sports: Brief review of Olympic Games, Asian Games, Commonwealth Games, World Cup, National Games and Indian Traditional Games. Preparing a report of the Annual Sports Meet for Publication in the Newspaper. Organization of Press Meet. Sports organization and Sports Journalism –General news reporting and sports reporting.

Methods of editing a Sports report. Evaluation of Reported News. Interview with an elite Player and Coach. Practical assignments to observe the matches and prepare a report and news of the same; visit to the News Newspaper office and the TV Centre to know various departments and their work. Collection of an Album of newspaper cuttings of sports news.

vi) TESTS, MEASUREMENT, AND EVALUATION

Introduction - Meaning and Definition of Test, Measurement, and Evaluation. Need and Importance of Measurement and Evaluation. Criteria for Test Selection: Scientific Authenticity, Administrative Considerations, and Educational Applications. Scientific Authenticity: Validity, Reliability, Objectivity, Norms, Duplicate Forms, and Standard Directions.

Physical Fitness Tests: Physical Fitness: Meaning and Definition, Physical Fitness Tests: AAHPER, JCR Tests. Roger's Physical Fitness Index. Cardiovascular test: Harvard step test, Cooper's 12-minute run/walk test.

Motor Fitness Tests: Meaning and Definition of Motor Fitness, Motor Fitness Tests; Indian Motor Fitness Test, Oregon Motor Fitness Test. Motor Ability: Meaning, Definition. Motor Ability Test: Barrow Motor Ability Test, Newton Motor Ability Test. Muscular Fitness: Kraus Weber Minimum Muscular Fitness Test.

Anthropometric and Aerobic-Anaerobic Tests: Physiological Test-Aerobic Capacity: Bruce Treadmill Test Protocol, Beep test. Anaerobic Capacity: Margaria-Kalamen test, Anthropometric Measurements: Method of Measuring Height: Standing Height, Sitting Height. Girth: Arm, Waist, Hip, Thigh. Skin Folds: Chest, Abdomen, Midthigh, Triceps, Iliac Crest.

Skill Tests: Specific Sports Skill Test: Badminton: French Stalter Short Service Test, Miller Wall Volley Test. Basketball: Knox, Johnson Basketball Test. Hockey: Henry Friedel Field Hockey Test, Schmithal's Field Hockey Test, Volleyball: Russel Lange Volleyball Test, Brady Volleyball Test. Football: Johnson Soccer Test, McDonald Volley Soccer Test. Tennis: Dyer Tennis Test, Broer Miller Test.

vii) SPORTS MANAGEMENT

Meaning and Definition of Sports Management: Meaning – Definition – Scope and concept of management – need and scope of sports management, levels of management – Principles of management – span of control – unity of command.

Organization of Physical Education and Budget: Scheme of Physical Education Programs in schools, colleges, and universities – Districts – States – National -

Organization Chart at the school/college level. Budget – Sports Budget - Games Fund – Sources of Income and Expenditure – Approved items of expenditure – Rules for Utilization of Games Fund for Physical Education Programme – Budget preparation and planning in schools and colleges.

Maintenance of Records and Equipment, etc: Maintenance of Records and Registers for Physical Education programme and their care maintenance of games equipment - administration and maintenance of track and field – swimming pool – Gymnasium – play grounds.

Leadership: Meaning and definition of leadership – types of leadership – theories of leadership – qualities and qualifications of a leader, sports leadership.

Organization of sports events (Intramurals and extramurals): Intramurals – meaning and definitions – need and importance of intramurals – annual sports day - Writing of circulars, notification, and invitations – publicity & public relations – selecting and fixing of officials – monitoring and write-ups – press – sponsoring teams – writing reports and maintaining records. Extramural – meaning and definitions – need and importance of extramural – Intercollegiate tournaments – team selections – awards and rewards

Viii) SCIENTIFIC PRINCIPLES OF SPORTS TRAINING

Introduction: Sports Training: Definition – Aims, Characteristics, Principles of Sports Training. Load: Definition, Components of load. Over Load: Definition, Causes of Over Load, Symptoms of Overload, Remedial Measures for over load – Super Compensation. Recovery. Detraining and Retraining.

Components of Physical Fitness: Strength: Meaning, types - Isometric, Isotonic, and Iso kinetic exercises – Factors determining strength – Methods to improve strength. Speed: Meaning – types – Factors determining speed – Methods to improve speed. Endurance: Meaning – types – Factors determining endurance – Methods to improve Endurance.

Flexibility and Coordination: Flexibility: Meaning – types - Factors determining flexibility – Methods to improve flexibility- Coordination: Meaning, types - Factors determining coordination – Methods to improve coordination.

Methods of Sports Training: Aerobic training, Anaerobic training, Weight training, Fartlek Training, Interval training, Plyometric training, Resistance training, Pressure training, High Altitude training, Functional training, Repetition method of training, and Transfer of training effects.

Periodization: Training Plan: Micro, Meso, and Macro Cycles. Short Term Plan and Long-Term Plans - Periodisation: Meaning, Single, Double and Multiple Periodisation, Phases of Periodisation, Preparatory Period, Competition Period and Transition Period. Top form, Tapering performance. Training schedules.