

**B.Ed. - First Year Curriculum Framework  
I - Theory Components**

<b>Group - A: Perspectives in Education</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>Internal Mark</b>	<b>External Mark</b>	<b>Total Mark</b>
FPEPL	Psychology of Learners and Learning	30	70	100
FPEEC	Education in Contemporary India	30	70	100
FPEES	Education and Socialisation	30	70	100
FPEET	Essentials of Teaching and Learning	30	70	100
<b>Sub - Total</b>		<b>120</b>	<b>280</b>	<b>400</b>
<b>Group - B : Curriculum and Pedagogic Studies</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>Internal Mark</b>	<b>External Mark</b>	<b>Total Mark</b>
FCPTA	Pedagogy of Tamil : Part - I	30	70	100
FCPEN	Pedagogy of English: Part - I			
FCPUR	Pedagogy of Urdu: Part - I			
FCPMA	Pedagogy of Mathematics : Part- I			
FCPCS	Pedagogy of Computer Science : Part- I			
FCPPS	Pedagogy of Physical Science : Part- I			
FCPBS	Pedagogy of Biological Science : Part- I			
FCPHI	Pedagogy of History : Part - I			
FCPGE	Pedagogy of Geography : Part- I			
FCPEC	Pedagogy of Economics: Part- I			
FCPCA	Pedagogy of Commerce and Accountancy : Part- I			

FCPHS	Pedagogy of Home Science : Part- I			
FCPSS	Pedagogy of Social Science : Part- I*			
FCPAL	Assessment of Learning	30	70	100
<b>Sub - Total</b>		<b>60</b>	<b>140</b>	<b>200</b>
<b>Group - C: Optional Course</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>Internal Mark</b>	<b>External Mark</b>	<b>Total Mark</b>
FEPCY	Yoga, Health and Physical Education	30	70	100
FEPCE	Environmental Education	30	70	100
FEPCI	Information and Communication Technology in Education	30	70	100
<b>Sub - Total</b>		<b>90</b>	<b>210</b>	<b>300</b>
<b>Grand Total</b>		<b>270</b>	<b>630</b>	<b>900</b>

**NOTE:\*** The Pedagogy of Social Science is mandatory for the Student teachers who have studied the following main subjects.

1. Philosophy
2. Psychology
3. Sociology
4. Logic &
5. Political Science



4	<b>Micro Teaching Records</b> <b>a) Micro Teaching Record : Level - I</b> i) Practicing any 5 skills pertaining to the basic subject of the student - teacher ii) Observing and rating of any 5 Peer's Microteaching lessons pertaining to the basic subject of the student – teacher <b>b) Micro Teaching Record : Level -II</b> i) Practicing any 5 Skills related to the basic Subject of student - teachers ii) Observing and rating of Peer's any 5 Microteaching lessons related to the basic Subjects of the Student-teachers	15	15	30
5	<b>Projects on Identifying and Analysing the Diverse Needs of Learners ( Below average, Average, Above average, Gifted and Differently abled )</b>  a) Level - I b) Level – II	15	15	30
6	<b>Preparation and Contribution ( after passing the first year practical examinations) of Teaching and Learning Materials (TLM) to Co-operative Schools</b> (a) Level - I (10 TLM pertaining to the basic subject of the student - teacher (b) Level - II (10 TLM pertaining to the basic Subject of the student-teachers)	20	20	40
7	<b>Reflective Record on Continuous and Comprehensive Evaluation (CCE) Practiced in the Co - operative Schools</b> Level - I or Level - II (This activity shall be related to pertaining to the basic subject of the student - teacher	-	-	20
8	<b>Test and Measurement Records (Based on the Marks available in the School Mark Registers)</b> a) Level - I b) Level – II	20	20	40
9	<b>Environmental Education Record</b> (Student - teachers need to assess and write a detailed report on the environmental context of the Co – operative Schools)	-	-	20

10	<b>Case Study Record – Individual Level – II</b>	-	20	20
11	<b>Psychology Experiment Record</b> (3-Paper-Pencil Tests and 3 Experiments out of the list given under the psychology experiments )	-	-	50
12	<b>Reading and Reflecting on School Textbooks</b> Level – I or Level – II (Reading and Reflecting the Textbooks of the student-teacher basic Subject)	-	-	20
13	<b>Citizenship training camp Record</b> (Camp should be organised for a period of 5 days with prior approval from the Tamil Nadu Teachers Education University)	-	-	20
14	<b>Educational Technology Record</b>	-	-	20
15	<b>Yoga, Health and Physical Education Record</b> (Observing and recording the Yoga, Health and Physical Education activities conducted in the colleges of Education and also teaching and practicing 1 activity related to Yoga, Health and Physical activity respectively at level-1 )	-	-	25
16	<b>Coursewise Tasks and Assignment Record</b> <b>Practicum / Field work related Tasks and Assignments for each Theory Courses carry the weightage of 25 marks.</b> List of Tasks and Assignments to be carried out by the Student-teachers based on the Suggested Activities are given at the end of the Syllabus of each Theory Course. Course wise Tasks and Assignments are to be submitted in the form of separate Records at the time of Practical Examinations	-	-	<b>9 Theory X 25 Marks =225</b>
				<b>600</b>
	<b>NOTE :</b> (a) <b>Level - I refers to Standard VI to VIII (Upper Primary), compulsory for all student - teachers. For activities pertaining to Level - I, student-teachers shall select either Standard VI or VII or VIII as per the requirement of the Co-operative schools.</b> (b) <b>Level - II refers to Standard IX &amp; X (Secondary) for UG qualified student - teachers / Standard XI &amp; XII ( Higher Secondary / Senior Secondary) for PG qualified student - teachers.</b>			

**TAMIL NADU TEACHERS EDUCATION UNIVERSITY**

**B.Ed., DEGREE PROGRAMME**

**Subject Code: FPEPL**

**PSYCHOLOGY OF LEARNERS AND LEARNING**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- acquire knowledge about the approaches to educational psychology;
- comprehend the concept of growth and development and its theories;
- gain knowledge about the concept of learning and its related theories;
- identify the various types of memory;
- understand motivation and its influence on human behaviour;
- understand in-depth concepts of intelligence and creativity;
- understand the concepts and theories of personality;
- understand the concept of individual differences;
- identify the various adjustment mechanisms; and
- understand the types of guidance and counselling programme.

**UNIT – I: INTRODUCTION TO EDUCATIONAL PSYCHOLOGY**

Psychology: Meaning - Branches of Psychology - Methods of Study in Psychology - Schools of Psychology: Structuralism, Psychoanalysis, Behaviourism, Humanism, Gestalt Psychology and its implications - Educational Psychology: Meaning, Scope and Significance.

**UNIT – II: GROWTH AND DEVELOPMENT OF THE LEARNER**

Growth and Development: Meaning - Factors influencing Growth and Development - Stages of development and its characteristics - Adolescence problem and remedies - Dimensions of development: Physical, Cognitive, Social, Emotional and Moral - Theories of

development: Piaget's Cognitive Development - Freud's Psycho-sexual development and Erikson's Psycho-social Development.

### **UNIT – III: LEARNING**

Learning: Concept, Principles and Factors affecting Learning - Theories of Learning and its Educational Implications: Thorndike's Connectionism, Pavlov's Classical and Skinner's Operant Conditioning, Learning by Insight, Hull's Reinforcement Theory - Metacognition: Meaning, Elements and its Instructional strategies - Learning Styles: Audio, Visual and Kinesthetic - Teacher's role in changing, strengthening and sustaining learning styles.

### **UNIT – IV: ATTENTION AND MEMORY**

Attention: Meaning, Nature, Distraction, Inattention, Divided attention and Span of Attention - Determinants of Attention - Sensation and Perception - Law of perception: Errors in perception (Illusion and Hallucination) - Concept Formation: Types and Theories - Memory: Meaning, Types of Memory, Storage System of Memory and Strategies for Improving Memory - Forgetting: Meaning, Causes, Theories of Forgetting - Memory Disorder.

### **UNIT – V: MOTIVATION AND GROUP DYNAMICS**

Motivation: Definition, Types of Motivation, Factors influencing Motivation - Theories of Motivation and its Educational Implications: Maslow's Hierarchy of Needs, McClelland's Theory of Achievement Motivation - Level of Aspiration - Promoting Achievement Motivation among Learners - Group Dynamics: Meaning, Definition, Types and Characteristics - Transactional Analysis (TA).

## **UNIT – VI: INTELLIGENCE AND CREATIVITY**

Intelligence: Meaning, Definition and Types - Theories of Intelligence: Spearman Two factor, Thurston Group Factor, Thorndike Multi-factor, Guilford Structure of Intellect, Gardner Multiple Intelligence - Emotional Intelligence: Theories of Emotional Intelligence - Intelligence Quotient - Nature and Types of Intelligence Test - Uses of Intelligence Tests - Creativity: Concept, Factors and Process - Strategies for fostering creativity.

## **UNIT – VII: PERSONALITY**

Personality: Meaning - Determinants of personality: Type theory, Trait theory and Development theory - Integrated Personality - Assessment of Personality: Projective, Non-Projective techniques and Dream analysis.

## **UNIT – VIII: INDIVIDUAL DIFFERENCES**

Concept of Individual Differences - Role of Heredity and Environment in individual differences - Nature of Gifted and Disabled children - Slow Learners: Dyslexia, Dyscalculia and Dysgraphia - Educational programmes for Differently Abled students.

## **UNIT – IX: ADJUSTMENT AND MENTAL HEALTH**

Adjustment: Meaning - Adjustment Mechanisms - Adjustment problems of Children and Adolescent - Causes of Maladjustment: Conflict and Frustration - Differences between adjusted and maladjusted adolescents - Criteria for good mental health - Concept of mental hygiene - Techniques of stress management - Meditation and Violence prevention programmes.

## **UNIT – X: GUIDANCE AND COUNSELLING**

Guidance and Counselling: Nature, principles and scope - Types: Personal, Educational, Social, Vocational, Avocational and Health - Its implications in the global context - Guidance Services: Orientation service - Educational and occupational information service -

Counselling service, placement and follow up - service - Guidance for special children: Slow learners, children with mental retardation and gifted - Juvenile delinquents.

**SUGGESTED ACTIVITIES:**

- Observe and inquire the process of learning by children from different backgrounds and record your observations.
- Prepare an album of any 10 psychologists and their contributions to learning process.
- Visit any two Special Education Institutions and write a report on the methods of teaching.
- Visit anyone of the Mental Health Institutes/Deaddiction Centers and prepare a detailed report about its services.
- Visit anyone of the Vocational Education Centres and prepare a report on the Job-oriented courses offered to the differently abled students.

**PSYCHOLOGY EXPERIMENT \***

<b>Sl. No.</b>	<b>GROUP – A (Any Three) (Paper-pencil Tests)</b> (Tests to be administered with appropriate standardized tools on the following aspects)	<b>Sl. No.</b>	<b>GROUP – B (Any Three) (Apparatus Tests)</b>
1.	Stress Management	1.	Finger Dexterity Test
2.	Adjustment	2.	Span of Attention
3.	Creativity	3.	Insight Motor Learning - Maze Learning
4.	Intelligence	4.	Habit Interference
5.	Interest	5.	Division of Attention
6.	Mental Health	6.	Electrical Mirror Drawing
7.	Personality	7.	Level of Aspiration
8.	Self - Concept	8.	Problem-Solving

\*The Psychology Experiment Record is to be submitted during the Practical Examinations.

**SUGGESTED READINGS:**

Agarwal. (2004). *Psychology of learning and development*. New Delhi: Shipra Publications.

Allen, B. P. (2006) (5<sup>th</sup> ed.). *Personality theories: Development, growth and diversity*. Needham Heights, MA: Allyn and Bacon.

Alexander, N. (2003). *Global trends in mediation*. New York: Walters Kluwer Law and Business.

Berk, L. E. (2010) (8<sup>th</sup> ed.). *Child development*. New Delhi: PHI Publications.

Bhatia, K.K. (2003). *Bases of educational psychology*. New Delhi: Kalyani Publishers.

Burger, J.M. (2010) (8<sup>th</sup> ed.). *Personality*. KCA: Wordsworth Publishing.

Boulle, L, Jones and J. Goldblatt, V. (1998). *Mediation: Principles, process, practice*. Wellington: Butterworth.

Cloninger, S.C. (2008) (5<sup>th</sup> ed.). *Theories of personality: Understanding persons*. Englewood Cliffs, New Jersey: Prentice Hall

Crowne, D. P. (2010) (2<sup>nd</sup> ed.). *Personality theory*. New York: Oxford University Press.

Chauhan, S.S. (2002). *Advanced educational Psychology*. New Delhi: Vikas Publishing House.

Dandapani (2002) (2<sup>nd</sup> ed.). *Advanced educational psychology*. New Delhi: Anmol Publication.

Dash (2003). *Guidance services in schools*. New Delhi: Fominant Publishers and Distributors.

Dash. M, Muralidhar. (2009). *Educational psychology*. (Reprinted). New Delhi: Deep & Deep Publications.

Douglas. J. Hacker, John Dunlosky, Arthur C. Graesser. (Eds.) (1998). *Metacognition in educational theory and practice*. New Jersey: Lawrence Erlbaum Associates.

Eyler, Janet and Giles, Dwight. (1996). *A practitioners guide to reflection in service learning*. Nashville: Vanderbilt University.

Gibson Robert, L and Michel Marianne, J. (2005). *Introduction to counselling and guidance*. New Delhi: Prentice Hall India.

Harry. C, Morgan (1997). *Cognitive styles and classroom learning*. Westport CT: Praeger Publisher.

Mangal, S.K. (2002). *Advanced educational psychology*. New Delhi: Prentice Hall of India.

Matthews, G. Deary, I. J and Whiteman, M.C. (2009) (2<sup>nd</sup> ed.). *Personality: Theory and research*. New York: Guilford Publications.

Narayan Rao, S. (1990). *Educational psychology*. New Delhi: Wiley Easter.

Riding, R. (1998). *Cognitive styles and learning strategies: Understanding style differences in learning and behavior*. London: David Fulton Publishers.

Schunk, D.H. (2007) (5<sup>th</sup> ed.). *Learning theories: An educational perspective*. New York: Prentice Hall of India.

Shrivastava. (2003). *Principles of guidance and counselling*. New Delhi: Kanishka Publishers.

Skinner, C.E. (2003) (4<sup>th</sup> ed.). *Educational psychology*. New Delhi: Prentice Hall of India.

Sprinth Hall Norman, A and Sprinth Hall, Richar, C. (1990) (5<sup>th</sup> ed.). *Educational psychology: A developmental approaches*. New Delhi: McGraw Hill.

Singh Agya Jit. (2011) (1<sup>st</sup> ed.). *Introducing the learner and learning process*. New Delhi: Akash Publishers.

Vygotsky, L.S. (1962). *Thought and language*. Cambridge, MA: MIT Press

Vygotsky, L.S. (1978). *Mind in society*. MA: Harvard University Press

Wertsch, J.V. (1985). *Cultural, communication, and cognition: Vygotskian perspectives*. New York: Cambridge University Press.

Weiten, W and Lloyd, M.A. (2007). *Psychology applied to modern life: Adjustment in the 21<sup>st</sup> century*. New Delhi: Akash Publications.

Woolfork, A. (2009) (9<sup>th</sup> ed.). *Educational psychology*. Singapore: Pearson Education.

**Subject Code: FP**  
**EDUCATION IN CONTEMPORARY INDIA**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- acquire knowledge of education ;
- understand the eastern and western schools of philosophy;
- understand the concept of knowledge;
- understand the thrust areas of education;
- identify the role and functions of central and state organizations education;
- understand the constitutional provisions for education;
- describe the concept and importance of teacher's autonomy and accountability;
- analyse the various psycho-social issues related to students;
- explain the integrated and holistic approach of education for value inculcation; and
- elucidate the objectives of the various teacher education programmes.

**UNIT – I: NATURE AND PROCESS OF EDUCATION**

Education: Meaning, Definition, Purpose and Nature – Concept of Education - Functions of Education - Types of Education: Formal, Informal and Non-formal - Philosophy: Concept, Meaning and Definition - Branches of Philosophy - Relationship between Philosophy and Education.

**UNIT – II: EASTERN AND WESTERN SCHOOLS OF PHILOSOPHY**

Eastern Schools of Philosophy: Vedanta, Bhagavat Gita, Jainism, Buddhism and their Educational Implications - Eastern Philosophical Thought: Swami Vivekananda, Mahatma Gandhi, Rabindranath Tagore,

Sri Aurobindo, J.Krishnamurthy and Thiruvalluvar - Western Schools of Philosophy: Idealism, Naturalism, Realism, Pragmatism, Existentialism and Constructivism and its Educational Implications. Western Philosophical Thought: Rousseau, Froebel, John Dewey, Montessori and Russell.

### **UNIT – III: THEORY OF KNOWLEDGE**

Knowledge: Meaning - Three Conceptions of Knowledge: Knowledge for Practice, Knowledge in Practice and Knowledge of Practice – Theory of Knowledge: Empiricism, Rationalism, Experimental and Yogic theory – Sources of Knowledge: Sensory Experiences, Reasoning, Authority and Intuition - Facets of knowledge : local and universal- concrete and abstract – theoretical and practical – contextual and textual – Forms of Knowledge : Intuitive knowledge – Demonstrative knowledge – Sensitive Knowledge – Experiential Knowledge – Logical Knowledge – Revealed Knowledge – Digital Knowledge , Difference between information, knowledge and wisdom.

### **UNIT – IV: THRUST AREAS OF EDUCATION**

Liberal and Vocational Education - Human Rights Education- Peace Education - Environmental Education –Population Education - Inclusive Education - Education for National and International understanding - Work Experience - Social Aspects of Education: Women Education, Education for deprived and Minority people and Education for Minority - Education for Sustainable Development.

### **UNIT – V: CENTRAL AND STATE ORGANISATIONS OF EDUCATION**

Central Government Organizations: MHRD - UGC – AICTE – CABE – NUEPA – NCERT – NCTE – NAAC - RCI - State Government Organisations: DSE - SCERT – SIEMAT - University Departments of Education – DIET – BRCS - CRCs - Innovative Programmes for

Strengthening Quality and Quantity of Education: OBBS, DPEP, SSA, RMSA, and RUSA. International Organisations: ILO, WHO, UNO and UNICEF.

## **UNIT – VI: EDUCATION IN THE INDIAN CONSTITUTION**

Education in Concurrent List – Directive Principles: Article- 21A – Universalisation of Elementary Education - Wastage and Stagnation – Brain Drain and Brain Gain – Right to Education – Constitutional Amendments: 42<sup>nd</sup> and 86<sup>th</sup> Amendments – Right to Education Act (2009) – Equitable Standard Education – University Education Commission (1948-49) - Secondary Education Commission (1952 -53) – Kothari Commission (1964 – 66) – NPE(1968) – NPE (1986) – Acharya Ramamurthy Committee (1990) – POA (1992) – Prof. Yashpal Committee (1993 & 2009) – National Curriculum Framework (NCF) 2005 – Sachar Committee (2005 - 2006) - National Knowledge Commission (2006) – Justice Verma Committee (2012)

## **UNIT – VII: MODERN TRENDS IN EDUCATION**

Characteristics of Modern Indian Society – Impact of Globalization, Liberalization, Privatization, Urbanization, Modernization - Westernization and Digitalization on Education - Role of Teacher in the 21<sup>st</sup> century – Teacher Autonomy: Meaning and Types – Accountability: Meaning, Types and Functions of Accountability – Teacher Autonomy Vs Accountability – Digital divide and e-governance in Education.

## **UNIT - VIII: PSYCHO – SOCIAL ISSUES RELATED TO STUDENTS**

Absenteeism – Truancy – Delinquency – Violence – Drug Abuse – Smoking and Chewing – AIDS/HIV – Child Abuse – Bullying – Human trafficking – Orphans – Street Children – Child Labour.

## **UNIT – IX: VALUE EDUCATION**

Values: Concept and Meaning of Values – Types of Values - Committees and Commissions observations on Value Education - Theories of Values - Value Education in Schools- Personal Values and Code of Conduct for Teachers – Culture: Meaning and Definitions – Transmission and Transformation of Culture – Cultural Lag.

## **UNIT - X: TEACHER EDUCATION**

Teacher Education: Meaning, definitions and functions – Historical background of teacher education in India – Objectives of Elementary and Secondary Teacher Education Programmes – NCTE norms and standards for Elementary and Secondary Level – Teacher Education problems and its Solutions – Pre-service and In-service Teacher Education – Open and Distance Learning (ODL).

### **SUGGESTED ACTIVITIES:**

- Visit any one of the educational institutions based on practicing various philosophies and write a detailed report about it.
- Write and display Education related quotes in and around your institution.
- Prepare a picture album about best practices of the schools
- Organize an Essay Competition for protecting and safeguarding our Eco- System and submit a write up about it.
- Prepare a detailed report on Code of Conduct observed by the School Teachers.

## **SUGGESTED READINGS:**

Adishesiah, M.S. (1978). *Report of the national review committee on higher secondary education with special reference to vocationalisation*. New Delhi: Govt. of India.

Aggarwal, J.C. (2009). *Recent developments and trends in education*. New Delhi: Shipra Publications

Atkin, J. (1996). *Values and beliefs about learning to principles and practice*. Seminar Series no. 54. Melbourne: Incorporated Association of Registered Teachers of Victoria.

Bhardwaj, I. (2005). *Value-oriented education*. *Journal of Value Education*, 5, 9-24.

Choudhuri, Indranath. (2005). Promoting value education through children's literature. *Journal of Value Education*. 5, 29-36.

Dewey, John. (2010). *Essays in experimental logic*. Delhi: Aakar Books

Durant, Will. (1966). *The pleasures of philosophy*. New York: Simon and Schuster Publishers.

Gilbert, J. (2005). *Catching the knowledge wave? The knowledge society and the future of education*. Wellington: NZCER Press.

Iida, A. (2009). Teacher autonomy and professional teacher development: Exploring the necessities for developing teacher autonomy in EFL Japanese Contexts. *Asian EFL Journal*. 35.

Krishnamurthi, J. (1994). *Education and the significance of life*. India: Krishnamurthi Foundation.

Loughran, J. (2006). *Developing a pedagogy of teacher education: Understanding teaching and learning about teaching*. London: Routledge.

McGarry, D. (1995). *Learner autonomy: The role of authentic texts*. Dublin: Simon publishers.

MHRD. (1993). *Learning without burden*. New Delhi: Government of India.

NCERT. (2005). *National curriculum framework*. New Delhi: NCERT

Njayarkulam, K. (2003). *Need for peace and value education to promote inter-religious cooperation*. In K.P. Joseph (Ed.), *Peace and value education: A creative response to consumerism and communalism: Dharma bharathi of holistic living*. Chennai: Vivekanandha Kendra prakashna Trust Publishers.

Ramos, R.C. (2006). *Considerations on the role of teacher autonomy*  
*Theoretical discussion papers*. Available online

<http://caljournal.files.wordpress.com/2010/12/2006>

Rainu Gupta. (2011). *Philosophical, sociological and economic bases of education*. Ludiana: Tandon Publications.

Robinson, V. and Lai, M. K. (2006). *Practitioner research for educators: A guide to improving classrooms and Schools*. Thousand Oaks, Calif.: Corwin.

Saraswati, Swami Satyananda. (2004). *Nine principles of upanishads*. Munger: Yoga publication Trust.

Stoll, L., Fink, D., and Earl, L. (2003). *It's about Learning (and it's about Time): What's in it for schools?* London: Routledge Falmer.

Swami Satprakashananda. (1995). *Methods of Knowledge according to Advaita Vedanta*. Calcutta: Advaita Ashrama Publication Department.

UNESCO. (1996). *Learning the Treasure within report to UNESCO of the international commission on education for the twenty-first century*. Paris.

**Subject Code : FPEES**  
**EDUCATION AND SOCIALIZATION**

**OBJECTIVES :**

At the end of the course, the student - teachers will be able to

- gain knowledge on the concept and meaning of education;
- understand the historical aspects of Indian education system;
- identify the various agencies of education and their role in society;
- appreciate education as a sub-system of Indian Society
- identify the different types of socialization and social change in the modern Indian society;
- understand the relationship between Culture and Education;
- comprehend the role of education in the societal context as well as cultural context;
- realise the Rights and Duties of the every citizen and
- understand the concept of self and social identity.
- understand the impact of LPG on Education.

**UNIT- I: EDUCATION AND SOCIETY**

Definition and meaning of Education – Functions of Education – Aims of Education – Factors influencing aims of education – Meaning of society – Social structure – Education as a Sub-system of society – Education as an investment – Characteristics of Education as a Sub-system – Education and its relationship with Indian social structure – Social organisation – Social ideals – School as a social demand for Education.

**UNIT- II: HISTORICAL REVIEW OF INDIAN EDUCATION SYSTEM**

Education in Ancient India – Taxonomy of Educational Objectives: Ancient Indian Approach: Concepts of Sravana, Manana and Nididhyasana - Aptavakyam Learning (Verbal Testimony) -Theory of learning and Ancient Philosophy – Definition: Mechanism – Steps in Aptavakyam learning – Characteristics of Aptavakyam learning – Educational implications of Aptavakyam learning – The cultural impact of Vedic Education in India.

### **UNIT- III: AGENCIES OF EDUCATION**

Formal, Informal and Non-formal agencies of Education – Parent Teachers Association – Extension activities – Utilizing community resources – Correspondence and Extension Education – Adult Education – Life-long learning – Open Distance Learning – E-learning – Mass media in Education: Role of radio, television, press media, motion picture and computers in Education.

### **UNIT- IV: THE INDIVIDUAL AND THE SOCIETY**

Society as the background of the moral life - Nature of society: The relation of the individual to the society– Individual: Mechanical view of society – Collectivism: Organic view of society – The idealistic view of society – The General Will and Common Good – The criterion of Social Progress: Egoism, Universalisation, Altruism, Individualism and Socialism – The individual and the State.

### **UNIT- V: BASIC CONCEPTS IN THE SOCIOLOGY OF EDUCATION**

Sociology: Micro-sociology and Macro-sociology and Sociology of Education –Socialisation: Meaning of socialisation, Sanskritization, Westernization and Modernization - Democracy: Meaning and Types and Principles of democracy – Functioning of the school on Democratic Principles and promotion of Democratic Values in the students - Equality: Meaning, definition and types of equality, Equality in the Constitution of India, Equality in Education - Authority: Meaning Definition of authority and Authority in Education.

### **UNIT –VI: EDUCATION IN THE SOCIETAL CONTEXT**

Social and Moral Institutions: The family, educational Institutions, Workshops, The Civil Community, Religious Organization and the State - Social Change: Types of Social Change – Impact of Societal Changes on the Educational System of India – Educational inputs for Social Change in India – Social Change in the Economic, Social and Cultural life of the people of India – Role of Education in promoting Social Mobility – Role of Universities in Societal Transformation.

## **UNIT- VII: EDUCATION IN THE CULTURAL CONTEXT**

Indian Culture and Tradition: Two-tier system of Indian Culture Values – Composite Culture of India – Material and Non Material culture – Culture - based Education: Culture as a system of Values – Blending Indians’ Heritage in Education, Role of Educational Institutions and Teachers in Preservation, Transmission and Advancement of culture – Work Culture: Interpersonal Competencies - Categories of Interpersonal competencies: Essential skills, Management skills, Leadership skills and Contextual skills – Life-Skill Education: Types of Life skills and Strategies for Life - skills Education.

## **UNIT –VIII: SOCIO – POLITICAL THEORIES**

Society and State: The State and Individual – The Ethical basis of State: General Will – The Ethical functions of the State – Theories of the State: Totalitarianism, Democracy, Individualism, Anarchism, Collectivism, Socialism and Communism and Sarvodaya – Indian Ethics: The four Supreme Ends of life - Ethics of Ahimsa - Rights and Duties: Nature of Rights and the Rights of Man – Determination of Duties – Indian Classification of Duties: Duty and Moral obligation - Education for Citizenship.

## **UNIT –IX: SOCIAL IDENTITY**

The Self: The concept of self, components of self, Self- focusing – Self-monitoring – Self-efficacy and Gender identity.

## **UNIT - X: INTERNATIONALISATION OF EDUCATION**

The Meaning of Liberalization, Privatization and Globalization (LPG) – Impact of LPG on Education – Internationalisation of Education – Exporting Education –The Issues of Globalisation – Establishment of Foreign Universities – Virtual University – Assessment and Accreditation of Universities.

## **SUGGESTED ACTIVITIES**

1. Study the Social Customs prevailing in the local community and submit a report on it.
2. Prepare a report on social diversities existing in the community and describe its root causes for such diversities.

3. Prepare a report on Educational programmes conducted by Television Channels.
4. Conduct a debate on the merits and demerits of LPG on Indian Education and submit a report on it.
5. Study the Social Stratification in a Village/ ward and prepare a report on it.
6. Prepare a list of Life skills required for students to be included in school curriculum and submit a report on it.

### **SUGGESTED READINGS:**

AIU, (2006). *Special Issues on Education and Indian Cultural Heritage*. New Delhi: University News 44 (05).

AIU, (2005). Role of Universities in Empowering Weaker Section of the Society. New Delhi: University News, 43, (47)

Bhattacharya and Srinivas, (1977), *Society and Education*. Calcutta: Academic Pub.

Bombwall, K.R. (ed.) (1968): *Aspects of Democratic Government and Politics in India*. New Delhi: Atma Rant & Sons

Bourdieu, P. & Passeron, J. (1977). *Reproduction in Education, Society and Culture*, London: Sage.

Dash, B.N, (2004). *Theories of Education and Education in the Emerging Indian Society*. New Delhi: Dormant Publishers and Distributers

Dewey, John (1963). *Democracy and Education*. New York: Mac Millan.

Dewey, John (1973): *The school and the society*. The University of Chicago Press.

Durkhiem, Emile (1956). *Education and sociology*. New York: The Free Press.

Government of India (1993): *Education For All: The Indian Scene Widening Horizons*. New Delhi: MHRD (Education)

Ezewo, E. (1983). *Sociology of Education*. Lagos, Longman.

Jadunath Sinha, (1994). *Manual of Ethics*. Kolkata: New Central Book Agency.

- Lee, (1972). *The world of Education Today and Tomorrow*, UNESCO Publications.
- Mohanty, J. (1987). *Democracy and Education in India*. New Delhi: Deep & Deep Publication.
- Mohanty, J. (1994). *Education for All (EFA)*. New Delhi: Deep & Deep Publication.
- Musgrave, P.W. (1983). *The Sociology of Education*. London: Harper and Row Publishers.
- Nitin Bhatnagar and Mamta Bhatnagar, (2012). *Effective Communication and Soft Skills*. Noida (U.P): Pearson Publications.
- Nieto, S. (1992). *Affirming Diversity: The Socio-political Context of Multicultural Education*. New York: Longman.
- Ottawa Y. A.K.C. (1962), *Education society*. Routeledge & Kegan.
- Prabhu, P.N, (1954). *Hindu Social Organisation*. Bombay: Popular Book Depot.
- Persons, Talcott (1952). *Social System*, U.S.A.: Free Press.
- Singh Yogendra, (1973). *Modernization of India*. New Delhi: Thomas Press Ltd.
- Srinivas. M.N, (1968). *Social Change in Modern India*. Bombay: Allied Publishers
- Yogendra K. Sharma (2012), *Foundations in Sociology of Education*. New Delhi: Kanishka Publishers.
- Weber, M. (1964). *The Theory of Social and Economic Organisation*. New York Press.
- William Lille, (1967). *An Introduction to Ethics*. New Delhi: Allied Publishers.

**Subject Code: FPEET**  
**ESSENTIALS OF TEACHING AND LEARNING**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- acquire the knowledge on the concepts, terms and procedures in teaching and learning;
- understand the principles and maxims of teaching;
- understand the tasks of teaching;
- acquire the knowledge on various theories of teaching;
- use various models of teaching;
- comprehend the instructional system;
- apply the knowledge of innovative methods and devices of teaching;
- develop skill of using different techniques of teaching;
- adopt innovative teaching strategies; and
- develop skills of effective teaching.

**UNIT-I: CONCEPTS OF TEACHING AND LEARNING**

Concept, Definition, Nature, Levels and Phases of Teaching and Learning- Teaching is an Art, Science and a noble Profession- Variables in Teaching - Relationship between Teaching and Learning- Modes of Learning: Enactive, Iconic and Symbolic modes of Learning - Types of Learning: Factual, Association, Conceptual, Procedural, Generalization, Principles and Rules, Attitudes, Values and Skills Learning – Domains of Learning: Cognitive, Affective and Conative Domain.

**UNIT-II: PRINCIPLES AND MAXIMS OF TEACHING**

General Principles of Teaching: Purposeful - Based, Paedo -Centered, Experience- Based, Activity-Centered and Evaluation - Based Teaching - Psychological Principles of Teaching - Maxims of Teaching.

### **UNIT-III: TASKS OF TEACHING**

Meaning - Definition -Variables - Phases: Pre - active, Inter-active and Post-active Phases- Levels of Teaching: Memory, Understanding and Reflective Levels.

### **UNIT-IV: THEORIES OF TEACHING**

Definition, Meaning, Nature, Need and Significance, and Scope- Theories of Teaching: (1) Formal Theory of Teaching: Communication Theory, Moulding Theory and Mutual Inquiry; (2) Descriptive Theory of Teaching: Gagne's Hierarchical Theory, Atkinson's Optimal Learning Theory and Bruner's Cognitive Theory.

### **UNIT-V: MODELS OF TEACHING**

Concept and Definition- Fundamental Elements of Teaching Models -Types of Teaching Models: (1) Information Processing Models-Bruner's Concept Attainment Model (2) Social Interaction Models- Glaser's Classroom Meeting Model (3) Personal Development Models- Roger's Non - directive Model (4) Behavior Modification Models- Training Model.

### **UNIT-VI: INSTRUCTIONAL SYSTEM**

System Approach: Concept, Meaning, Types and Steps in System Approach- Input-Process- Output Model of a System- Feedback based Model of System - Steps involved in the development of Instructional System- Role of Teacher in Instructional System.

### **UNIT-VII: METHODS AND DEVICES OF TEACHING**

Concept of Teaching Method - Categorization of Teaching Method: Lecture Method, Discussion Method, Team Teaching, Symposium, Panel Discussion, Seminar, Conference, Supervised Study and Tutorial Method. Concept of Teaching Devices- Categorization of Teaching Devices: Narration, Exposition, Description, Explanation, Questioning, Review and Assignment.

### **UNIT-VIII: TECHNIQUES OF TEACHING**

Concept of Technique-Categorization of Teaching Techniques-Teacher Dominant Techniques: Telling, Indoctrination, Guidance and Counselling, Drill and Demonstration- Student Dominant Techniques: Debate, Creative

writing, Library work, Project work, Field Trip, Problem Solving, Brain Storming, Colloquium, Self-Learning, Meaningful Learning, Programmed Instruction, Keller Plan and Computer Assisted Instruction (CAI) -Group activities involving Team Work: Group Interactive Sessions, Co-operative Learning, Collaborative Learning, Constructivist Learning, Group Investigation and Group Project.

### **UNIT-IX: TEACHING STRATEGIES**

Concept of Instructional Strategy- Evolving Instructional Strategy: Selection of Content to be taught, Description of Ability, Dimensions of Educational Goals, Preparation of a Table of Specifications, Prioritization of Goals, Specification of Instructional Objectives in behavioral terms, Deciding time duration, Selection of the appropriate method and Determining the most appropriate strategy. Innovative Teaching Strategies: Block Teaching, e-tutoring, Print Media, Electronic Media, Tele - Conference, Video Conference, Interactive Video, Cybernetics and Virtual Classroom.

### **UNIT- X: EFFECTIVE TEACHING**

Effective Teaching: Concept and Meaning- Teaching Competence and Skills: Meaning and Nature – Classification of Teaching Skills: Core Teaching Skill, Specific Teaching Skills and Target Group Specific Teaching Skills - Dimensions of Effective Teaching: Competency, Commitment and Performance Areas - Factors contributing Effective Teaching.

### **SUGGESTED ACTIVITIES**

- Conduct group discussions on innovative teaching strategies and prepare a report.
- Prepare a detailed report on different roles of a Teacher in Instructional System.
- Conduct a Brain storming session on issues and trends in classroom teaching and submit a report on it.
- Prepare Programmed Learning Material (Linear Method) for any one of the topics related to this course.
- Prepare a list of study habits prevailing among students of particular class

through interaction of students.

### **SUGGESTED READINGS**

Allen, D., & Kevin, R. (1969). Micro teaching. London: Wesley Publishing Corporation.

Bloom, B.S. (1956). Taxonomy of educational objectives handbook. New York: Longmans Group.

Chauhan, S.S.(1979). Innovations in teaching-learning processes. New Delhi: Vikas Publishing House.

De Cecco, J.P. (1964). Educational technology technique in programmed instruction. New York: Halt Reinhart &Winston Inc.

Derek, Rowntree.(1986).Teaching through self- instruction. London: Kogan Page.

Gagne, R.M.(1965).Educational objectives and human performance in learning and the educational process. Chicago: Rand Mac Nally &Co.

Gronlund, N.E.(1976).Measurement and evaluation in teaching. New York: Macmilan Co.

Jaya pillai, K.(1985).Effective teaching. Madurai: Madurai Kamarajar University.

Joyce., & Weil., (2004).Models of teaching. Prentice Hall of India.

Kulkarni, S.S. (1963). A hand book of programmed learning. Baroda: CASE M.S.University Publication.

Kulkarni, S.S.(1986).Introduction to educational technology. Bombay: Oxford and IBH Publishing Co.

Kumaraswamy Pillai, K.(1980). Curriculum, teaching and evaluation. Annamalainagar: Sivakami Printers.

Mager, R.F.(1962).Preparing objectives for programmed instruction. Palo Alto, Calif:Fearson Publishers.

Mangal, S.K. (1986). Fundamental of educational technology. Ludhiana: Prakash Brothers.

Mathew Thomas. (2009).Effective teaching. New Delhi: S.Chand and Company.

Miller, R.B.(1962).Analysis and specifications of behaviour for training.Pittsburgh: University of Pittsburgh Press.

NCTE.(1998).Competency based and commitment oriented teacher education for quality school education. New Delhi: NCTE .

Sampath, K.(1981). Introduction to educational technology. New Delhi: Sterling Publishing.

Siddiqui,M.H.,& Khan,M.S. (1991).Models of teaching: Theory and Practice . Delhi:Ashish Publishing House.

Sharma.(1982). Programmed instruction and instructional technology. Meerut: International Publishing House.

Sharma, Motilal.(1985).System approach: Its application in education. Bombay: Himalaya Publishing House.

Sharma, R.A.(1991).Technology of teaching. Meerut: R.Lall Book Depot.

**COURSE CODE: FCPTA**

**PEDAGOGY OF TAMIL**

**PART-1**

**தமிழ் கற்பிக்கும் முறைகள் (பகுதி-1)**

**நோக்கங்கள்:**

பாடப்பொருளைக் கற்றபின்பு மாணவ-ஆசிரியர்

- இடைநிலை, மேனிலை வகுப்புதமிழ்ப் பாடங்களின் கற்றல் நோக்கங்களை வெளிப்படுத்துவர்;
- தமிழ் கற்றல்-கற்பித்தலின் நோக்கங்களை எடுத்துரைப்பர்;
- பாடம் கற்பிப்புத் திட்டத்தைத் தயாரிக்க உரிய அணுகுமுறைகளைப் பின்பற்றுவர்;
- கலைத்திட்டத்தில் மொழியின் இடம் பற்றி எடுத்துரைப்பர்;
- துணைக்கருவிகளை முறையாகப் பயன்படுத்துவர்;
- மொழி, இலக்கியம் கற்பித்தலுக்கானபல்வேறு முறைகளைப் பயன்படுத்துவர்;
- மாணவர்களிடையே மொழித்திறன் வளர்க்கும் முறைகளை மேற்கொள்வர்;
- கற்றலில் மாணவர்களின் தேவை அறிந்துக் கற்பிப்பர்;
- வகுப்பறைத் திறன்கள் மேம்படுத்துதல் பற்றி எடுத்துரைப்பர்;
- இடைநிலைமேனிலைத் தமிழ்ப்பாடம் கற்பித்தலில் பொருத்தமான வளர்வறி, தொகுநிலை வினாக்களைத் தயாரிப்பர் .

**அலகு - I : பாடப்பொருள் பகுத்தாய்வு**

நிலை : 1 6 முதல் 8 ஆம் வகுப்பிற்கான தமிழக அரசால் பரிந்துரை செய்யப்பட்ட தமிழ் பாடநூல் பாடப்பொருளை பகுத்தாய்வு செய்தல்

நிலை : 2 9-10 ஆம் வகுப்புத் தமிழ்ப்பாடநூல்களை இளங்கலை மாணவர்கள் பகுத்தாய்தல். 11-12ஆம் வகுப்பு தமிழ் பாடநூல்களை முதுகலை மாணவர்கள் பகுத்தாய்தல்

(தமிழகஅரசால் பரிந்துரைக்கப்பட்ட நடைமுறையில் உள்ள பாடத்திட்டம்)

**அலகு - II : தாய்மொழிக் கற்பித்தலின் நோக்கங்களும் குறிக்கோள்களும்**

பொதுநோக்கங்கள் : வெளியிடும் கருவி - பட்டறிவைஎடுத்தியம்பல் - செயலாற்றல் - அறிவுகளஞ்சியவாயில் - கற்பிக்கும் வாயிலாக அமைத்தல் - அடிப்படை மொழித்திறன்கள் - இலக்கிய இன்பம் - படைப்பாற்றல் - கற்பனையாற்றல் - அழகுணராற்றலை வளர்த்தல் - சமூகப் பண்பாட்டுவளர்ச்சி - சமூகமரபுகளைப் பேணுதல் - வாழ்க்கைத் திறன்களைப் பெறுதல் - விழுமப் பதிவு. சிறப்புநோக்கங்கள் : ஆண்டர்சன் வகைமைநெறி: அறிவுக்களம் -உணர்வுக்களம் - செயற்களம்.

### அலகு - III : நுண்ணிலைக் கற்பித்தலும், பாடம் கற்பிப்புத்திட்டமும்

நுண்ணிலைக் கற்பித்தல்: பொருள் - விளக்கம் - படிநிலைகள் - தொடங்குதல் திறன் - விளக்குதல் திறன் - வினாக்கேட்டல் திறன் - பல்வகைத் தூண்டல்களைப் பயன்படுத்தும் திறன்- வலுவூட்டிகளைப் பயன்படுத்தும் திறன் - முடிக்கும் திறன் - கரும்பலகைப் பயன்பாடு - இணைப்புப்பாடம் - உற்றுநோக்கல் - அலகுத்திட்டம் - பாடங்கற்பிப்புத் திட்டம்: பாடம் கற்பிப்புத் திட்டதேவைகள்- கற்பிப்புத் திட்டதயாரிப்பு அணுகுமுறைகள்.

### அலகு - IV: கல்வி ஏற்பாடு- ஒருங்கிணைத்தலும் ஒழுங்கமைத்தலும்

கல்விஏற்பாடு: பொருள் - முதன்மைக் கூறுகளும் கொள்கைகளும் - செங்குத்து - கிடைமட்டம். கல்வி ஏற்பாட்டை ஒழுங்கமைக்கும் செயற்போக்கு - தேவைகளைப் பகுத்தாய்தல் - நோக்கங்கள்- பாட உள்ளடக்கத்தைத் தேர்ந்தெடுக்கும் தகுநிலைகள் . கற்றல் பட்டறிவை வழங்குதற்கான தகுநிலைகள் - பாடப்பொருளையும் கற்றல் பட்டறிவையும் மதிப்பிடல்.

### அலகு - V : கற்றல் கற்பித்தல் துணைக்கருவிகளின் மேம்பாடு

கற்றல் கற்பித்தலில் துணைக்கருவிகளின் நோக்கங்கள் - தன்மைகள்: எட்கர்டேல் அனுபவக்கூம்பு வீழ்த்துநிலைத் துணைக்கருவிகள்: டெசிஸ்டாஸ்கோப்(Techistoscope) - வானொலி- ஒலிப்பதிவுநாடா - தலைமேல்பிம்பம் படவீழ்த்தி(OHP), திரவப் படிக்கைக் காட்சி வீழ்த்தி (LCD) -தொலைக்காட்சி - ஒளிப்பதிவுநாடா - கணினி - நழுவவீழ்த்தி - இவற்றின் கற்பித்தல் பயன்பாடு. வீழ்த்தாநிலைத் துணைக்கருவிகள்: வரைவுப்படம் - உருவப்படம் - முப்பரிமாணப் படங்கள் -மின்னட்டை - சுழலட்டை - மாதிரிகள் . கற்பித்தல் மேம்பாடு: நிரல் வழிக் கற்றல் (Programmed Learning)- வகைகள். மொழிப் பயிற்றாய்வுக் கூடம் - பங்கும் பயன்பாடும் - கணினி நழுவங்கள் (PPT) - கணினித் துணையுடன் கற்பித்தல் (CAI) - விண்ணரங்கம் - கற்றல் கட்டகங்கள் -வகுப்பறைக் கற்பித்தல் மனவரைபடம். - கற்றல் கற்பித்தலுக்கான வலைத்தளங்களை அடையாளம் காணல்- மொழி கற்பித்தல், கற்றல் மேம்படுத்தப் பல்லாடகத்தின் பணிகள்.

### அலகு - VI : தமிழ் கற்பித்தல் செயலுத்திகள்

ஆசிரியர் மையக் கற்பித்தல்: விரிவுரை - உரையாடல் - வினாவிடை - தடைவிடை - நெட்டுரு - பங்கேற்பு முறைகள் - விதிவருமுறை - விதிவிளக்கமுறை. மாணவர் மையக் கற்பித்தல்: தனிப்பயிற்சி - மேற்பார்வை - ஒப்படைப்பு - கண்டறி முறை - விளையாட்டு - நடிப்பு - செயல்வழிக் கற்றல் - குழுக்கற்றல் - தானேகற்றல் - செயலாக்கக் கற்றல்

### அலகு - VII : கற்றல் - கற்பித்தலில் ஏற்படும் இடர்பாடுகள்

தமிழ் மொழி கற்பித்தலில் உள்ள இடர்பாடுகள் - புறநிலை: இயற்கைச் சூழல் - காலஅளவு. மொழி நிலை: எழுத்து - சொல் - தொடர் - வாக்கியம் - எழுதுநிலை: நிறுத்தற்குறியீடுகள் - கற்றலில் ஏற்படும் சிக்கல்களும் தீர்வுகளும், தனிமனித வேறுபாடு - பிறமொழிக் கலப்பு - வீட்டு மொழியின் தாக்கம்.

### அலகு - VIII: மாணாக்கரின் பல்வகைத் தேவைகள்

தமிழ்ப்பாடம் கற்பதில் மாணவர்களின் ஆர்வம் - மனப்பான்மை முதலியன - மீத்திறன், சராசரி, மெதுவாகக் கற்கும் மாணவர்கள், தமிழ் கற்கும்போது எதிர்கொள்ளும் இடர்பாடுகள் - குறையறி, குறைதீர், முன்னேற்ற நடவடிக்கைகள். உணர்வு , செயல் சாராத் திறன்கள்: பொருள் - விளக்கம் - ஆர்வம்: பொருள், வகைப்பாடு, வளக்குவைகள். மனப்பான்மை - விழுமங்கள்: பொருள் - முக்கியத்துவம் - விழுமங்களின் தோற்றுவாய்கள் - நிறுவனங்கள் , ஆசிரியர்கள் வாயிலாக பெறப்படும் விழுமங்கள் - இணைவுப்பாடங்களை ஒருங்கமைத்தலும் மேலாண்மை செய்தலும்.

### அலகு - IX : வகுப்பறை மேலாண்மை

வகுப்பறை மேலாண்மை: பொருள் - விளக்கம் - வகுப்பறை ஒருங்கமைத்தல் - கூறுகள் - வகுப்பறையில் கற்றல் சூழல் - ஆக்கமுடைய வகுப்பறைச்சூழல் - விளைபயன்மிக்க கற்றல் சூழலுக்கு உதவும் காரணிகள். நேர்த்தியான வகுப்பறைச் சூழலை ஏற்படுத்துதல் - கற்பித்தல் திறன் நுட்பங்கள் - வகுப்பறை ஒழுங்காக நடைபெற மேற்கொள்ளும் முறைகள்: தடுத்தல் - கட்டுப்படுத்தல் - வகுப்பறைச் செயல்பாடுகள் - வகுப்பறைப் பதிவேடுகளும் விதிகளும்.

### அலகு - X : கற்றல் கற்பித்தலில் மதிப்பீடு

தேர்வு: பொருள் - நோக்கங்கள் -கற்றலில் தேர்வு - அகவயம் - புறவயம் - அடைவுத் தேர்வு - குறையறி > முன்னறி சோதனைகள் - மதிப்பீடு: பொருள் - தொடர் முழுமை மதிப்பீடு (CCE): வளர்வறி - தொகுநிலை - வினாப் பண்புகள் - வினா வகைகள் - வகுப்பறை வினாக்கள் - மொழித் திறன்களை அளக்கும் வினாக்கள் - படிப்பு சார் அடைவுத் தேர்வு குறிக்கோள்களுக்கும் கற்றல் பட்டறிவுக்கும் அழுத்தம் தருதல் - வினாத்தாள் திட்டவரைவு - விடைத்தாள் அளவிடுதல் - புள்ளியியல் அளவைகள்: கூட்டுச் சராசரி, இடைநிலையளவு, முகடு, வீச்சு, திட்டவிலக்கம், சராசரிவிலக்கம், கால்மானவிலக்கம் , தரஒட்டுறவுக் கெழு, பியர்ஸன் இணைப்புக் கெழு. வரைபடங்கள்: பட்டை வரைபடம் - நிகழ்வு கோட்டு வரைபடம் - திரள் நிகழ்வு வரைபடம் - திரள் நிகழ்வு விழுக்காட்டு வரைபடம்(

ஓகைவ்).

**பரிந்துரைக்கப்பட்ட செயல்முறைகள் :**

1. 6-10 அல்லது 11-12 ஆம் வகுப்பு வரை உள்ள பாடங்களுக்குப் பலவுள் தெரிவு வினாக்கள் தயாரித்தல்.
2. பாடப்பொருளுக்கு ஏற்ற கலை நிகழ்ச்சிகளுக்கான குறிப்புகள் தயாரிக்க. (இலக்கியமன்றம், ஓரங்கநாடகம், பட்டிமன்றம், நாடகம் முதலியன).
3. உலகஅளவில் தமிழ் மொழி,தமிழர்கள் பரவியுள்ளமை பற்றி விவரங்கள் சமர்ப்பித்தல். (இணைய தள உதவியுடன்)
4. மாணவர்களிடம் காணப்படும் இலக்கணப் பிழைகளை வகை தொகை செய்து குறைதீர் பயிற்சிகள் தயாரித்தல்.
5. தமிழ்க் கல்வி ஏற்பாட்டிலுள்ள, மாணவர் சமுதாய நலன் நோக்கிய கூறுகளை வகைப்படுத்துதல்.
6. கற்றல் குறைபாடுடைய ஓரிரு மாணவரை இனங்கண்டு அவர்கள் இடர்ப்படும் தன்மைக்கேற்ற தீர்வக் கான கற்றல் செயல்பாடுகளை வடிவமைத்தல் .
7. செய்யுள், உரைநடை, இலக்கணம் ஆகியனவற்றில் ஒவ்வொரு பாடதிற்கான PPT தயாரித்தல்
8. பள்ளிக் கூடத்தில் நடத்தப்பட்ட எவையேனும் மூன்று தேர்வு வினாத்தாட்களை பகுத்தாய்தல்
9. வகுப்பறையில் எதிர்கொண்ட மேலாண்மைச் சிக்கல்கள், அவற்றைத் தீர்ப்பதற்கு மேற்கொண்ட நடவடிக்கைகள் ஆகியன பற்றிய அறிக்கை தயாரித்தல்.
10. தமிழைத் தவிற பிறமொழிகளை வீட்டு மொழியாகக் கொண்ட மாணவர் எதிர் கொள்ளும் இடர்பாடுகளை வகைதொகைச் செய்க.

**பார்வை நூல்கள்**

இந்திய மொழிகளின் நடுவண் நிறுவன வெளியீடுகள் (2013),

இலக்கியத் தேர்ச்சி அளவிடல்.. மைசூர்:

இரேணுபத்மாமோகன், இர.(2008), வினாக்களில் விரிசல்கள், சென்னை: சாந்தாபப்ளிஷர்ஸ்.

இரத்தினசபாபதி, பி.(2002),கல்வியில் தேர்வு,சென்னை: சாந்தாபப்ளிஷர்ஸ்.

இரத்தினசபாபதி, பி.(2007),செம்மொழிக் கல்வி அ முதல் ஓளவரை, சென்னை: சாந்தாபப்ளிஷர்ஸ்.

கலைச்செல்வி, வெ(2013),*தமிழ் பயிற்றல் நூட்பங்கள்*,நாமக்கல் : சஞ்சீவ் வெளியீடு.

கணபதி, வி. முதலானோர் (2013),*பாடப்பொருள் மற்றும் தமிழ்க் கற்பித்தல்*,சென்னை: சாந்தா பப்ளிஷர்ஸ்.

கணபதி, வி.(1997),*நற்றமிழ் கற்பிக்கும் முறைகள்*, சென்னை: சாந்தாபப்ளிஷர்ஸ்.

சப்புரெட்டியார், ந.(2010),*தமிழ் பயிற்றும் முறை*, சேலம்: அறிவுச்சுடர் பதிப்பகம்.

சுலோச்சனா, ஆ(2015)*இலக்கியவீச்சு*. சென்னை: தமிழகக்கல்விஆராய்ச்சிவளர்ச்சிநிறுவனம்,

பாக்கியமேரி, எ.(2013),*இலக்கணம் இலக்கிய வரலாறு மொழித்திறன்*, சென்னை: பாவேந்தன் பதிப்பகம்,

பரமசிவம், சொ (2010),*நற்றமிழ் இலக்கணம்*, சென்னை: பட்டுப் பதிப்பகம்.

பிரபாகரன், உ.(2012),*தமிழ் கற்பித்தல் முறைகள்*: கும்பகோணம்: அரவிந்த் பதிப்பகம்.

பெரியண்ணன், கோ.(2004), *இனியதமிழில் இலக்கணப்பிழையின்றிஎழுதும் முறைகள்*, சென்னை: வனிதாபதிப்பகம்.

வாசு அறிவழகன், (2015) , *உளப்பகுப்பாய்வு நோக்கில் சங்க இலக்கியங்கள்*, சென்னை: தமிழகக் கல்வி ஆராய்ச்சி நிறுவனம்.

வேணுகோபால், இ.பா. (2008),*பைந்தமிழ் கற்பிக்கும் முறைகள்*, சென்னை: சாரதாபதிப்பகம்.

வஜ்ரவேலு, சு. (2009),*அருந்தமிழ் கற்பிக்கும் முறைகள்*, சென்னை: அம்சாபதிப்பகம்,

விஜயா, கு.(2008),*செயல்வழிக்கற்றல் ஒருவிளக்கம்*,சென்னை: சாந்தாபப்ளிஷர்ஸ்.

விஜயலெட்சுமி, வ. (2007),*நுண்ணிலைக் கற்பித்தல்*,சென்னை: சாரதாபதிப்பகம்.

வீரப்பன், பா(2000), *உயர்நிலைதமிழ்க் கற்பித்தல் ஆசிரியர் கையேடு*, மைசூர்: தேசியகல்வி ஆராய்ச்சி பயிற்சிநிறுவனம்.

வீரப்பன், பா(2004),*தொடக்கநிலைத் தமிழ் கற்பித்தலில் புதியஅணுகுமுறைகள்*,சென்னை: ஜோதிபதிப்பகம்.

David Jacobson etal. (2001), *Methods for Teaching A Skilled Approach*, London.Charles E.Merril Publishing Company

Panneerselvam P. (2013), *Tips fpo Teachers!* Chennai: Shantha Publishers.

Principles of preparing textbooks in Mother tongue, NCERT Publication(1970).

[http://mycbcsguide.com/blog/continuous and comprehensive -evaluation-cce/](http://mycbcsguide.com/blog/continuous-and-comprehensive-evaluation-cce/)

<http://www.nwea.org/blog/2013/22-essay-formative-assessment-techniques-for-measuring-student-learning/>

[www.cict.in](http://www.cict.in) (செம்மொழித் தமிழாய்வு மத்திய நிறுவனம்)

[www.tamilvu.org](http://www.tamilvu.org)

**COURSE CODE: FCPEN**  
**PEDAGOGY OF ENGLISH**  
**PART I**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to:

- sensitise the contents and structures of English textbook of Tamil Nadu Govt. from the standards of upper primary (VI to VIII), secondary (IX & X) and higher secondary (XI & XII) levels;
- realize the aims and objectives of teaching English;
- acquaint with the skills of teaching at micro and macro levels;
- understand the importance of organising and integrating various essential components in constructing a standardized curriculum;
- engage themselves in the preparation of teaching resources and materials with the assistance of ICT;
- get familiarized with the various strategies of teaching English;
- identify and resolve the issues and problems in teaching-learning of English;
- trace out the needs of diversify students in particular, slow learners, gifted and differently abled children;
- comprehend the significance and the aspects of classroom management; and
- obtain knowledge about the evaluation process, type of tests and the basics of Educational statistics.

**UNIT – I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of the Content course of the standards (VI to VIII) English Text Book prescribed by Tamil Nadu Government.

Analysis of the Content course of the standards IX & X (for UG) English Text Book IX – XII (for PG) English Text Book prescribed by Tamil Nadu Government.

## **UNIT – II: AIMS AND OBJECTIVES OF TEACHING ENGLISH**

Andresen's Taxonomy (Revised) of Educational Objectives: Cognitive, Affective and Psychomotor domains - General and Specific instructional objectives - Place of English at different levels of school education (Upper Primary, Secondary and Higher Secondary levels) - Quality of English teaching: pre-class, in-class and after-class - Place of English in three language formula and its objectives - Teaching the communication skills: Listening, speaking, reading and writing - Teaching English as a skill subject rather than a knowledge subject - Learning the Mother Tongue and Second Language (MT & SL).

## **UNIT – III: TEACHING SKILLS AND ORGANISATION OF PRACTISING TEACHING PROGRAMME**

Micro teaching: Meaning, definition and principles - Micro teaching cycle - Micro teaching skills: Introducing the lesson, Explanation, Using the blackboard, Reinforcement, Stimulus variation and Questioning - Link lesson, Year plan Unit plan and Lesson plan: prose, poetry, grammar and composition - Lesson plan format: GIOs and SIOs, motivation, presentation, application, recapitulation and assignment - Observation and its types - Demonstration lesson: Teacher educator, guide teacher, peer group feedback – Organization of practice: Role of supervisor, principal and academic staff in conduct of practicing teaching programme – General teaching competency scale, Self-Appraisal scale, Guidelines for Peer observation and framework of Evaluation.

## **UNIT – IV: INTEGRATION AND ORGANISATION OF CURRICULUM**

Curriculum: meaning, essential components and principles of curriculum construction - Vertical and Horizontal organisation of curriculum - Process of curriculum organization: analysis of needs, objectives, criteria for selection of

contents and selection of learning experiences, organization and integration of content and learning experiences and evaluation techniques.

#### **UNIT–V: DEVELOPMENT OF TEACHING AND LEARNING MATERIALS**

Edgar Dale's Cone of Experiences - Projected Aids: interactive board, LCD projector, Overhead projector, Tape recorder, Radio and Television - Non-projected aids: flash cards, pictures, charts, bulletin board, models, blackboard sketches - Programmed learning: Linear and Branched learning - Language laboratory: characteristics, its role, advantages and utilization - Computer Assisted Language (CAI) learning modules - Power point presentation (Ppt.) and Mind-map for classroom teaching-learning - Identifying websites - Multimedia and its functions of enriching language teaching learning process.

#### **UNIT – VI: STRATEGIES OF TEACHING ENGLISH**

Definition: method and approach and its characteristics - Types of methods: Activity Based Learning (ABL), Active Learning method (ALM), Direct method, Grammar-translation, Audio-lingual, Communicative Language Teaching (CLT), Task-based language learning - Structural approach - Types of Structure - Selection and gradation of structures - Situational approach, oral approach, communicative approach, humanistic approach and principled eclectic approach in teaching of English - Listening Skill: listening for perception and comprehension - The three phases of listening - Listening materials - Listening to specific information and general understanding - Listening activities - Speaking Skill: techniques - tasks for developing speaking skill - Barriers for effective communication - Testing speaking - Reading Skill: aims of teaching reading - Process involved in reading - Types of reading - Methods of teaching reading to beginners - Reading for perception and for comprehension - Strategies to develop reading - Testing reading - Writing Skill: sub skills in writing - Characteristics of good handwriting - Strategies for developing good handwriting.

#### **UNIT – VII: ISSUES AND PROBLEMS IN TEACHING AND LEARNING**

Nature of language: linguistic principles and their pedagogical implications - Language and Society: with special reference to gender, identity, power and class (society) - Role of English language in the Indian context: English as a colonial language, English in post-colonial times, position of English as second language in India, role of mother tongue and second language (MT & SL), English as a link language in global context, challenges of teaching and learning English.

### **UNIT – VIII: DIVERSE NEEDS OF LEARNERS**

Interest and attitude of learners towards learning English - Difficulties in learning of English: slow learners, gifted learners and differently abled children - Remedial measures for slow learners, enrichment programmes for gifted learners and differently abled children - Non-cognitive Abilities: meaning and nature - Interest, Attitude, Values: meanings, classifications and sources - Source of values through personal and by teacher, organization and management of various co-curricular activities.

### **UNIT – XI: CLASSROOM MANAGEMENT**

Classroom Management: concept and components - Classroom Organization - Classroom learning atmosphere - Positive classroom climate - Factors assisting effective learning atmosphere - Advantages of positive learning climate - Creating ideal classroom atmosphere - Technical teaching skills - Prevention and control of students - Classroom activities - classroom records and rules.

### **UNIT – X: EVALUATION OF TEACHING – LEARNING PROCESS**

Evaluation: concept and characteristics - Techniques of evaluation: oral and written, self-evaluation, peer evaluation, group evaluation - Characteristics and qualities of constructing a good English test - Item analysis and difficulty level index of items - Preparation of Blue print based on components with equal weightage - Types of tests: prognostic and diagnostic tests, teacher-made test, achievement test, standardized test and competitive examinations - Central tendency: mean, median, mode and range - Quartile and Standard

deviations - Rank Order Correlation Coefficient and Karl Pearson's product moment method - Graphical representation of data: bar diagram, histogram, pie chart, frequency polygon, frequency curve and Ogive curve - Progress and assessment of development of language skills - Comprehensive and Continuous Evaluation (CCE): formative and summative evaluations - Typology of questions: activities and tasks reflecting, problem solving, creative and critical thinking and enhancing imagination - Preparation of tests for testing different skills of language: listening, speaking, reading, writing, study skills and reference skills - Preparation of Scholastic Achievement Test (SAT) giving weightages to objectives and learning experiences.

### **SUGGESTED ACTIVITIES:**

- Write an essay on various contemporary social and educational emerging issues and problems in detail.
- Enumerate ten activities (Five for listening and Five for speaking) from the text books of classes VI to VIII.
- Suggest your own activities using supplementary materials.
- Analyze the tasks given at the end of anyone unit in the textbook and check their relevance to cognitive, affective and psycho motor domains.
- Select a topic of your choice and select 10 vocabulary items to teach in the relevant context and give reasons for your selection.
- Prepare a question paper for classes VI to VIII to assess all the aspects of language learning.
- Preparation of lesson plans and episodes for micro teaching skills as well as demonstration and observation process.
- Analyse the text books of English of Tamil Nadu Govt. in terms of organisation and integration of essential components, skills, needs and requirements with special reference to learners.
- Preparation of remedial materials for slow learners, gifted and differently abled children for anyone of the units.

- Prepare digital lesson plans and Power point presentations for classroom teaching-learning process.

### **SUGGESTED READINGS:**

Allen, Virginia French, (1983): *Techniques in Teaching Vocabulary*. New York: Oxford University Press (OUP)

Alexander. (1971). *Guided composition in English language teaching*. London: Longman.

Aggarwal. J. C. (2008). *Principles, Methods & Techniques of Teaching*. UP: Vikas Publishing House.

Aggarwal, J. C. (2008). *Essentials of Educational Technology*. UP: Vikas Publishing House.

Allen Campbell, A. (1972). *Teaching English language*. New Delhi: Tata McGraw Hills.

Baruah, T. C. (1993). *The English teachers' Handbook*. New Delhi: Sterling Publishers.

Bright, J. A., & Gregory, G. P. (1976). *Teaching English as second language*. London: Longman.

Brown, G. (1977). *Listening to Spoken English, Applied Linguistics and Language*. London: Longman. Chauhan, S. S. (2008). *Innovations in Teaching Learning Process*. UP: Vikas Publishing House.

Christopher, S. W. (1998). *Computer and Language Learning*. Singapore: SEAMEO, Regional Language Centre.

Dahin, (1967). *The language laboratory and Language Learning*. London: Longman.

Dhand, H. (2009). *Techniques of Teaching*. New Delhi: APH Publishing Corporation.

Diane, Larsen and Freeman, (1990). *Teacher's Handbook for the Video Series Language Teaching Methods*. Washington, D.C: Office of English Language Programs Materials Branch United States Department.

Frisby, A. W. (1970). *Teaching English*. London: Longman Publications.

Geetha, N. (1996). *English language teaching: Approaches, methods, techniques*. London: Orient Longman.

- Gregory Bernard, G. (1969). *Better spoken English*. London: Macmillan.
- Hornby, A. S. (1968). *The teaching of structural words and sentence patterns*. London: Oxford University Press.
- Hook, J. N., & Robert, L. S. (1967). *Competence in English: A programmed handbook*. New York: Harcourt, Brace & World.
- Howatt, A. P. R. (1972). *Programmed learning and the language teacher*. London: Longman.
- Mowla, Venkateswaran, S. (2008). *Principles of Teaching English*. UP: Vikas Publishing House.
- Nanda, K. (1989). *Developing English comprehension*. New Delhi: Sterling Publishers.
- Palmer, H. E. (2008). *Oral Method of Teaching Language*. Delhi: Surjeet Publications.
- Parrott, M. (1993). *Developing Reading Comprehension*. Oxford: Pergamon Press.
- Pit, C.S. (1985). *An intermediate English practice book*. London: Orient Longmans.
- Rao, P. (2005). *Method of teaching English*. Hyderabad: Neelkamal Publications.
- Richards, J.C. and Rogers. T. (1998). *Approaches and Methods to Language Teaching*. London: CUP
- Siddiqui, M.H. (2009). *Techniques of Classroom Teaching*. New Delhi: APH Publishing House.
- Sharma, R. A. (2008). *Technological foundation of Education*. Meerut: R. Lall Books Depot.
- Sharma, R. N. (2008). *Principles and Techniques of Education*. Delhi: Surjeet Publications.
- Sharma, R. N. (2008). *Contemporary Teaching of English*. New Delhi: Surjeet Publications.

**COURSE CODE : FCPMA**  
**PEDAGOGY OF MATHEMATICS**  
**PART I**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- get sensitised the school content in Mathematics;
- comprehend the aims and objectives of teaching Mathematics;
- acquire various teaching skills and develop competence in structuring lesson plans;
- integration and organisation of Mathematics curriculum;
- identify the various learning resources;
- explore the methods of teaching Mathematics;
- understand the issues in teaching and learning Mathematics;
- understand the diversify needs of the students;
- acquire classroom management skills; and
- construct appropriate assessment tools for evaluation.

**UNIT- I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of the Content course of Standards VI to VIII Mathematics Text Books prescribed by Government of Tamil Nadu.

Analysis of the Content course of Standards IX – X ( for UG), XI – XII (for PG) Mathematics Text Books Prescribed by Government of Tamil Nadu.

**UNIT - II: AIMS AND OBJECTIVES OF TEACHING MATHEMATICS**

Need and significance of teaching Mathematics-Aims: Practical, Social, Disciplinary and Cultural aims - Instructional Objectives: General

Instructional Objectives (G.I.Os) and Specific Instructional Objectives (S.I.Os) relating to the Cognitive, Affective and Psychomotor Domain based on Bloom's Taxonomy of Educational Objectives – Revised Bloom's Taxonomy.

### **UNIT-III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE – TEACHING PROGRAMME**

Micro Teaching: Origin, Need, Phases, Definition, Characteristics, Process, Cycle, A Plan of action, Advantage of Micro teaching and its Uses-Skills : Explanation, Questioning , Blackboard usage, Reinforcement, Stimulus variation, Introduction and Closure -Link lesson - Unit Plan - Year Plan - Lesson Plan: Need and importance, Characteristics of good Lesson Plan, Herbartian steps, Format of a typical Lesson plan -G.I.Os and S.I.Os, Teaching Learning Materials, Motivation, Presentation, Application, Recapitulation and Assignment –Uses of Lesson plan - Organisation of Practice – Teaching Programme for B.Ed., Student-teachers - Role of the Supervisor, Principal and the Academic Staff in the Conduct of Practice - Teaching Programme - General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation

### **UNIT – IV: INTEGRATION AND ORGANIZATION OF MATHEMATICS CURRICULUM**

Meaning of Curriculum, Components of curriculum - Principles of curriculum construction - Vertical and Horizontal organisation of curriculum - Process of curriculum organisation: Analysis of needs, Objectives, Formulation of objectives, Selection of content, Selection of learning experience, Organisation and integration of content and learning experience and Evaluation Techniques.

### **UNIT V: DEVELOPMENT OF TEACHING LEARNING MATERIALS**

Edgar Dale's Cone of Experience -Need and importance of Audio Visual aids  
– Types of Audio Visual Aids - Projected aids: Over Head Projector, LCD projector, Epidiascope and Slide Projector - Non Projected Aids: Charts, Flash Cards, Print Materials, Realia and Models. Types of Board: Bulletin Board, Magnetic Board, Flannel Board, Interactive Board and Smart Board - Graphic Aids - Activity Aids- Mathematics Club -Mathematics Lab and Mathematics Library.

#### **UNIT-VI: STRATEGIES OF TEACHING MATHEMATICS**

Methods of Teaching: Analytic, Synthetic, Inductive, Deductive, Heuristic, Problem solving, Project and Laboratory - Activity Based Learning (ABL) - Active Learning Method (ALM) - TIGER Method -Techniques of Teaching Mathematics: Self Study, Drill work ,Supervised Study, Assignment, Oral Work , Group discussion and Buzz Session. Interactive Teaching: Meaning and Types- Interaction Patterns Generated by Teacher Centred Approaches to Teaching.

#### **UNIT –VII: ISSUES IN TEACHING AND LEARNING**

Individual differences, Language problem in learning - Nature of subjects, Examination and grading system - Teaching and Learning styles - Classroom behaviour of Teacher and Learner - Difficulties in Learning Mathematics: Dyscalculia - Mathematics Phobia - Dysgraphia - Mathematics Anxiety - Difficulties in handling mathematical instrument - Causes, Problems and its remedial measures .

#### **UNIT VIII: DIVERSE NEEDS OF STUDENTS**

Need for Learner Centred Approach; Historical Perspective; Attributes of learner Centred Classroom; Application of Learner Centred Approach; Integration of Learner Centred Approach with the Main Stream Education System. Slow learners and gifted learners in mathematics - Remedial and Enrichment programmes - Non - Cognitive Abilities: Meaning and Nature - Interest: Meaning, Classification and sources - Attitude: Meaning and Importance - Interest and Attitude of students towards learning Mathematics -

Values: Meaning and Importance - Source of Values through Personal examples set by Teachers and Organisation and Management of a variety of Co-curricular activities.

### **UNIT IX: CLASSROOM MANAGEMENT**

Concept of Class Room Management - Class Room Organisation - Components of Class Room Management - Class Room Learning atmosphere - Positive Classroom climate - Factors supporting a Effective Learning atmosphere - Advantages of Positive Learning climate - Creative Ideal classroom atmospheres - Classroom Activities -Classroom Records and Rules.

### **UNIT - X: EVALUATION OF TEACHING – LEARNING**

Different types of tests in Mathematics: Achievement, Diagnostic, Prognostic- Criterion and Norm referenced evaluation - Construction of Achievement Test - Continuous and Comprehensive Evaluation - Formative and Summative Evaluation- Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Standard Deviation, Quartile deviation, Rank Order Correlation Method and Karl Pearson's product moment method - Graphical representation of data: Bar diagram, Histogram, Pie Chart, Frequency curve, Frequency polygan and Ogive curve.

### **SUGGESTED ACTIVITIES**

1. Collect and present the History and Contributions of any one Mathematician.
2. Discussion on various learning resources in Mathematics.
3. Preparation of Teaching Learning Material for any one topic in Mathematics.
4. Preparation of Power Point Presentation for any one topic in Mathematics.
5. Identify and practice suitable methods of teaching to teach a Mathematical Concept.
6. Conduct a Mathematical Quiz.
7. Organise a Mathematics Club.

### **SUGGESTED READINGS**

Aggarwal, J.C. (2008).Teaching of Mathematics. UP: Vikas Publishing House.

Bagyanathan, D.(2007).Teaching of Mathematics. Chennai: Tamil Nadu Text Book Society.

Bhasin, Sonia.(2005).Teaching of Mathematics- A practical approach-  
Mumbai:Himalaya Publishing House.

Bhatia, K.K. (2001). Foundations of teaching learning process. Ludhiana: Tandon  
Publication.

Ediger,M., & Rao. D.B., (2000).Teaching mathematics  
successfully.NewDelhi:Discovery Publishing House.

Bawa, M.S &Nagpal, B.M., (2010).Developing Teaching Competencies.Viva Books  
Private limited, New Delhi.

James, Anice. (2009).Skills and strategies of teaching Mathematics. Hyderabad:  
Neelkamal Publication.

Joyce.,&weil.,(2004).Models of teaching.U.K: Prentice Hall of India.

Kapur, J.N. (2002).Suggested experiments in school Mathematics. New Delhi: Arya  
Book Depot.

Kulshreshta,A.K. (2008).Teaching of Mathematics. Meerut: R.Lall Books Depot.

Mangal, S.K., &Mangal,S. (2005). Essentials of educational technology and  
management. Meerut: Loyal Book Depot.

NCERT.(2005). NCF for School Educaton. New Delhi: Anmol Publications.

Passi, B.K., (1991). Models of teaching.NCERT,New Delhi.

Pratap,N. (2008). Teaching of Mathematics. Meerut: R.Lall Books Depot.

Sharma, R.A. (2008).Technological foundations of education. Meerut: R.Lall Books  
Depot.

Sharan, R., & Sharma, M. (2006).Teaching of Mathematics. New Delhi: APH  
Publishing Corporation.

Sidhu, K.S. (2006).Teaching of Mathematics. New Delhi: Sterling Publishers.

Mathematics Books for standard VI - XII, Tamil Nadu Text Book Corporation,  
Government of Tamil Nadu.

**COURSE CODE: FCPCS**  
**PEDAGOGY OF COMPUTER SCIENCE**  
**PART I**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- get sensitized the school content in Computer Science;
- comprehend the aims and objectives of teaching Computer Science ;
- acquire various teaching skills and develop competence in structuring lesson plans;
- integration and organization of Computer Science curriculum;
- identify the various learning resources;
- explore the methods of teaching Computer Science;
- understand the issues in teaching and learning Computer Science;
- understand the diversify needs of the students;
- acquire classroom management; and
- construct appropriate assessment tools for evaluation.

**UNIT- I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of the Content course of Standards VI to VIII Mathematics Text Books prescribed by Government of Tamil Nadu.

Analysis of the Content course of standards IX - X ( for UG) Mathematics, XI – XII (for PG) Computer Science Text Books Prescribed by Government of Tamil Nadu.

**UNIT - II: AIMS AND OBJECTIVES OF TEACHING COMPUTER  
SCIENCE**

Need and significance of teaching Mathematics-Aims: Practical, Social, Disciplinary and Cultural- Instructional Objectives: General Instructional Objectives (G.I.Os) and Specific Instructional Objectives(S.I.Os) relating to the Cognitive, Affective and Psychomotor Domains based on Bloom's Taxonomy of Educational Objectives – Revised Andresen's Taxonomy.

### **UNIT-III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE – TEACHING PROGRAMME**

Micro teaching: Origin, Need, Phases, Definition, Characteristics, Process, Cycle, A Plan of action, Advantage of Micro teaching and its Uses-Skills : Explanation, Questioning , Blackboard usage, Reinforcement, Stimulus variation, Introduction - Unit Plan - Year Plan - Lesson Plan: Need and importance ,Characteristics of good Lesson Plan, Herbartian steps, Format of a typical Lesson plan - G.I.Os and S.I.Os, Teaching Learning Materials, Motivation, Presentation, Application, Recapitulation and Assignment – Uses of Lesson plan - Organisation of Practice – Teaching Programme for B.Ed., Student-teachers. Role of the Supervisor; Role of the Principal and the Academic Staff in the Conduct of Practice-teaching Programme. General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation

### **UNIT – IV: INTEGRATION AND ORGANIZATION OF COMPUTER SCIENCE CURRICULUM**

Meaning of Curriculum, Components of Curriculum – Principles of curriculum construction – Vertical and Horizontal Organisation of Curriculum – Process of Curriculum organisation: Analysis of needs, Objectives, Formulation of Objectives, Selection of Content, selection of learning experience, organisation and integration of content and learning experience and Evaluation techniques.

### **UNIT V: DEVELOPMENT OF TEACHING LEARNING MATERIALS**

Edgar Dale's Cone of Experience - projected aids: OHP, slides, LCD projector, Audio Conference, Video Conference, Epidiascope and Slide Projector - Non Projected Aids: Charts, Flash Cards, Printed Materials, Bulletin Board, Magnetic Board and Flannel Board. Need and importance of Audio Visual aids – Types of Audio Visual Aids – Graphic Aids, Activity Aids.

#### **UNIT-VI: STRATEGIES OF TEACHING COMPUTER SCIENCE**

Methods of Teaching: Analytic, Synthetic, Inductive, Deductive, Heuristic, Problem solving, Project and Laboratory - Activity Based Learning (ABL) – Active Learning Method (ALM) - Techniques of Teaching Computer Science: Self Study, Drill work, Supervised Study, Assignment, Oral Work, Group discussion and Buzz Session - Online courses-Social Networks - Blogs - Cloud computing – Android - Windows - Cyberspace Threats and Solutions-Spyware protection-Microsoft outlook 2013- Smart Classroom – E-Learning – Surfing – Skype.

#### **UNIT –VII: ISSUES IN TEACHING AND LEARNING**

Individual differences, Language problem in learning – Nature of subjects, Examination and grading system – Teaching and Learning styles – Classroom behaviour of Teacher and Learner-Practical difficulties: handling keypad and mouse-Drawbacks of internet – Technophobia – Difficulties in Hardware and Software – Self –Learning – Difficulties in writing programmes.

#### **UNIT VIII: DIVERSE NEEDS OF STUDENTS**

Need for Learner Centered Approach; Historical Perspective; Attributes of learner Centered Classroom; Application of Learner Centered Approach; Integration of Learner Centered Approach with the Main Stream Education System – Slow learners and gifted learners in Computer Science – Remedial and Enrichment programmes-Blended Learning-Smart Classroom - Non – Cognitive Abilities: Meaning and Nature - Interest: Meaning, Classification and sources - Attitude: Meaning and Importance - Interest and Attitude of

students towards learning Computer Science - Value: Meaning and Importance; Source of Values through Personal examples set by teachers and Organization and management of a variety of Co-Curricular activities.

### **UNIT IX: CLASSROOM MANAGEMENT**

Concept of class Room Management – Class Room Organisation – Components of Class Room Management – Class Room Learning atmosphere – Positive Classroom climate – Factor supporting an Effective Learning atmosphere – Advantages of Positive Learning climate – Creative Ideal classroom atmospheres – Technical teaching skills – Prevention and Control of Students – classroom Activities – Classroom Records and Rules.

### **UNIT-X: EVALUATION OF TEACHING – LEARNING**

Different types of tests in Computer Science: Achievement, Diagnostic, Prognostic-Criterion and Norm referenced evaluation - Construction of Achievement Test –Online test- Continuous and Comprehensive Evaluation - Formative and Summative Evaluation - Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Quartile deviation, Standard Deviation, Rank Order Correlation Coefficient Method and Karl Pearson's product moment method - Graphical representation of data: Bar diagram, Histogram, Pie Chart, Frequency Polygon, Frequency curve and Ogive curve.

### **SUGGESTED ACTIVITIES:**

1. Prepare a power point presentation for any two units in Computer Science and submit it.
2. Develop a Blog of your own and add it in online and prepare a report on it.
3. Visit to any IT Company to know about latest softwares and prepare a report on it.

4. Analyse any one topic in different website and present your report by comparing it.
5. Explore the Usage of Office 365 and write the merits and demerits in CD.

#### **SUGGESTED READINGS:**

Allen Martin,(1980), *Teaching and Learning with LOGO* Cromm Helm, London. Ammul Publications Pvt. Ltd.,

Balagursamy,(2000),*Programming in Basic*. THN, Delhi.

Carin. & Robert, S. (1989), *Teaching modern science* (5th edition), U.S.A: Merrill Publishing Co.

Chauhan, S.S., (1995.)*Innovations in Teaching Learning Process*, Vikas Publishing House Private Ltd.

Das, R.C., (1990). *Science Teaching in Schools*, Sterling Publishers Private Ltd., Bangalore.

Davis, (2004), *Computer Today*, McGraw Hill Delhi.  
Delhi: BPB Publishing.

Goel, D. R., and Joshi, P. (1999). *A Manual for INTERNET Awareness*. CASE:

Goel,H.K(2007),*Teaching of computer science*. New Delhi:R.Lall Books

Gotstried,(2005),*Progammig with BASIC*, SCHAUM.

Harley, H.K. (2007),*The internet: complete reference*. New Delhi: Tata McGrow Hill

Heiss, Obourn. & Hoffman. (1985) *Modern science in secondary schools*. ,New Delhi: Sterling Publication (Pvt.) Limited.

Hillman, David (1998), *Multimedia Technology and Applications*, New York : Delmar Publishers,.

Krishna Sagar, (2005), *ICTs and teacher training*, Delhi: Tarum offset.

Mahapatra, B.C. (2006). *Education in Cybernatic Age*. New Delhi: Sarup Sons.

Malvino,(2008),*Digital Computer Electronics*, TMH, Delhi.

Mansfield, R. (1993). *The Compact Guide to Windows.World and Excel*. New

Nair, C.P.S., (2000), *Teaching of Science in Our School*, Chand & Co., Pvt Ltd.,

New Delhi. NarendraVaidya, (1999), *Science Teaching for the 21st Century*, Deep & Deep Publica

Nayak, (2003). , *Teaching of physics*. New Delhi: APH Publications.

Patton, M.Q. (1980). *Qualitative evaluation methods*. New Delhi: Sage Publications. pub.co.,Ltd. Publishing.

Rao, P.V.S., (2001), *Computer Programming*, TMH, Delhi.

Roger Hunt Hon Shelley, *Computers and Common Sense*, Prentice Hall (India) Delhi.

Sambath, K., Paneerselvam, A., & Santhanam,S.(2006).*Introduction of educational Technology*, New Delhi: Sterling Publishers Private Limited

Saxena, S. (1999). *A first course in computers*. New Delhi: Vikas Publishing

Sharma, R.C., *Modern Science Teaching*, DhanpatRai Publishing Co. Pvt. Ltd.,

Sharma,R.A.(2008).*Technological foundation of education*. Meerut: R.Lall Books Depot.

Siddifit, S. (1985). *Teaching of Science today and tomorrow*. New Delhi: Doba's House.

Stanely Pogrow, (1993) *Education in the Computer Age*. New Delhi: Sage Publication.

Steeven M. Rass, (1990) *Basic Programming for Education*, New York: Pentic Hall.

Tanenbaum, A. S. (1996). *Computer Networks*. New Delhi: Pretince Hall of India.

Walkenbach, J. (1997). *Excel 97 Bible*. New Delhi: Comdex Computer

Yadav, M.S., (2000) *Modern Methods of Science Teaching in Secondary Schools*, New Delhi:

**COURSE CODE: FCPPS**  
**PEDAGOGY OF PHYSICAL SCIENCE**

**PART I**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- get sensitised the school content in Physical Science;
- comprehend the aims and objectives of teaching Physical Science;
- acquire various teaching skills and develop competence in structuring lesson plans;
- develop a theoretical understanding integration and organisation of Physical Science curriculum;
- identify various learning resources;
- explore the methods of teaching Physical Science;
- understand the issues in teaching and learning Physical Science;
- understand the diverse needs of the students;
- acquire classroom management ; and
- construct appropriate assessment tools for evaluation.

**UNIT- I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of the Content course of Standards VI to VIII Science Text Book prescribed by Government of Tamil Nadu.

Analysis of the Content course of standards IX & X ( for UG) Science Text Book, XI & XII (for PG) Physics/Chemistry Text Books Prescribed by Government of Tamil Nadu.

**UNIT - II: AIMS AND OBJECTIVES OF TEACHING PHYSICAL SCIENCE**

Need and significance of teaching Physical Science -Aims: Practical, Social, Disciplinary and Cultural- Instructional Objectives: General Instructional Objectives (G.I.Os) and Specific Instructional Objectives(S.I.Os) relating to the Cognitive, Affective and Psychomotor Domains based on Bloom's Taxonomy of Educational Objectives – Revised Anderson's Taxonomy

### **UNIT-III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE – TEACHING PROGRAMME**

Micro teaching: Origin, Need, Phases, Definition, Characteristics, Process - Advantage of Micro teaching and its Uses-Skills : Explaining, Questioning , Blackboard usage, Reinforcement, Stimulus variation, Introduction and Closure -Link lesson - Unit Plan - Year Plan - Lesson Plan: Need and importance ,Characteristics of good Lesson Plan, Herbartian steps, Format of a typical Lesson plan -G.I.Os and S.I.Os, Teaching Learning Materials, Motivation, Presentation, Application, Recapitulation and Assignment –Uses of Lesson plan - Organisation of Practice – Teaching Programme for B.Ed. Student-teachers - Role of the Supervisor; Role of the Principal and the Academic Staff in the Conduct of Practice teaching Programme - General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation

### **UNIT – IV: INTEGRATION AND ORGANIZATION OF PHYSICAL SCIENCE CURRICULUM**

Meaning of Curriculum, components of curriculum – Principles of curriculum construction – Vertical and Horizontal organisation of curriculum – Process of curriculum organisation: Analysis of needs, Objectives, formulation of objectives, selection of content, selection of learning experience, organisation and integration of content and learning experience and evaluation techniques.

### **UNIT V: DEVELOPMENT OF TEACHING LEARNING MATERIALS**

Edgar Dale's Cone of Experience - projected aids: OHP sheets, slides, LCD projector, Epidiascope and Slide Projector - Non Projected Aids: Chart, Flash

Card, Poster, Graph Printed Materials, Models, Diorama, Bulletin Board, Magnetic Board and Flannel Board. Need and importance of Audio Visual Aids – Types of Audio Visual Aids – Radio, Tape recorder, Television, Computer and Activity Aids - Science Club, Science Lab, Science Library, Field trip, Field work and Science Exhibition: Need and importance, Organization, Activities and its advantages.

#### **UNIT-VI: STRATEGIES OF TEACHING PHYSICAL SCIENCE**

Methods of Teaching: Lecture, Demonstration, Project , Scientific, Analytic and Synthetic Methods - Activity Based Learning (ABL) –Active Learning Method (ALM) . Individualised Instruction – Programmed Instruction – Computer Assisted Instruction-Techniques of Teaching Physical Science: Self Study, Drill work ,Supervised Study, Assignment, Oral Work , Group discussion and Buzz Session - Interactive Teaching – Meaning and Types; Interaction Patterns generated by Teacher Centred Approaches to Teaching – Teacher Centred Strategies: Question & Answer Technique, Inductive–Deductive method - Pupil Initiated Interaction Pattern: Heuristic Method and Problem Solving Method.

#### **UNIT –VII: ISSUES IN TEACHING AND LEARNING**

Individual Differences, Language Problem in Learning , problems in providing laboratory equipments to students expectations, Nature of Subjects, Examination and Grading System –Difficulties in establishing a culture of evidence, Teaching and Learning Styles – Classroom behaviour of Teacher and Learner – Importance of Effective Instruction

#### **UNIT - VIII: DIVERSE NEEDS OF STUDENTS**

Need for Learner Centred Approach; Historical Perspective; Attributes of learner Centred Classroom; Application of Learner Centred Approach; Integration of Learner Centred Approach with the Main Stream Education System - Non – Cognitive Abilities: Meaning and Nature - Interest: Meaning, Classification and sources - Attitude: Meaning and Importance - Value:

Meaning and Importance; Source of Values through Personal examples set by teachers , Organization and management of co-curricular activities.

### **UNIT - IX: CLASSROOM MANAGEMENT**

Concept of class Room Management – Class Room Organisation – Components of Class Room Management – Class Room Learning atmosphere – Positive Classroom climate – Factor supporting an Effective Learning atmosphere – Advantages of Positive Learning climate – Creative Ideal classroom atmospheres – Technical teaching skills – Prevention and Control of Students – classroom Activities – Classroom Records and Rules.

### **UNIT - X: EVALUATION OF TEACHING - LEARNING**

Different types of tests in Physical Science: Achievement, Diagnostic, Prognostic-Criterion and Norm referenced evaluation - Construction of Achievement Test, Blue print - Continuous and Comprehensive Evaluation - Formative and Summative Evaluation- Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Quartile deviation, Standard Deviation, Rank Order Correlation Coefficient Method and Karl Pearson's product moment method - Graphical representation of data: Bar diagram, Histogram, Pie Chart, Frequency Polygon, Frequency curve and Ogive curve.

### **SUGGESTED ACTIVITIES:**

1. Prepare different steps involved for demonstration of an experiment each one for Physics and Chemistry
2. Identify concrete and abstract concepts in physics and chemistry of any class and suggest the appropriate teaching methods and approaches to teach them and report
3. Prepare an album about scientist and their contributions to Physics and Chemistry
4. Visit a science centre or science museum (District / State / National ) and prepare a report
5. Organise science exhibition and submit a write up about it

### **SUGGESTED READINGS:**

Bhatia, K.K. (2001). *Foundations of teaching learning process*. Ludhiana: Tandon Publication.

Bawa, M.S & Nagpal, B.M., (2010). *Developing Teaching Competenceis*. New Delhi: Viva Books Private limited.

Carin & Robert Sund, (1989). *Teaching Modern Science* (Fifth Edition). U.S.A: Merrill Publishing Co.

Gupta, S.K. (1985). *Teaching of Physical Science in Secondary Schools*. Sterling Publication Pvt. Limited.

Heiss, Obourn & Hoffman (1985). *Modern Science in Secondary Schools*. New Delhi: Sterling Publication Pvt. Limited.

Jenkins, E.W. (Ed.) (1997). *Innovations in Science and Technology Education*. Vol. VI, UNESCO, Paris.

Joyce., & weil. (2004). *Models of teaching*. U.K: Prentice Hall of India.

Joseph, (1966). *The Teaching of Science*. Harvard : Harvard University Press.

Kerr, S.T., (Ed.), *Technology and the Future of Schooling*. U.S.A: University of Chicago Press

Mangal, S.K., & Mangal, S. (2005). *Essentials of educational technology and management*. Meerut: Loyal Book Depot.

Nair, C.P.S. (1971). *Teaching of Science in our Schools*. Sulthan Chand & Co. (Pvt.) Limited.

NCERT, (2005). *NCF for School Educaton*. New Delhi: Anmol Publications.

Nayak, (2003). *Teaching of Physics*. New Delhi: APH Publications.

Newbury N.F., *Teaching of Chemistry in Tropical Secondary Schools*. Oxford University Press.

Passi, B.K., (1991). *Models of teaching*. New Delhi: NCERT

Panner Selvam, A. (1976). *Teaching of Physical Science (Tamil)*. Government of Tamil Nadu.

Patton, M.Q. (1980). *Qualitative Evaluation Methods*. India: Sage Publications.

Rao, C.S. (1968). *Science Teacher's Handbook*. American Peace Crops.

Sharma, P.C. (2006). *Modern Science Teaching*. New Delhi: Dhanpat Rai Publications.

Sharma, R.A. (2008). *Technological foundations of education*. Meerut: R.Lall Books Depot.

Siddiqi, (1985). *Teaching of Science Today and Tomorrow*, Doals House

Thurber, Walter, A., and Collettee, Alfred, T. (1964). *Teaching Science in Today's Secondary School*, Prentice Hall of India Pvt. Ltd.

**COURSE CODE: FCPBS**  
**PEDAGOGY OF BIOLOGICAL SCIENCE**  
**PART I**

**OBJECTIVES:**

At the end of the course the student-teachers will be able to

- acquire the knowledge about the school content in Biological Science;
- understand the aims and objectives of teaching Biological Science;
- acquire various teaching skills and develop competence in structuring lesson plans;
- understand the integration and organisation of Biological Science curriculum;
- identify the various learning resources;
- explore the methods of teaching Biological Science;
- understand the issues in teaching and learning Biological Science;
- understand the diverse needs of the students;
- develop skills on classroom management; and
- construct appropriate assessment tools for evaluation.

**UNIT- I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of the Content course of upper primary Standards VI to VIII Science Text Book prescribed by Government of Tamil Nadu.

Analysis of the Content course of standards IX - X ( for UG) Science Text Book, XI – XII (for PG) Botany/Zoology Text Books Prescribed by Government of Tamil Nadu.

## **UNIT - II: AIMS AND OBJECTIVES OF TEACHING BIOLOGICAL SCIENCE**

Need and significance of teaching Biological Science -Aims: Practical, Social, Disciplinary and Cultural- Aims: General Instructional Objectives and Specific Instructional Objectives relating to the Cognitive, Affective and Psychomotor Domains based on Bloom's Taxonomy–Anderson's Revised Taxonomy.

## **UNIT-III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE – TEACHING PROGRAMME**

Micro teaching: Origin, Need, Phases, Definition, Characteristics, Process- Advantage of Micro teaching and its Uses-Skills : Explaining, Questioning , Blackboard usage, Reinforcement, Stimulus variation, Introduction - Unit Plan - Year Plan - Lesson Plan: Need and importance ,Characteristics of good Lesson Plan, Herbartian steps, Format of a typical Lesson plan - Motivation, Presentation, Application, Recapitulation and Assignment –Uses of Lesson plan: Organisation of Practice – Teaching Programme for B.Ed., Student-teachers. Role of the Supervisor; Role of the Principal and the Academic Staff in the Conduct of Practice-teaching Programme. General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation

## **UNIT – IV: INTEGRATION AND ORGANIZATION OF BIOLOGICAL SCIENCE CURRICULUM**

Meaning of Curriculum, components of curriculum – Principles of curriculum construction –Organisation of curriculum – Process of curriculum organisation: Analysis of needs, Objectives, formulation of objectives, selection of content, selection of learning experience, organisation and integration of content and learning experience and evaluation techniques.

## **UNIT V: DEVELOPMENT OF TEACHING LEARNING MATERIALS**

Edgar Dale's Cone of Experience - Classification of teaching aids - Projected aids: OHP, slides, LCD projector, Epidiascope and Slide Projector - Non Projected Aids: Charts, Flash Cards, Printed Materials, Bulletin Board, Magnetic Board and Flannel Board. Need and importance of Audio Visual aids – Types of Audio Visual Aids – Radio, Television, Computer and Activity aids. Mobile Laboratories and Improvised Apparatus - Science club, Science lab, Library, field trip, Field work and Science Exhibition: Need and importance, Organization, activities and its advantages.

#### **UNIT-VI: STRATEGIES OF TEACHING BIOLOGICAL SCIENCE**

Methods of Teaching: Analytic, Synthetic, Inductive, Deductive, Heuristic, Problem solving, Project and Laboratory - Activity Based Learning (ABL) – Active Learning Method (ALM), Lecture Method, Demonstration Method, Scientific Method - Symposia – workshop – Brain storming– panel discussion - seminar– team teaching - Assignment and Discussion. Techniques of Teaching Biological Science: Individualized Instruction, Programmed Instruction and Computer Assisted Instruction.

#### **UNIT –VII: ISSUES IN TEACHING AND LEARNING**

Individual differences, Language problem in learning – Nature of subjects, Examination and grading system – Teaching and Learning styles – Classroom behaviour of Teacher and Learner - Interest and Attitude of students towards learning – Difficulties in Learning Biological Science – Slow learners and gifted learners in Biological Science – Remedial and Enrichment programmes.

#### **UNIT VIII: DIVERSE NEEDS OF STUDENTS**

Need for Learner Centred Approach; Historical Perspective; Attributes of learner Centred Classroom; Application of Learner Centred Approach; Integration of Learner Centred Approach with the Main Stream Education System - Non – Cognitive Abilities: Meaning and Nature - Interest: Meaning, Classification and sources - Attitude: Meaning and Importance - Values: Meaning, Importance and Source of Values. Organisation and management of a variety of co-curricular activities.

## **UNIT IX: CLASSROOM MANAGEMENT**

Concept of Class room Management – Class room Organisation – Components of Class room Management – Class room Learning atmosphere – Positive Classroom climate – Factor supporting an Effective Learning atmosphere – Advantages of Positive Learning climate – Creative Ideal classroom atmospheres – Technical teaching skills – Prevention and Control of Students – Classroom Activities – Classroom Records and Rules.

## **UNIT-X: EVALUATION OF TEACHING – LEARNING**

Concept of Evaluation, Objective Based Evaluation, Continuous and Comprehensive Evaluation (CCE): Summative and Formative Evaluations. Different types of tests: Standardised and Teacher made test - Achievement, Diagnostic, Prognostic- Criterion and Norm referenced evaluation - Construction of Achievement Test - Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Quartile deviation, Standard Deviation, Rank Order Correlation Coefficient Method and Karl Pearson's Product Moment Method - Graphical representation of data: Bar diagram, Histogram, Pie Chart, Frequency Polygon, Frequency curve and Ogive curve.

## **SUGGESTED ACTIVITIES**

1. Visit to a Zoological Park / Botanical garden/ Food industry/ Agro based industry.
2. Write the life history and contributions of Carl Linnaeus and Gregor John Mendel.
3. Preparation of improvised Biological Science kit.
4. Conducting and Organising Biological Science Quiz /Biological Science Club / Science fair.
5. Organise an event on Earth day/ Environment day/ Water day/ World health day.
6. Collection, preservation and display of any five museum specimen.
7. Preparation of Herbarium ( 5 Families).
8. Maintenance of aquarium, terrarium, vivarium, use of incubator and so on..

## **SUGGESTED READINGS:**

- Bawa, M.S & Nagpal, B.M., (2010). *Developing teaching competencies*. New Delhi: Viva Books.
- Bhatia, K.K. (2001). *Foundations of teaching learning process*. Ludhiana: Tandon Publication.
- Buffaloe, Neal., & Throneberry, J. B. (1972). *Principles of biology teaching*. New Delhi: Prentice – Hall.
- Chauhan, S.S., (1995). *Innovations in teaching learning process*, New Delhi: Vikas Publishing House Private Ltd.
- Carin., & Robert, S. (1989). *Teaching modern science*. U.S.A: Merill Publishing Co.
- Das, R.C., (1990). *Science teaching in schools*, Bangalore: Sterling Publishers.
- Garrett, (1979). *Statistics in psychology and education*. Bombay: Vakils, Feffer and Simons.
- Heiss, Obourn., & Hoffman. (1985). *Modern science in secondary schools*, New Delhi: Sterling Publication.
- Joyce., & weil., (2004). *Models of teaching*. U.K: Prentice Hall.
- Mangal, S.K., & Mangal, S. (2005). *Essentials of educational technology and management*. Meerut: Loyal Book Depot.
- Nayak, (2003). *Teaching of physics*. New Delhi: APH Publications.
- Narendra Vaidya, (1999). *Science Teaching for the 21st Century*, New Delhi: Deep & Deep Publication.
- Nair, C.P.S., *Teaching of Science in Our School*, New Delhi: Chand & Co., Pvt Ltd.
- NCERT. (2005). *NCF for School Educaton*. New Delhi: Anmol Publications.
- Passi, B.K., (1991). *Models of teaching*. NCERT, New Delhi
- Patton, M.Q. (1980). *Qualitative evaluation methods*. New Delhi: Sage Publications.
- Science and Biology Textbooks for standard VI - XII, Tamil Nadu Text Book Corporation, Government of Tamil Nadu.

Siddifit, S. (1985). *Teaching of science today and tomorrow*. New Delhi: Doba's House.

Sharma, R.C., *Modern Science Teaching*, Dhanpat Rai Publishing Co. Pvt. Ltd.,

Sharma, R.A. (2008). *Technological foundations of education*. Meerut: R.Lall Books Depot.

Yadav, M.S., (2000). *Modern Methods of Science Teaching in Secondary Schools*. New Delhi: Ammol Publications Pvt. Ltd.

**COURSE CODE : FCPHI**  
**PEDAGOGY OF HISTORY**  
**PART I**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- acquire knowledge about the school history textbooks from VI to XII;
- understand the aims and objectives of teaching History at different level;
- develop teaching skills;
- know the principles underlying history curriculum;
- realise the implications of teaching learning materials;
- adopt the different teaching strategies;
- analyse and develop appropriate methods to deal with controversial issues in teaching history;
- identifying the diverse needs of students and develop suitable programmes;
- plan the classroom management; and
- use various tools for evaluation.

**UNIT- I: SENSITIZING THE SCHOOL CURRICULUM**

Analysis of upper primary Standards VI to VIII Social Science Text Book prescribed by Government of Tamil Nadu.

Analysis of Course Content of Standards IX to X Social Science Text Book for UG and XI to XII History Text Books (for P.G) prescribed by the Government of Tamil Nadu.

**UNIT – II: AIMS, OBJECTIVES AND VALUES OF TEACHING HISTORY**

General and Specific Aims of Teaching History - Taxonomy of Instructional

Objectives: Cognitive, Affective, Psychomotor Domains and Anderson's

revised Taxonomy: Values of Teaching History: Social, Economic, Cultural, Moral, Philosophical, Political, Intellectual and Vocational.

### **UNIT – III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE – TEACHING PROGRAMME**

Micro Teaching: Meaning, Concept, Definition, Principles and Phases of Microteaching - Developing the Skills: Introducing a Lesson, Explaining, Probing Questioning, Stimulus Variation, Reinforcement, Achieving Closure, Use of Teaching Aids, and Blackboard Usage - Link lesson: Definition, Need for Link Lesson in Micro Teaching Programme. Macro Teaching: Year Plan, Unit plan, and Daily Plan, Need and Importance of Lesson Plan, Objective based teaching, Steps of a lesson plan - Organization of Practice – Teaching Programme for B.Ed., Student-teachers - Role of the Supervisors; Role of the Principal Mentor Teachers, Head Masters and the Academic Staff in the Conduct of Practice -Teaching Programme – Assessment of Teaching Competency; General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation.

### **UNIT – IV: INTEGRATION AND ORGANIZATION OF HISTORY CURRICULUM**

Content, Principles of Selection – Individual, Social, National and Global needs – Methods of organization; Logical and Psychological (stages of development), Chronological, Periodical, Concentric and Spiral, Regressive and Progressive Methods – Principles of correlation of subjects; Identical, Incidental, Systematic – Fusion of Subject; Geography, Political science, Anthropology, Literature, Economics and Sociology.

### **UNIT – V: DEVELOPMENT OF TEACHING LEARNING MATERIALS FOR TEACHING HISTORY**

Teaching Learning Materials: Significance and Principles of using teaching learning Classification of Teaching Learning Materials: Edger Dale’s Cone of Experience – Audio Aids, Audio Visual Aids, Graphic Aids, 3D Aids, Display Boards and Activity Aids.

### **UNIT – VI: STRATEGIES OF TEACHING HISTORY**

Teacher-Centred Methods : Story Telling, Dramatization, Lecture, Lecture cum Demonstration, Team Teaching, Supervised Study, Review and Drill, -

Source Method : Debate, Symposium, Brain Storming, Seminar, Workshop, Demonstration - Learner Centred Methods : Heuristic Method, Problem Solving Method, Project Method, Field Work, Dalton Plan, Inductive and Deductive Methods, Analytical and Synthetic approaches.

#### **UNIT – VII: ISSUES IN TEACHING AND LEARNING HISTORY**

Individual differences, Language problem in learning - Nature of subjects, Examination and grading system - Teaching and Learning styles - Classroom behavior of Teacher and Learner. Approaches and strategies, Teaching of Current Affairs and Controversial Issues in History: Qualities of History Teacher.

#### **UNIT – VIII: DIVERSE NEEDS OF THE LEARNERS**

Interest and attitude of students toward learning history – Difficulties in learning history – Slow learners and gifted learners – Remedial and enrichment programmes.

#### **UNIT – IX: CLASSROOM MANAGEMENT**

Classroom Management: Concept – Principles of Classroom management – Factors influencing classroom management – Techniques of classroom management – Flanders Interaction Analysis and Modification of Teacher Behaviour.

#### **UNIT – X: EVALUATION IN HISTORY**

Evaluation: Concept, Meaning, Different types of tests in History: Achievement, Diagnostic, Prognostic Criterion and Norm referenced evaluation - Construction of Achievement Test – Online test- Continuous and Purposes and Functions of Evaluation - Evaluation Criterion – Referenced and Norms – Referenced Evaluation - Formative and Summative Evaluation; Achievement Test - Purpose – Characteristics and Types of Achievement test – Diagnostic Test-Remedial Teaching – Construction of an Achievement test in History; Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Quartile deviation, Standard Deviation, Rank Order Correlation

Coefficient Method and Karl Pearson's product moment method - Graphical representation of Data: Bar Diagram, Histogram, Pie Chart, Frequency Polygon, Frequency Curve and Ogive curve..

**SUGGESTED ACTIVITIES:**

1. Preparing Reflected on Journal the Textbooks from VI to XII standards
2. Prepare episodes for Demonstration of teaching skills (Micro teaching).
3. Construct Debate the Strength and weakness of traditional and modern methods of teaching.
4. Writing of module for history class.
5. List out the classroom management skills.
6. Visiting the historical places and monuments and submit a report on it.
7. Collecting Report on Current events related to history.
8. Preparation and use of Power Point related to any one lesson in history for STD IX to XII.
9. Identifying Cataloguing web-sites related to the State Board History Curriculum and Comparing any two for STD IX to XII.
10. Preparation and use of teaching and learning materials related to history for st VI to XII
11. Construction of Achievement Test in history for std IX to XII.

**SUGGESTED READINGS:**

Aggarwal, J.C. (1982). Development and planning of modern education, New Delhi: Vikas Publishing House.

Aggarwal, J.C. (1996). Teaching of history: A practical approach. New Delhi: Vikas Publishing House.

Arora, K.L. Teaching of history, Ludhiana: Tandon Publications.

Arul Jothi, Balaji, D.L. & Sunil Kapoor. (2009). Teaching of history II. New Delhi: Centum Press.

Balaguruswamy, E., & Sharma, K.D. (1982). Computer in education and training, New Delhi: NIIT

Bloom, Benjamin. (1974). Taxonomy of educational objectives: Cognitive domain, Longman.

Chaudhry, L.P. (1975). The effective teaching of history of India. New Delhi: NCERT.

Chauhan, S.S. (2008). Innovations in teaching learning process. UP: Vikas publishing House.

Garrett, H.E. (1979). Statistics in psychology and education. Bombay: Vakils Feffer and Simons.

Kochhar, S.K. (2003). Teaching of history, New Delhi: Sterling Publishing.

Mangal, S.K. & Mangal, S. (2005). Essentials of educational technology and management, Meerut: Loyal Book Depot.

Sharma, R.A.(2008). Technological foundation of education. Meerut: R. Lall Book Depot.

Singh, Y.K. (2009). Teaching practice. New Delhi: APH Publishing Corporation.

Singh, Y.K. (2004). Teaching of history modern methods, New Delhi: APH Publishing Corporation.

## **COURSE CODE: FCPGE**

### **PEDAGOGY OF GEOGRAPHY – PART I**

#### **OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- get sensitised to the school content in Geography;
- comprehend the aims and objectives of teaching Geography;
- acquire various teaching skills and develop competence in structuring lesson plans;
- integrate and organise Geography curriculum;
- identify the various learning resources;
- explore the methods and techniques of teaching Geography;
- understand the issues in teaching and learning of Geography;
- understand the diverse needs of the students;
- acquire classroom management; skills and
- construct appropriate assessment tools for evaluation of Geography learning.

#### **UNIT- I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of the Content course of Standards VI to VIII Social Science Text Book prescribed by Government of Tamil Nadu.

Analysis of the Content course of Standards IX - X Social Science Text Book (for UG) , XI – XII (for PG) Geography Text Book Prescribed by Government of Tamil Nadu.

#### **UNIT - II: AIMS AND OBJECTIVES OF TEACHING GEOGRAPHY**

Need and significance of teaching -Aims: Practical, Social, Disciplinary and Cultural- Instructional Objectives: General Instructional Objectives (G.I.Os) and Specific Instructional Objectives(S.I.Os) relating to the Cognitive,

Affective and Psychomotor Domains based on Bloom's Taxonomy of Educational Objectives – Revised Anderson's Taxonomy.

### **UNIT-III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE – TEACHING PROGRAMME**

Micro teaching: Origin, Need, Phases, Definition, Characteristics, Process, Cycle, A Plan of action, Advantage of Micro teaching and its Uses-Skills : Explanation, Questioning , Blackboard usage, Reinforcement, Stimulus variation, Introduction and Closure -Link lesson - Unit Plan - Year Plan - Lesson Plan: Need and importance ,Characteristics of good Lesson Plan, Herbartian steps, Format of a typical Lesson plan -G.I.Os and S.I.Os, Teaching Learning Materials, Motivation, Presentation, Application, Recapitulation and Assignment –Uses of Lesson plan - Organisation of Practice – Teaching Programme for B.Ed., Student-teachers. Role of the Supervisor; Role of the Principal and the Academic Staff in the Conduct of Practice-teaching Programme - General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation

### **UNIT-IV: INTEGRATION AND ORGANIZATION OF GEOGRAPHY CURRICULUM**

Meaning of Curriculum, components of curriculum – Principles of curriculum construction – Vertical and Horizontal organisation of curriculum – Process of curriculum organisation: Analysis of needs, Objectives, formulation of objectives, selection of content, selection of learning experience, organisation and integration of content and learning experience and evaluation techniques.

### **UNIT-V: DEVELOPMENT OF TEACHING LEARNING MATERIALS**

Edgar Dale's Cone of Experience - Projected aids: Over Head Projector, LCD projector, Slide Projector and Epidiascope - Non Projected Aids: Charts, Flash

Cards, Print Materials, Realia and Models. Types of Boards: Bulletin Board, Magnetic Board, Smart Board, Interactive Board and Flannel Board. Need and importance of Audio Visual aids - Types of Audio Visual Aids - Graphic Aids -Activity Aids. Geography Club, Cartography Lab, Geography Library and Geographic Exhibition: Need and importance, Integration, Organizations, Activities and its Advantages.

#### **UNIT-VI: STRATEGIES OF TEACHING**

Teacher-Centered Methods : Lecture, Lecture cum Demonstration, Team Teaching, Supervised Study, Review and Drill, - Source Method : Debate, Symposium, Brain Storming, Seminar, Workshop, Learner Centered Methods : Heuristic Method, Problem Solving Method, Project Method, Field Work, Inductive and Deductive Methods, Analytical and Synthetic approaches. Laboratory - Activity Based Learning (ABL) –Active Learning Method (ALM) – Strategies for Teaching Geography:

#### **UNIT-VII: ISSUES IN TEACHING AND LEARNING**

Individual differences, Language problem in learning – Nature of subjects, Examination and grading system – Teaching and Learning styles – Classroom behaviour of Teacher and Learner - Need for Learner Centred Approach; Historical Perspective; Attributes of learner Centred Classroom; Application of Learner Centred Approach; Integration of Learner Centred Approach with the Main Stream Education System..

#### **UNIT-VIII: DIVERSE NEEDS OF STUDENTS**

Non – Cognitive Abilities: Meaning and Nature - Interest: Meaning, Classification and sources - Attitude: Meaning and Importance - Interest and Attitude of students towards learning- Value: Meaning and Importance- Source of Values through personal examples set by Teachers and Organisation and management of a variety of Co-curricular activities – Difficulties in Learning – Slow learners and Gifted learners in Geography: Remedial measures and Enrichment programmes.

#### **UNIT-IX: CLASSROOM MANAGEMENT**

Concept of class Room Management – Class Room Organisation – Components of Class Room Management – Class Room Learning atmosphere – Positive Classroom climate – Factors supporting an Effective Learning atmosphere – Advantages of Positive Learning climate – Creative Ideal classroom atmospheres – Technical teaching skills – classroom Activities – Classroom Records and Rules.

### **UNIT-X: EVALUATION OF TEACHING – LEARNING**

Different types of tests in Geography: Achievement, Diagnostic, Prognostic-Criterion and Norm referenced evaluation - Construction of Achievement Test - Continuous and Comprehensive Evaluation - Formative and Summative Evaluation- Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Standard Deviation, Quartile deviation, Rank Order Correlation Method and Karl Pearson's product moment method - Graphical representation of data: Bar diagram, Histogram, Pie Chart, Frequency Polygon, Frequency curve and Ogive curve.

### **SUGGESTED ACTIVITIES:**

1. Collect and present the History and Contributions of any one Geographer.
2. Prepare the Teaching Learning Material for any one topic in Geography.
3. Prepare the Module for any one of the Concept in Geography.
4. Prepare a report on various community resources in learning Geography.
5. Organise a Field trip and prepare a report.

### **SUGGESTED READINGS**

Aggarwal. (2008). Teaching of social studies:A practical approach .(4th ed). UP: Vikas Publishing House Pvt Ltd.

Aggarwal. (2008). Teaching of history (4nd ed).UP: Vikas Publishing House Pvt Ltd.

Aggarwal. J. C. (2008). Principles, methods & techniques of teaching. UP: Vikas Publishing Ahemedabad: Sahitya Mudranalaya.

Aravind,G.(2005). Nationalism and social reform in a solonial situation. New Delhi: Gyan

Archer, R.L. and Lewis, W.J. (1924). The teaching of geography, London, A& C Black Ltd.

Arulsamy, S. and Zaya Pragassarazan, Z. (201 1). The Teaching skills and strategies, Hydreabad, Neel kamal Publicaitons Pvt. Ltd.

Bawa, M.S &Nagpal, B.M., (2010).Developing Teaching Competenceis.Viva Books Private limited, New Delhi.

Bhatia, K.K. (2001). Foundations of teaching learning process. Ludhiana: Tandon Publication.

Bloom, B.S. (Ed) (1956). Taxonomy of Education Objectives, Hand Book-1, The Cognitive Domain, Newyork, David Mckey Company Inc. Books Pvt.

Books for standard VI - XII, Tamil Nadu Text Book Corporation, Government of Tamil Nadu.

Chauhan S. S (1983). Innovation in Teaching Learning Process. Vikas Publishing House Pvt. Ltd. 5, Ansari Road, New Delhi. (Second Edition).

Chauhan, S. S. (2008). Innovations in teaching learning process. UP: Vikas Publishing

Chorley, R.J. and P .Hagett (ed) (1970). Frontiers in Geography Teaching, London, Methuen Co-Ltd.

Crawford, C,C. and Mc. Donald, L.D. (1929). Modern Methods in Teaching of Geography , Newyork, Houghton: Miffin company .

Dhand, H. (2009). Techniques of Teaching. New Delhi: APH Publishing Corporation.

Duplass, J. A. (2009). Teaching elementary social studies. New Delhi: Atlantic Publishers.

Garrett, H. E (1979). Statistics in Psychology and Education, Vikils, Feffer and Simons Ltd, Bombay .

Gopsil, G .H. (1973): The Teaching of Geography , London, Macmillan Education Ltd.

Graves. N (1972). New Movements in the Study and Teaching of Geography , London Maurice Temple Smith Ltd.

Hall, D. (1976). *Geography and the Geography Teachers*, London, George Allen & Unwin Ltd.

Harshone, R (1959). *Perspective on the Nature of Geography*, London, John Murray

Henryk,S.(2005). *Philosophy for a new civilisation*. New Delhi: Gyan Books Pvt. Ltd.

Joyce., & Well., (2004). *Models of teaching*. U.K: Prentice hall of India.

Kaul A. K (1991). *Why and How of “Geography teaching”*, Vinod publications, 346 – Booksmarket, Ludhiana. Ltd, New Delhi.

Mangal S. K and Uma Mangal (2009). *Essentials of Educational Technology*, PHI Learning Private

Mangal, S. k., & Mangal, S. (2005). *Essentials of educational technology and management*. Meerut: loyal book depot.

NCERT.(2005). *NCF for School Educaton*. New Delhi: Anmol Publications.

Passi, B. K. (1976). *Becoming a better teacher: Micro teaching approach*. Pvt. Ltd.

Passi, B.K., (1991). *Models of teaching*.NCERT,New Delhi.

Rekha,P. (2005). *Movements in medieval india*. New Delhi: Gyan Books Pvt. Ltd.

Sharma, R. A. (2008). *Technological foundation of education*. Meerut: R.Lall Books Depot.

Sharma, R. N. (2008). *Principles and techniques of education*. Delhi: Surjeet Publications.

Singh,Y. K. (2009). *Teaching of history: Modern methods*. New Delhi: APH Publishing Corporation.

**COURSE CODE: FCPEC**  
**PEDAGOGY OF ECONOMICS**  
**PART I**

**OBJECTIVES:**

At the end of the course the student-teachers will be able to

- acquire the knowledge on the school content in Economics;
- understand the aims and objectives of teaching Economics;
- acquire various teaching skills and develop competence in structuring lesson plans;
- understand the integration and organisation of Economics curriculum;
- identify the various learning resources;
- explore the methods of teaching Economics;
- understand the issues in teaching and learning Economics;
- understand the diverse needs of the students;
- develop skill on classroom management; and
- construct appropriate assessment tools for evaluation.

**UNIT- I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of the upper primary Standards VI to VIII Social science Text Book prescribed by Government of Tamil Nadu.

Analysis of the Content course of standards XI – XII Economics Text Book Prescribed by Government of Tamil Nadu.

**UNIT- II: AIMS AND OBJECTIVES OF TEACHING ECONOMICS**

Nature and scope of economics - Aims and values of teaching Economics - Objectives of teaching Economics based on Bloom's taxonomy- Recent

trends in Economics aspects – Globalisation, Liberalization and Privatization to Economics.

### **UNIT-III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE - TEACHING PROGRAMME**

Micro teaching: Origin, Need, Phases, Definition, Characteristics, Process, Cycle, A Plan of action, Advantage of Micro teaching and its Uses-Skills : Explaining, Questioning , Blackboard usage, probing question, Reinforcement, Stimulus variation -Link lesson - Unit Plan - Year Plan - Lesson Plan: Need and importance, Characteristics of good Lesson Plan, Herbartian steps, Format of a typical Lesson plan, Motivation, Presentation, Application, Recapitulation and Assignment –Uses of Lesson plan.Organisation of Practice – Teaching Programme for B.Ed., Student-teachers. Role of the Supervisor; Role of the Principal and the Academic Staff in the Conduct of Practice-teaching Programme. General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation

### **UNIT – IV: INTEGRATION AND ORGANIZATION OF ECONOMICS CURRICULUM**

Meaning of Curriculum, components of curriculum – Principles of curriculum construction –Organisation of curriculum – Process of curriculum organisation: Analysis of needs, Objectives, formulation of objectives, selection of content, selection of learning experience, organisation and integration of content and learning experience and evaluation techniques.

### **UNIT -V: DEVELOPMENT OF TEACHING LEARNING MATERIALS**

Edgar Dale’s Cone of Experience - Classification of teaching aids - Projected aids: OHP, slides, LCD projector, Epidiascope and Slide Projector - Non Projected Aids: Charts, Flash Cards, Printed Materials, Bulletin Board, Magnetic Board, Flannel Board, Flash cards, Poster, Graph, Models and Diorama - Need and importance of Audio Visual aids – Types of Audio Visual Aids – Radio, Television, Computer.

### **UNIT-VI: STRATEGIES OF TEACHING ECONOMICS**

Methods of Teaching: Analytic, Synthetic, Inductive, Deductive, Heuristic, Problem solving, Project - Activity Based Learning (ABL) –Active Learning Method (ALM), Lecture Method - Symposia – discussion – workshop – Brain storming– panel discussion - seminar– team teaching - Assignment and Discussion. Techniques of Teaching Economics: Individualized Instruction, Programmed Instruction, Computer Assisted Instruction.

#### **UNIT –VII: ISSUES IN TEACHING AND LEARNING**

Individual differences, Language problem in learning – Nature of subjects, Examination and grading system – Teaching and Learning styles – Classroom behaviour of Teacher and Learner. Interest and Attitude of students towards learning – Difficulties in Learning Economics – Slow learners and gifted learners – Remedial and Enrichment programmes.

#### **UNIT- VIII: DIVERSE NEEDS OF STUDENTS**

Need for Learner Centred Approach - Historical Perspective - Attributes of learner Centred Classroom - Application of Learner Centred Approach - Integration of Learner Centred Approach with the Main Stream Education System.

Non – Cognitive Abilities: Meaning and Nature - Interest: Meaning, Classification and sources - Attitude: Meaning and Importance - Value: Meaning, Importance and Source of Values. Organisation and management of a variety of co-curricular activities.

#### **UNIT- IX: CLASSROOM MANAGEMENT**

Concept of Classroom Management – Classroom Organisation – Components of Classroom Management – Class Room Learning atmosphere – Positive Classroom climate – Factor supporting an Effective Learning atmosphere – Advantages of Positive Learning climate – Creative Ideal classroom atmospheres – Technical teaching skills – Prevention and Control of Students – Classroom Activities – Classroom Records and Rules.

#### **UNIT-X: EVALUATION OF TEACHING - LEARNING**

Concept of Evaluation, Objective Based Evaluation, Continuous and Comprehensive Evaluation, Summative and Formative Evaluation. Different types of tests: Standardised and Teacher made test - Achievement, Diagnostic, Prognostic- Criterion and Norm referenced evaluation - Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Quartile deviation, Standard Deviation, Rank Order Correlation Coefficient Method and Karl Pearson's product moment method - Graphical representation of data: Bar diagram, Histogram, Pie Chart, Frequency Polygon, Frequency curve and Ogive curve.

### **SUGGESTED ACTIVITIES:**

1. Observe a day's proceedings in house of assembly or parliament budget report.
2. Collect newspaper clippings on any economic issue and write a report on the issue with your commands.
3. Organise anyone of the economic awareness programme and report for state and Central Government.
4. Field visit and report writing of any one cottage or small scale industry).
5. Critical analysis of the characteristics of economics textbook of XI / XII standard and prepare a detailed report.

### **Suggested Readings**

Aggarwal, J. C. (2005). *Teaching of Economics*. Agra: Vinod Pustak Mandir.

Becker, G.W., (1964). *An Introduction to the Economics of Education*, Penguin, London.

Bloom, Benjamin, (1974). *Taxonomy of Educational Objectives, Cognitive domin*, Longman Green.

Bowman, M.J. et al. (Eds.) (1968). *Readings in the Economic of Education*. Paris:UNESCO.

Chauhan, S.S., (2008). *Innovations in Teaching Learning Process*, UP: Vikas Publishing House Private Ltd.

Dhand, H. (2009). *Techniques of Teaching*. New Delhi: APH Publishing Corporation.

Garrett, (1979). *Statistics in psychology and education*. Bombay: Vakils, Feffer and Simons Ltd.

Patton, M.Q. (1980). *Qualitative evaluation methods*. New Delhi: Sage Publications.

Rudramamba, B. (2004). *Method of Teaching Economics*. New Delhi: Discovery publication house.

Singh, Y. K. (2009). *Teaching Practice*. New Delhi: APH Publishing Corporation.

Sharma, S. (2004). *Modern Technologies of Teaching Economics*. New Delhi: Anmol Publishing House.

Yadav. (2003). *Teaching of Economics*. New Delhi: Anmol publication.

### **COURSE CODE : FCPCA**

### **PEDAGOGY OF COMMERCE AND ACCOUNTANCY - PART - I**

#### **OBJECTIVES:**

- At the end of the course, the student teacher will be able
- To help the student teachers to acquire the knowledge of nature and historical development
- To understand the aims, objectives and planning for instruction to teach commerce.
- To understand and develop different micro-teaching skills.
- To develop competency in different methods and techniques of teaching.
- To understand different types of techniques in curriculum construction.
- To get familiarize with the various learning resources for professional effectiveness.
- To understand the need for the different types of training programme and qualities of a commerce teacher and commerce text book.
- To enable the student teachers to understand the classroom climate and classroom
- To develop competency in constructing achievement test in commerce and accountancy

- To help the student teachers to sensitize the school content in commerce and accountancy

### **UNIT - I: SENSITISING THE SCHOOL CURRICULUM**

Analysis of upper primary Standards VI to VIII Social Science Text Books prescribed by Government of Tamil Nadu.

Analysis of course content of standards XI and XII Commerce and Accountancy textbooks prescribed by Govt. of Tamil Nadu

### **UNIT - II: AIMS AND OBJECTIVES OF TEACHING OF COMMERCE AND ACCOUNTANCY**

Aims and Objectives – meaning and definition – Bloom’s taxonomy of educational Objectives: cognitive, affective and psychomotor domains – relationship between objectives.

### **UNIT - III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE TEACHING PROGRAMME**

Micro teaching – history and development – definition, objectives and characteristics- steps and procedure – micro teaching cycle – Major micro teaching skills: skill of explaining, stimulus variation, black board writing, reinforcement and illustrating with examples – need for a link lesson - Planning – need and importance – year plan and unit plan – its importance and preparation - Lesson Plan: need, principles, steps and requirements – preparation of lesson plan for both commerce and accountancy - review and assignment – purpose, types of assignment – characteristics of a good assignment - remedial measures.

Organisation of Practice – Teaching Programme for B.Ed., Student-teachers. Role of the Supervisor: Role of the Principal and the Academic Staff in the Conduct of Practice – teaching Programme. General Teaching competence Scale, Self-Appraisal Scale, Guidelines for peer Observation and Framework of Evaluation.

#### **UNIT – IV: INTEGRATION AND ORGANIZATION OF COMMERCE AND ACCOUNTANCY CURRICULUM**

Curriculum – meaning and importance – principles in construction – process and approaches in curriculum construction - curriculum organization – state board and CBSE – its comparison – a critical review of higher secondary school commerce and accountancy syllabus of academic and vocational courses.

#### **UNIT – V: DEVELOPMENT OF TEACHING LEARNING MATERIALS FOR TEACHING COMMERCE AND ACCOUNTANCY**

Teaching Learning Materials: latest trends in curriculum construction in the Instructional Aids – meaning, need and kinds - importance of audio – visual aids and its merits and limitations – Instructional materials in commerce: need and importance – classification of instructional material – projected and non-projected material – uses of instructional material in teaching and learning commerce.

#### **UNIT – VI: STRATEGIES OF TEACHING COMMERCE AND ACCOUNTANCY**

Methods of teaching - meaning, need and characteristics of good teaching method and its classification – lecture method, descriptive, problem solving, inductive and deductive and case study method. Techniques of teaching – role playing, brainstorming, buzz session, stimulation, seminar, symposium, group discussion, workshop and team teaching.

#### **UNIT – VII: ISSUES IN COMMERCE EDUCATION**

Commerce Education – meaning, nature and scope - historical development – need for commerce and accountancy education – fulfilling the present day needs – values of teaching commerce and accountancy: practical, social, cultural, moral, disciplinary and vocational values. Correlation of commerce and accountancy with reference to economics, mathematics, commercial geography, business administration and management.

Individual differences, Language problem in learning – Nature of subjects, Examination and grading system – Teaching and Learning styles – Classroom behaviour of Teacher and Learner – Difficulties in Learning Commerce and Accountancy.

## **UNIT - VIII: COMMERCE DEPARTMENT AND RESOURCES**

Commerce department: library, equipment's, records and registers –  
Commerce teacher: academic and professional qualifications – preparation of teachers' diary - pre-service and in-service – qualities of a commerce teacher – social responsibilities of a commerce teacher - problems faced by the commerce teacher. Commerce and Accountancy text-book – need and importance – qualities of a good text book - principles of selecting a good text-book – criteria for development and evaluation of a text book.

Classroom interaction analysis - classroom climate – meaning and managing tasks – factors influencing for creating better classroom climate – classroom discipline – role of the commerce teacher.

## **UNIT – IX: CLASSROOM MANAGEMENT**

Classroom management – concept, principles and techniques - understanding student needs – factors influencing classroom management- Time Management.

## **UNIT – X: EVALUATION IN COMMERCE AND ACCOUNTANCY**

Testing and Evaluation - purpose and administration of a test – types of evaluation - questions: objective type, short answers and essay type - criteria for good test - construction of achievement test – design. Blueprint, marking schemes – administration of an achievement test – scoring and recording of test results. Educational statistics – graphical representation – measures of central tendency; mean, median and mode – measures of dispersion and its uses in classroom situation - correlation and rank correlation.

## **SUGGESTED ACTIVITIES**

1. Preparing Journal Reflective on the Text books from VI to XII standard
2. Demonstration of teaching skills (micro teaching)
3. Analysis of the strength and weakness of traditional and modern methods of teaching
4. Writing of module for Commerce and Accountancy class.

5. List out the classroom management skills.
6. Visiting the Industries and Market write a report.
7. Reporting on Current events (scrap book) related to Commerce and Accountancy.
8. Preparation and use of Power Point
9. Identification and Cataloguing of three web-sites related to the state board Commerce and Accountancy Curriculum
10. Preparation and use of teaching and learning materials related to Commerce and Accountancy.
11. Construction of Achievement Test to Commerce and Accountancy.

**Reference:**

1. Aggarwal, J.C., (2005) Educational technology and Management, Vinod Pustak Madir,
2. Boynton, L.O (1995) Methods of teaching Book keeping, Cincinnati: South Western
3. Dhand, H. (2009) Techniques of Teaching, New Delhi: APH Publishing Corporation.
4. Khan, M.S (1982). Commerce Education, New Delhi: Sterling Publishers.
5. Laxmi Devi (1997) Economics of Education, India: Bhargava Publications.
6. Lynn Erisson, H. (1998) Concept based curriculum instruction, India : SAGE Publications.
7. Mangal, S.K., (2001) Foundations of Educational Technology, Tandon Publications,
8. Passi, B.K and Lalita, M.A., (1976) Micro – Teaching: Theory and Research, Jugal
9. Rao, Seema, (1995), Teaching of Commerce, New Delhi: Anmol Publications.
10. Rao, S. (2004), Teaching of Commerce, New Delhi: Anmol Publications.
11. Satish C. Chandha, (2006) Educational Technology and Measurement, R.Lall Book
12. Sharma, R.A., (2005) Teaching of Commerce, Meerut : Surya Publication.

13. Siddiqui, M.H. (2009), Techniques of Teaching, New Delhi: APH Publishing Corporation.
14. Singh, R.P., (2005) Teaching of Commerce, Meerut: Surya Publication.
15. Sivarajan. K. And Lal. E.K., (2002) Commerce Education, Methodology of Teaching and Pedagogic Analysis, Calicut: Calicut University.

**COURSE CODE: FCPHS**  
**PEDAGOGY OF HOME SCIENCE**  
**PART I**

**OBJECTIVES:**

At the end of the course, the student-teachers will be able to

- acquire knowledge about the School Home Science content from standards VI to XII;
- understand the aims and objectives of teaching Home Science;
- acquire effective teaching skills and develop competency in structuring lesson and unit plans.
- know the principles underlying home science curriculum;
- realise the significance of teaching learning materials in Home Science teaching;
- comprehend the strategies of teaching Home Science.
- gain knowledge on the diverse needs of the learner's:
- plan classroom management in Home Science:
- use various tools for evaluation of Home Science.

**UNIT- I: SENSITIZING THE SCHOOL CURRICULUM**

Analysis of the upper primary Standards VI to VIII Science Text Book prescribed by Government of Tamil Nadu.

Analysis of the content Standards XI to XII Home science Text Book prescribed by the Government of Tamil Nadu.

## **UNIT – II: AIMS, OBJECTIVES AND VALUES OF TEACHING HOME SCIENCE**

General and Specific aims of Teaching Home Science - Revised Anderson's Taxonomy, Taxonomy of Instructional Objectives: Cognitive, Affective and Psychomotor Domain; Values of Teaching Home Science: Social, Economic, Cultural, Moral, Philosophical, Political, Intellectual and Vocational.

## **UNIT – III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE – TEACHING PROGRAMME**

Micro Teaching: Meaning, Concept, Principles and Phases of Microteaching - Developing the Skills: Introducing a Lesson, Explaining, Probing Questioning, Stimulus Variation, Reinforcement, Achieving Closure, Use of Teaching Aids, and Blackboard Usage - Link lesson: Definition, Need for Link Lesson in Micro Teaching Programme - Macro Teaching: Unit plan, Year Plan and Daily Plan, Need and Importance of Lesson Plan, Objectives based teaching, Steps in lesson plan - Organization of Practice – Teaching Programme for B.Ed., Student-teachers - Role of the Supervisor; Role of the Principal and the Academic Staff in the conduct of Practice -teaching programme - General Teaching Competence Scale, Self-Appraisal Scale, Guidelines for Peer Observation and Framework of Evaluation.

## **UNIT – IV: INTEGRATION AND ORGANIZATION OF HOME SCIENCE CURRICULUM**

Principles of curriculum development, selection of content and organization of subject matter of Home Science curriculum in senior secondary education.

## **UNIT – V: DEVELOPMENT OF TEACHING LEARNING MATERIALS FOR TEACHING HOME SCIENCE**

Teaching Learning Materials: Significance and principles of using teaching - learning materials in Home Science – Classification of Teaching - Learning Materials: Edger Dale’s Cone of Experience – Audio aids, Audio - visual aids, Graphic aids, 3D aids, Display boards and Arbitrary aids.

#### **UNIT – VI: STRATEGIES OF TEACHING HOME SCIENCE**

Methods of teaching - meaning, need and characteristics of good teaching method and its classification – lecture method, descriptive, problem solving, inductive and deductive and case study: Techniques of teaching – role playing, brainstorming, buzz session, stimulation, seminar, symposium, group discussion, workshop and team teaching. Biographical approaches in teaching Home Science, Communication in teaching Home Science, Collaborative Learning and Experimental Learning in Home Science, facilitating learners for self-study.

#### **UNIT – VII: ISSUES IN TEACHING AND LEARNING**

Individual differences, Language problem in learning - Nature of subjects, Examination and grading system - Teaching and Learning styles - Classroom behavior of Teacher and Learner. - Teaching of Current Affairs and Controversial Issues in Home science: Approaches and strategies of teaching home science – Qualities of home science teacher - Creative teaching.

#### **UNIT – VIII: DIVERSE NEEDS OF THE LEARNERS**

Interest and attitude of students toward learning home science – Difficulties in learning home science – slow learners and gifted learners – Remedial and enrichment programmes.

#### **UNIT – IX: CLASSROOM MANAGEMENT**

Classroom Management: Concept – Principles of Classroom management – factors influencing classroom management – Techniques of classroom management - Flanders Interaction Analysis and modification of teacher behaviour.

#### **UNIT – X: EVALUATION IN HOME SCIENCE**

Purposes and Functions of Evaluation – Types of Evaluation: Diagnostic, Formative, Summative and Criterion-Referenced and Norm-Referenced

Evaluation - Achievement Test: Preparation of Achievement Test, Characteristics of Achievement Test, Diagnostic test and Remedial teaching of Achievement Tests in Home science – Standardized Vs Teacher Made Tests.

### **SUGGESTED ACTIVITIES:**

1. Prepare a Journal Reflecting on the Text books from VI to XII standards.
2. Plan of equipments for home science lab in schools.
3. Demonstration of teaching skills (Micro teaching).
4. Analysis of the Strength and weakness of traditional and modern methods of teaching.
5. Writing of module for home science class.
6. List out the classroom management skills.
7. Preparation of radio and TV lessons.
8. Reporting on Current events (scrap book) related to home science.
9. Preparation and use of Power Point.
10. Identifying and Cataloguing of three web-sites related to the state board home science Curriculum.
11. Preparation and use of teaching and learning materials related to home science.
12. Construction of Achievement Test to home science.

### **SUGGESTED READINGS:**

- Sharma B.L. *Teaching of home science*. Meerut. Vinay Rakheja Publications.
- Sharma R.S. and Kaushik. *Principles of home science*. New Delhi. Anmol Publications.
- Seema Yadav. *Teaching of home science*. New Delhi. Anmol Publications.
- Mujibul Hasan Siddiqui. *Teaching of home science*. New Delhi. APH Publications.
- Reddy.R.S. *Nutrition education*. New Delhi. Commonwealth Publisher.
- Anita Varma. *Graha vighyan shikshan*. Varanasi. Vijay Prakashan Mandir.
- Arvindra Chandra, Anupama Saha. *Fundamentals of teaching of home science*. New Delhi. Sterling Publisher.

**COURSE CODE: FCPSS**  
**PEDAGOGY OF SOCIAL SCIENCE**  
**PART I**

**OBJECTIVES**

At the end of the course, the student-teacher will be able to

- acquire knowledge about the school Social Science text books from VI to XII;
- understand the aims and objectives of teaching Social Science;
- develop effective teaching skills;
- adopt the different teaching-learning strategies;
- analyse and develop appropriate methods to deal with controversial issues in Social Science;
- know the principles underlying Social Science curriculum;
- plan the classroom management;
- realise the implications of teaching learning materials;
- identify the diverse needs of students and develop suitable programmes and;
- use of various tools of evaluation.

## **UNIT- I: SENSITIZING THE SCHOOL CURRICULUM**

Analysis of the Content course of Standards VI to VIII Social Science Text Books prescribed by Government of Tamil Nadu.

Analysis of the Content course of Standards XI to XII Philosophy/Psychology/Sociology/Political Science/Logic Text Books prescribed by the Government of Tamil Nadu.

## **UNIT – II: AIMS, OBJECTIVES AND VALUES OF TEACHING**

### **SOCIAL SCIENCE**

General and Specific aims of Teaching Social Science- Revised Blooms Taxonomy, Taxonomy of Instructional Objectives: Cognitive, Affective and Psychomotor Domain; Values of Teaching Social Science: Social, Economic, Cultural, Disciplinary, Moral, Philosophical, Political, Intellectual and Vocational.

## **UNIT – III: TEACHING SKILLS AND ORGANIZATION OF PRACTICE - TEACHING PROGRAMME**

Micro Teaching: Meaning, Concept, Principles and Phases of Microteaching - Developing the Skills: Introducing a Lesson, Explaining, Probing Questioning, Stimulus Variation, Reinforcement, Achieving Closure, Use of Teaching Aids, and Blackboard Usage - Link lesson: Definition, Need for Link Lesson in Micro Teaching Programme. Macro Teaching: Unit plan, Year Plan and Daily Plan, Need and Importance of Lesson Plan, Objectives based teaching, Steps in lesson plan - Organisation of Practice – Teaching Programme for B.Ed., Student-teachers. Role of the Supervisor; Role of the Principal

and the Academic Staff in the Conduct of Practice-teaching Programme.  
General Teaching Competence Scale, Self-Appraisal Scale, Guidelines  
for Peer Observation and Framework of Evaluation

#### **UNIT – IV: INTEGRATION AND ORGANIZATION OF SOCIAL SCIENCE CURRICULUM**

Content, principles of selection – Individual, Social, National and  
Global needs – Methods of organization – Logical and Psychological  
(stages of development), Chronological, Periodical, Concentric and  
Spiral, Regressive and Progressive Methods – Principles of correlation  
of subjects – Identical, Incidental, Systematic – Fusion with Geography,  
Political science, Anthropology, Literature, Economics and Sociology

#### **UNIT – V: DEVELOPMENT OF TEACHING LEARNING**

##### **MATERIALS FOR TEACHING SOCIAL SCIENCE**

Teaching Learning Materials: Significance and principles of using  
teaching learning materials in Social Science – Classification of  
Teaching Learning Materials: Edger Dale’s cone of experience – Audio  
aids, Audio visual aids, Graphic aids, 3D aids, Display boards and  
arbitrary aids.

#### **UNIT – VI: STRATEGIES OF TEACHING SOCIAL SCIENCE**

Teacher-centred Methods : Story Telling, Dramatization, Lecture,  
Lecture cum Demonstration, Team Teaching, Supervised Study, Review  
and Drill, Source Method- Debate, Symposium, Brain Storming,  
Seminar, Workshop, Demonstration - Learner centred Methods :  
Heuristic Method, Problem Solving Method, Project Method, Field  
Work, Dalton Plan, Inductive and Deductive Methods, Analytical and  
Synthetic approaches.

#### **UNIT – VII: ISSUES IN TEACHING AND LEARNING SOCIAL SCIENCE**

Individual differences, Language problem in learning - Nature of subjects, Examination and grading system - Teaching and Learning styles - Classroom behavior of Teacher and Learner. Teaching of Current Affairs and Controversial Issues in Social Science: Approaches and strategies of teaching Social Science – Qualities of Social Science teacher.

### **UNIT – VIII: DIVERSE NEEDS OF THE LEARNERS**

Interest and attitude of students toward learning Social Science – Difficulties in learning Social Science – slow learners and gifted learners – Remedial and enrichment programmes.

### **UNIT – IX: CLASSROOM MANAGEMENT**

Classroom Management: Concept – Principles of Classroom management – factors influencing classroom management – Techniques of classroom management - Flander Interaction Analysis and modification of teacher behaviour.

### **UNIT – X: EVALUATION IN SOCIAL SCIENCE**

Different types of tests in Social Sciences: Achievement, Diagnostic, Prognostic-Criterion and Norm referenced evaluation - Construction of Achievement Test –Online test- Continuous and Comprehensive Evaluation - Formative and Summative Evaluation - Statistical Measures: Mean, Median, Mode, Range, Mean Deviation, Quartile deviation, Standard Deviation, Rank Order Correlation Coefficient Method and Karl Pearson's product moment method - Graphical representation of data: Bar diagram, Histogram, Pie Chart, Frequency Polygon, Frequency curve and Ogive curve.

### **SUGGESTED ACTIVITIES**

1. Preparing Journal Reflective on the Text books from VI to XII standard
2. Demonstration of teaching skills (micro teaching)

3. Analysis of the strength and weakness of traditional and modern methods of teaching
4. Writing of module for Social Science class.
5. List out the classroom management skills.
6. Visiting the historical, geographical places and monument.
7. Reporting on Current events (scrap book) related to Social Science.
8. Preparation and use of Power Point
9. Identification and Cataloguing of three web-sites related to the state board Social Science Curriculum
10. Preparation and use of teaching and learning materials related to Social Science.
11. Construction of Achievement Test to Social Science.

**SUGGESTED READINGS:**

- Aggarwal, J.C. (1993). *Teaching of Social Studies - A Practical Approach*, 2<sup>nd</sup> revised Edition. New Delhi: Vikas Publishing House.
- Benjamin, S.B.J. Thomas, F & George F.M. (1971). *Hand book of Formative and Summative Evaluation of Student Learning*, New York: Mc crow Hill Book Company.
- Bining A.C. and Bining D.H (1952). *Teaching of Social Studies in Secondary School*. Bombay: Tata McCraw Hill Book Company.
- Dash, B.M. *Concrete –cum- method of Teaching of Social Studies*. New Delhi: Kalyani Publications.
- Edgar, S.W. and Stanely, P.W (1958). *Teaching Social Studies in High Schools*. IV Edison Boston D.C.: Health and Company.
- Kohli, A.S. *Teaching of Social Studies*. New Delhi: Anmol Publications.
- Kochar, S.K. (1998). *Teaching of Social Studies*. New Delhi Sterling publications.
- Metha, D.D. (2004). *Teaching of Social Studies*. Ludhiana: Tandon Publications.

Mittal, H.C, *Teaching of Social Studies*. New Delhi Dhanpat Rai and Chandra R.N. Sons.

Mottart, Maurice, P. *Elementary Social Studies instructions*. New York: Longman, Green and Co.

Mofatt, Maurice, P. *Social Studies instruction*. New York: Prentice Hall.

Preston, Ralph, C. (1965). *Hand book of Social Studies*. Renhart and Company.

Shaid, B.D. (1962). *Teaching of Social Studies*. Jalandhar: Panipet.

Sidhu, H.S. *Teaching of Social Studies*. Ludhiana: Tondon Publishers.

Garrett, H.E. (1979). *Statistics in psychology and education*. Bombay: Vakils Feffer and Simons.

### **COURSE CODE: FCPAL**

### **ASSESSMENT OF LEARNING**

#### **OBJECTIVES:**

At the end of the course, the student teacher will be able to

- understand the basic concepts of Test, Assessment and Evaluation;
- acquire the knowledge of commonly used Tests in schools;
- understand the purpose of Diagnostic Test;
- develop Teaching Competency Assessment Scale;
- develop knowledge on Continuous and Comprehensive Evaluation;
- understand the Tools of Evaluation;
- understand the process of Standardization of Tests;
- identity the various types of Intelligence Tests;
- understand the various types of Personality, Aptitude and Interest Tests;
- understand the various aspects of Curriculum Evaluation;

#### **COURSE CONTENT**

##### **UNIT I: BASICS OF MEASUREMENT AND EVALUATION**

Test, Measurement and Evaluation - Concept, Meaning, Nature, Characteristics and Need. Measurement scales: Nominal scale, Ordinal scale,

Interval scale and Ratio scale - Characteristics of good evaluation – Formative and Summative Evaluation –Uses of evaluation.

Meaning and Definition of Evaluation approach - Steps in Evaluation approach - Techniques of Evaluation - Classification of Evaluation Tests - Educational purpose and objectives of Evaluation - Difference between Test and Examination.

## **UNIT II: COMMONLY USED TESTS IN SCHOOLS**

Meaning, Purpose and Construction of Achievement Test - Standardized Tests - Teacher -made Tests - Administration of an Achievement Tests - Scoring and Recording of Test Results - Norms and Interpretation of Test Scores - Question Bank - Types of Questions - Oral Tests: Oral Response Test and Oral Performance Test - Written Response Test - Practical Test - Broad Categories of Test: Aptitude Test, Ability Test and Achievement Test. Grading systems – Comparative / Relative Grading and Absolute Grading.

## **UNIT III: DIAGNOSIS RELATED TO ACHIEVEMENT**

Meaning and Importance of Educational Diagnosis - Purpose and use of Diagnostic Tests - Diagnostic Evaluation Versus Summative and Formative Evaluation. Steps involved in the Diagnosis and Remediation of Learning difficulties - Areas and Content of Diagnostic Testing - Achievement tests versus Diagnostic Tests.

## **UNIT IV: RATING SCALE**

Meaning and Definition of Rating Scale - Construction of Rating Scale - Teaching Competency Assessment Scale.

## **UNIT V: CONTINUOUS AND COMPREHENSIVE EVALUATION (CCE)**

Aim, Objective and characteristics of CCE - Continuous Evaluation and Comprehensive Evaluation – Scholastic area – Co-Scholastic area – Functions of Continuous and Comprehensive Evaluation – Recording and reporting: Measurement of students’ achievements – Feedback as essential component of assessment

## **Unit VI: TOOLS OF EVALUATION**

Rating scale, Check list, Anecdotal records, Socio-Metric Technique, Interview, Opinionnaire, Questionnaire, Schedule, Attitude Scale, Test and Inventory - Use of test data: placement, promotion, grouping, diagnosis and remediation – Self reporting Techniques - Reflection as assessment technique for learning.

## **UNIT VII: TEST CONSTRUCTION AND STANDARDIZATION**

Criteria of Good Measuring Instrument - Test Construction : Item Writing, Item - Analysis - Test Standardization: Steps of Test Standardization - Validity – Reliability –Objectivity –Usability – Norms.

## **Unit VIII: INTELLIGENCE TESTS**

Construction and Standardization of the Psychological Tests, Intelligence - its nature - Theories - Spearman, Thorndike, Thurstone and Guilford. Types of Intelligence Test - their functions and uses.

## **UNIT IX: ASSESMENT OF PERSONALITY, APTITUDE AND INTEREST**

Psychometric Tests - Projective Techniques: Rorschach Inkblot Test, Thematic Apperception Test, Word Association Test and Sentence Completion Test - Situation Test and Personality Inventories - Measurement of Aptitude - DAT - Seashcie's Masical Aptitude Test. Interest Inventories - SVIB - Thurston's interest Schedule - Kuder's - preference record and Lea - Thorpe Inventory.

## **UNIT X: CURRICULUM EVALUATION**

Concept, Need, Importance and Sources of Curriculum Evaluation, Aspects of Curriculum Evaluation, Criterion Referenced Testing and Norm Referenced Testing - Methods of Curriculum Evaluation - Restructuring Curriculum.

## **SUGGESTED ACTIVITIES**

1. Plan and construct an achievement test in one of the Pedagogy Subjects.

2. Prepare a report by undertaking question papers of previous year public examination of any three school subjects.
3. Administer an intelligence test on students of any class and interpret the results.
4. Survey the continuous and comprehensive assessment practices followed in schools and prepare a report.
5. Prepare the Teaching Competency Assessment Scale.

### **SUGGESTED READINGS**

Adams, G.S., Measurement and Evaluation in Education, Psychology and Guidance, New York, 1964, Holt, Rinehart & Winstone.

Anastasi, Anne, (1976), Psychological Testing, 4<sup>th</sup> end. New York; Macmillan Publishing Co. Inc.

Agarwal, Y.P. (1990), Statistical Methods – Concepts, Applications and Computation, New Delhi : Sterling Publishers Pvt. Ltd.

Bertrand, Arthur and Cebuls, Joseph P., (1980): Tests, Measurement and Evaluation A Development Approach, U.S.A: Addison-Wesley.

Bloom, Benjamin S., et.al (1971): Handbook on Formative and Summative Evaluation in Student Learning. U.S.A: McGraw Hill.

Bean, K.L. (1953), Construction of Educational and Personal Tests, New York, McGraw Hill Book Co.,

Bradfield, J.M., Measurement of Educational in Education, New York, MacMillan Co.,

Brown, F.S., Principals of Educational and Psychological Testing, New York, Holt Renhart and Winston.

Chase, Clinton I., (1974) Measurement for Educational Evaluation, U.S.A: Addison - Wesley.

Cronback, L.J., (1970), Essentials of Psychological Testing 3<sup>rd</sup> ed., New York; Harper and Row.

Ebel, Robert L., (1979), Essentials of Educational Measurement, London, Practice Hall International Inc.

Ebel Robert L., (1966): Measuring Educational achievement, New Delhi : Prentice-Hall of India.

Ebel, Robert L. and Frisbie, David A., (1991): Essential of Education Achievements, New Delhi : Prentice Hall of India.

Ebel, E.L. (1965). Measuring Educational Achievement, New Jersey: Englewood Cliffs,

Fredcrick, Davis B. (1981). Educational Measurement and their interpretation, Belmont : Woodworth Publishing Company Inc..

Freeman S. Frank, (1968), Theory and Practice of Psychological Testing, Calcutta, Oxford and IBH Publishing Co.,

Gronlund E. Norman, (1970). Reading in Measurement and Evaluation. London : The Macmillan Company, Collier, Macmillan Ltd.

Gronlund, N.E., (1981). Measurement and Evaluation in Teaching, 4th ed., New York; Macmillan Publishing Co. Inc.

Garrett.H.E. (1956). Elementary Statistics, New York : Longmans, Green & Co.,.

Guilford, J.P. (1965). Fundamental Statistics in Psychology and Education, New York : Mc Graw Hill Book Company.

Ingram, Cregg. F, (1980). Fundamentals of Educational Assessment, U.S.A.: D.V.and Nostrand,

Harper, A.Edwin J, and Harper, Erika S. (1992). Preparing Objectives Examinations, A Handwork for Teachers, Students and Examiners, New Delhi : Prentice-Hall of India.

Hannagan, T.J. (1982), Mastering Statistics, Surrey : the Macmillan Press Ltd.,.

Khan, Mohd, Arif, (1995): School Evaluation, New Delhi : Ashish Publishing House,

Kerlinger, F.N., (1973), Foundations of Behavioural Research, 1<sup>st</sup> ed., New York: Holt, Rinehart and Winston Inc.

Lindgren, B.W. (1975), Basic Ideas of Statistics, New York : Macmillan Publishing Co, Inc.,.

Linn, Robert L. (1989) Educational Measurement, U.S.A : Macmillan.

National Council of Educational Research and Training, (1967): Scheme of Comprehensive Internal Assessment Rajasthan Board of Secondary Education: Ajmer.

Nunnally, Jume, (1964). Educational Measurement & Evaluation, New York; McGraw Hill Book Company.

Nail, V.H. (1965) Introduction to Educational Measurement, Boston, Hoaghton Mifflin Co.,

Patel, R.N. (1978). Educational Evaluation-Theory and Practice, Bombay: Himalaya Publishing House.

Popham. W. James (1990). Modern Educational Measurement: Practitioners Perspectives, U.S.A: Prentice-Hall.

Singh, Pritam, (1989). Handbook of Pupil Evaluation, New Delhi: Allied Publishers.

Singh.P. (1989). Scheme of Continuous Comprehensive Evaluation for Navodaya Vidyalayas, Navodaya Vidyalaya Samiti, MHRD, New Delhi.

Srivastava, H.S. (1989). Comprehensive Evaluation in School, NCERT, New Delhi

Srivastava,H.S. and Pritamn Singh (1977): Use of Test Material in Teaching. NCERT: New Delhi

Stodola Quentin & Stordhal Kalmer, (1972), Basic Educational Tests and Measurement; New Delhi; Thomson Press (India Limited).

Thorndike, R.L. & Hagen, EP., (1969), Measurement and Evaluation in Psychology and Education, 3<sup>rd</sup> ed; New York; John Wiley & Sons Inc.

Wine, R.L. (1976), Beginning Statistics, Massachusetts : Winthrop Publishers Inc.,.

**COURSE CODE: FEPCY**

**YOGA, HEALTH AND PHYSICAL EDUCATION**

**OBJECTIVES:**

At the end of the course, the student-teacher will be able to

- define the concept of Yoga;
- classify the sanas and Pranayama;
- understand the meaning and significance of Pranayama, mudra, kriyas and meditation;
- comprehend the aims and objectives of Health Education;
- appreciate the important of food and nutrition;
- list out the communicable diseases and life style disorders;
- explain the Physical Education concepts and its scope;
- practice the various physical exercises;
- write lesson plans; for various games and appreciate the methods of teaching;
- acquire skills to organise and conduct sports in schools.

**UNIT- I: INTRODUCTION TO YOGA**

Meaning, Concept and Historical Development of Yoga – Misconception about Yoga - Aims and objectives - Eight limbs of yoga - Guidelines for

practicing yoga - Benefits of yoga – Physiological, Psychological, Therapeutic and Physical.

## **UNIT – II: ASANAS**

Meaning, Methods and benefits of Asanas – Sitting posture: Padmasana, Mathyasana, Vajrasana, Paschimottanasana, Vakrasana, Yogamuthra – Standing posture: Trikonasana, Vrishasana, Chakrasana, Padahastanasana, Tadasana, Vutkathasana- Lying Posture: Shalabhasana, Dhanurasana, Bhujangasana, Halasana, Pavanamuktasana, Vipritatarani – Surya namaskar: Meaning, Twelve stages of Surya namaskar, Benefits, Preventive and curative effects of asanas.

## **UNIT – III: PRANAYAMA, MUDRA, KRIYAS AND MEDITATION**

Pranayama: Meaning and Practice of Pranayama. Types of Pranayama: NadiSodhan, Ujjayi - benefits of Pranayama -. Mudra: Meaning – Types of Mudra : Chin Mudra, Pran Mudra - benefits of Mudra - Kriyas: Meaning, Methods and benefits of Kriyas - Types of Kriyas : Kaphalabhati, Neti, Dhauti. Nauli, Basti, Trataka - benefits of Kriyas - Meditation: Meaning, Objectives - Types of Meditation: Transcendental meditation, Breathing meditation, Object meditation - benefits of Meditation.

## **UNIT - IV: HEALTH EDUCATION**

Meaning, Aims and Objectives - Scope of Health Education - Methods of Imparting Health Education in Schools – Health Instruction – Health Services – Health Supervision - Posture – meaning, causes, defects and prevention - First Aid – Meaning, Principles of first aid, Content in the first aid box - Need and importance of first aid - Qualification of a first aider - First Aid in different cases.

## **UNIT - V: FOOD AND NUTRITION**

Food: Meaning and Classification - Carbohydrates, Proteins, Fats, Vitamins, Minerals, Roughage and Water - Guidelines for food selection - Food

preservation – Nutrition: Meaning and Concept – Malnutrition - Balanced diet  
- Diet for obesity and underweight.

#### **UNIT – VI: COMMUNICABLE DISEASES AND LIFE STYLE DISORDER**

Communicable diseases: Meaning – Types: Malaria, Typhoid, Tuberculosis, Cholera, Diarrhoea and AIDS – Causes, symptoms and treatment - Life style disorder – Diabetes, Hyper Tension, Heart Attack, Obesity and Ulcer – Causes, Symptoms and treatment.

#### **UNIT – VII: INTRODUCTION TO PHYSICAL EDUCATION**

Concept and Meaning, Definition - Aims and Objectives of Physical Education - Scope, Need and Importance of Physical Education - Physical Fitness: Meaning, Definition, and Health related components of Physical fitness: Muscular Strength, Muscular Endurance, Flexibility, Cardio – respiratory endurance and Body composition, benefits of Physical fitness.

#### **UNIT – VIII: PHYSICAL EXERCISE**

Meaning - Need and Importance of Physical Exercise - Effects of exercise on the various systems – Muscular, Circulatory, Digestive, Nervous and Respiratory systems.

#### **UNIT – IX: RULES OF GAMES AND SPORTS, LESSON PLAN AND METHODS OF TEACHING**

Games: Volleyball – Dimensions of court, skills and basic rules, Kabaadi – Dimensions of court, skills and basic rules, Kho-Kho – Dimensions of court, skills and basic rules - Track ; Laying of 400 Meters Track - Lesson plan – Meaning, Values and preparation of general lesson plan - Methods of teaching: common method, lecture method, demonstration method, reciprocal method, discussion method, whole method, part method, whole-part-whole method, progressive method, observation method and project method.

#### **UNIT – X: ORGANISING COMPETITIONS**

Intramural and extramural competitions – Meaning, Definition - Organising and Conducting - Sports meet – types: Standard, Non-standard, Organising and Conducting, Tournaments: Single league and Single League and Single Knock Out– Preparation and drawing fixtures, merits and demerits.

#### **SUGGESTED ACTIVITIES:**

1. Sit in a meditative posture and meditate for 30 minutes. Record your experiences in a brief manner.
2. Visit any one school and conduct an interview with the students about their participation in games and sports.
3. Prepare an album on some communicable diseases in your locality and suggest solutions for the same.
4. Plan a state level sports and cultural meet and prepare a programme list.
5. Visit one or more schools, ask the Physical Director about the concept of Physical stamina and fitness; Compare and contrast their concept with that of Yogic concept and its relevance to the present day scenario.

#### **SUGGESTED READINGS:**

Aggarwal J.C. (2005). Health and Physical Education, Shipra Publications, Delhi.

Anantharaman, T.R. (1996). Ancient Yoga and Modern Science. New Delhi: MushiramManoharlal Publishers Pvt. Ltd.

Athicha Pillai A. & Bevinson Perinbaraj S. (2006). Methods in Physical Education. Publisher: Pravin, Tamilnadu, India.

Bhavani, A.D. (2008). A Primer of Yoga Theory. Pondyichery: Dhivyananda Creations.

Bud Getchell (1992). Physical fitness: A Way of Life, Macmillian Publishing Company, America.

Charles P (1998). A Key to Stay Fit, Shanthi Publication. Delhi.

David H Bass (1996). Your Personal Fitness Trainer, BPB Publications, New Delhi.

Dhanajoy, S., & Seema, K. (2007). Lesson planning: Teaching methods and class management in physical education. New Delhi: KhalSahitya Kendra.

Gupta D.K. (2005). Health Education for Children, KheelSahitya Kendra, New Delhi.

Joshi K S Dr. (1983) Yogic Pranayama: Breathing for Long Life and Good Health, Orient Publications, Delhi.

Krishan Kumar Suman. (2009) Yoga for Health and Relaxation, Lotus Press, New Delhi.

Nagendra, H.R. (2004). Yoga for Promotion of Positive Health. Swami Vivekananda Yoga Prakashana, India.

Nagendra H.R. and Nagaratna, R. (2008). Yoga Practices. Bangalore: Swami Vivekananda Yoga Prakashana, India.

Nath, S.P. (2005). Speaking of Yoga. New Delhi: Sterling Publishers.

Pandit Lakshmi Doss. (2002) Yogasana for Everybody, Balaji Publications, Chennai.

Reema, K. (1996). Physical Fitness. New Delhi: KhelSahitya Sports Publication.

Swami Satyananda. (1999). Four Chapters on Freedom. Commentary on Yoga Sutras of Patanjali Saraswathi. Bihar school of Yoga, Munger.

Thomas.J. P. (1967). Physical Education Lesson. Gnanodaya Press, Madras.

Venugopal B and Dr.Ranganayaki. (2010). Yoga and Yoga Practices, Neelkamal Publications Pvt.Ltv. Hyderabad.

Yadav, Y.P. and Yadav, R. (1998). Art of Yoga. Friends Publishers, India.

Yoga Education (Bachelor of Education B.Ed). (2015). National Council for Teacher Education, New Delhi. St. Joseph Press.

Yoga Education (Master of Education M.Ed). (2015). National Council for Teacher Education, New Delhi. St. Joseph Press.

Yoga Education (Elementary Education D.El.Edn). National Council for Teacher Education, New Delhi. St. Joseph Press.

### **SUGGESTED WEB READING:**

<http://www.tutorvista.com/content/biology/biology-i/food-nutrition-health/classification-food.php>.

<http://www.redcross.ca/training-and-certification/first-aid-tips-and-resources-/first-aid-tips/Kit-contents>.

<http://www.glopalhealth.gov/global-health-topics/communicable-diseases>.

## **COURSE CODE: FEPCE**

### **ENVIRONMENTAL EDUCATION**

#### **OBJECTIVES**

At the end of the course, the student-teachers will be able to:

1. realise the importance of environmental education;
2. list out the natural resources and its associated problems;
3. understand the impact of different types of pollution and its management;
4. appreciate the policies and programmes initiated to protect the environment;
5. narrate the environmental movements in India;
6. appreciate the international initiatives to protect the environment;
7. realise the importance of management and protection environment;
8. develop curriculum for environmental education;
9. understand the impact of science and technology on environment; and
10. adopt the environmental ethics in day-to-day life.

#### **UNIT 1 - ENVIRONMENTAL EDUCATION**

Concept and Meaning of Environment – Segments of the Earth – Components of Environment –Types of Environment – Environmental Education: Backdrop of Environmental Education – Focal Aspects of Environmental Education – Functions of Environmental Education – Goals and Objectives of Environmental Education – Need and Importance of Environmental Education

– Core Themes of Environmental Education – Scope of Environmental Education.

## **UNIT 2 - NATURAL RESOURCES, PROBLEMS AND SOLUTIONS**

Natural Resources: Land Resources, Prevention of Soil Erosion – Forest Resources, Prevention of Deforestation – Water Resources, Prevention of Water Scarcity – Mineral Resources, Prevention of Exploitation of Minerals – Food Resources, Food Crisis and Increasing Food Production – Energy Resources – Alternative Energy Resources.

## **UNIT 3 - ENVIRONMENTAL POLLUTION, HAZARDS AND DISASTER MANAGEMENT**

Environmental Degradation – Types of Environmental Degradation – Environmental Pollution – Environmental Pollutants – Types of Pollution: Soil/Land Pollution, Water Pollution, Air Pollution, Noise Pollution, Radiation/Nuclear Pollution, Light Pollution, Solid Waste Pollution – Prevention and Management of Pollution – Hazards and Disaster Management: Earth Quake, Land Slides, Volcanic Eruption, Forest Fire, Tsunami, Cyclone, Flood - Nuclear and Industrial Accidents – Oil Spill.

## **UNIT 4 - ENVIRONMENTAL PROBLEMS, POLICIES AND PROGRAMMES**

Major Environmental Problems around the World: Global Warming, Green House Effect, Climate Change, Ozone Layer Depletion, Acid Rain, Extinction of Flora and Fauna – Environmental Policies and Programmes in India: Environmental Legislation, Acts, Rules, Notifications and Amendments.

## **UNIT 5 - ENVIRONMENTAL MOVEMENTS AND SUSTAINABLE DEVELOPMENT IN INDIA**

Environmental Movements in India: Bishnoi Movement - Chipko Movement - Narmada Bachao Andolan - Silent Valley Movement - Baliapal Movement – Ganga Action Plan – Swachh Bharat Mission - Environment for Sustainable Development: Symptoms of Non-Sustainability - Principles of Sustainable Development - Strategies for Sustainable Development - India's Initiation for Sustainable Development.

## **UNIT 6 - INTERNATIONAL EFFORTS FOR ENVIRONMENTAL PROTECTION**

Environmental Issues and Global Community: Stockholm Conference (1972) – Brundtland Commission (1983) – The Earth Summit or Rio Conference (1992) – Kyoto Conference (1997) – Copenhagen UN Climate Change Conference (2009) – Doha Climate Change Conference (2012).

## **UNIT 7 - MANAGEMENT AND PROTECTION OF ENVIRONMENT**

Environmental Management: Need, Dimensions, Approaches – Impact of Human Activities on Environment – International NGOs and Environmental Protection: Environmental Foundation for Africa, World Wide Fund for Nature, Conservation International, Green Peace – International Union for Conservation of Nature (IUCN) - Environmental Protection Strategies initiated in India: National Green Tribunal – Central and State Pollution Control Board.

## **UNIT 8 - ENVIRONMENTAL EDUCATION IN SCHOOL CURRICULUM**

Status of Environmental Education in School Curriculum – Environmental Education at different levels of School Education -- Innovative Methods of Teaching Environmental Education – Problems faced in Teaching Environmental Education – Role of UNEP, CEE and NCERT in Promoting Environmental Education.

## **UNIT 9 - IMPACT OF SCIENCE AND TECHNOLOGY ON ENVIRONMENT**

Science and Technology: Advantages and Disadvantages – Impact of Science and Technology on Environment, Natural Resources, Health, Community – Role of Science and Technology on Environmental Protection and Environmental Sustainability – Role of Media in Protecting the Environment.

## **UNIT 10 - ENVIRONMENTAL ETHICS**

Emergence and Importance of Environmental Ethics – Principles of Environmental Ethics – Environmental Ethics and Human Values – The Core Aspects of Promoting Environmental Ethics.

## **PRACTICUM**

1. Identify any 10 plants in and around your institution and write a brief report on them.
2. Suggest the means and methods for a clean and safe environment of your locality.
3. Prepare a time-line chart on the environmental policies and programmes of India.
4. Prepare a scrap book on issues related to environment.
5. Prepare a case study report on the effects of pollution.

## **SUGGESTED REFERENCE BOOKS**

1. Archana Tomar. (2011). *Environmental education*. Delhi: Kalpaz Publications.
2. Driver, R. (1989). Student's conceptions and the learning of science. *International Journal of Science Education*, Vol. 11, pp.481–490. (29).
3. Garrison, J.W. & Bentley, M.L. (1990). Science education, conceptual change and breaking with every day experience. *Studies in Philosophy and Education*, Vol. 10, pp.19–35. (19).
4. Goleman, Daniel. (2012). *Eco literate*. United States: Jossey-Bass.
5. Gruenewald, D.A. (2004). A foucauldian analysis of environmental education: Toward the socioecological challenge of the earth charter. *Curriculum Inquiry*, 34(1): 71-107.
6. Hoelscher, David W. (2009). *Cultivating the Ecological Conscience: Smith, Orr, and Bowers on Ecological Education*. M.A. Thesis, University of North Texas.
7. Insel, Paul M., & Roth, Walton T. (2002). *Core concepts in health (9<sup>th</sup> Edition)*. Boston: McGraw Hill.
8. Joshi, P.C., & Namita Joshi. (2012). *A text book of environmental science*, New Delhi: A.P.H. Publishing Corporation.
9. Malone, K. (1999). Environmental education researchers as environmental activists. *Environmental Education Research*, 5(2): 163-177.

10. Nath, B. (2003). Education for sustainable development: The Johannesburg summit and beyond. *Environment, Development and Sustainability*, Vol.5, pp.231- 254.
11. Palmer, J.A. (1998). *Environmental education in the 21st century: Theory, practice, progress, and promise*. [Routledge](#).
12. Patil, C. S. & Prabhu M. Biradar. (2013). *Environmental education*. New Delhi: A.P.H. Publishing Corporation.
13. Periyar E.V.R. College (Ed). (2004). *Environmental studies*. Tiruchirapalli: Periyar E.V.R. College.
14. Pradeep Kumar, T. (2011). *Environmental education*. New Delhi: A.P.H. Publishing Corporation.
15. Richard Maclean. (2003). Sustainable careers. *The Environmental Protection Magazine*, pp 12 – 14.
16. Shrivastava, A.K. & Rajan. R.K. (2005). *A handbook for teachers: Research in teaching of ecology and environment*. New Delhi: A.P.H. Publishing Corporation.
17. Singh, S.R. (2012). *Environmental education and sustainable development*. New Delhi: A.P.H. Publishing Corporation.
18. Sony Havilah, N. (2013). *Environmental education*. New Delhi: A.P.H. Publishing Corporation.
19. Stapp, W.B., et al. (1969). [The concept of environmental education](#). *The Journal of Environmental Education* 1(1):30-31.
20. Suresh Chandra Paachuri & Pradeep Kumar. (2013). *Environmental education*. New Delhi: A.P.H. Publishing Corporation.
21. Trivedi, P.R. (2011). *Environmental education*. New Delhi: A.P.H. Publishing Corporation.

### **Web Resources:**

22. <http://www.epa.gov/sustainability/basicinfo.htm>
23. <http://www.conserve-energy-future.com/current-environmental-issues>

24. <http://indiatoday.intoday.in/story/10+most+powerful+movements/1/22812.html>
25. [www.unesco.org/shs/ethics](http://www.unesco.org/shs/ethics)
26. [www.ewindia.com/internationalconferencesonenvironmenthtml/](http://www.ewindia.com/internationalconferencesonenvironmenthtml/)
27. [http://en.wikipedia.org/wiki/Environmental\\_education](http://en.wikipedia.org/wiki/Environmental_education)
28. <http://www.yourarticlelibrary.com/environment/forest/forest-resources-in-india-use-over-exploitation-causes-and-effects/28196/>
29. <http://www.yourarticlelibrary.com/environment/the-importance-of-natural-resources-of-planet-earth/9914/>
30. [http://wwf.panda.org/about\\_our\\_earth/blue\\_planet/problems/pollution](http://wwf.panda.org/about_our_earth/blue_planet/problems/pollution)
31. <http://www.brighthub.com/environment/science-environmental/articles/92943.aspx>

### **COURSE CODE : FEPCI**

### **INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION**

#### **OBJECTIVES:**

At the end of the course, the student-teacher will be to

- understand the concept of Information and Communication Technology;
- acquire knowledge about new horizons in ICT;
- comprehend the theory of communication;
- appreciate enriched learning experiences using ICT;
- comprehend the role played by ICT in Education;
- attain the knowledge of internet and its applications;
- appreciate the use of multimedia and web content for teaching learning;
- use ICT in educational institutions;
- organize and learn through ICT;
- analyse the role of ICT in Evaluation

#### **UNIT – I: INFORMATION AND COMMUNICATION TECHNOLOGY**

ICT: Concept, Objectives, Need and Importance of ICT - Characteristics and Scope of Information and Communication Technology.

#### **UNIT – II: NEW HORIZONS IN ICT**

Recent trends in the area of ICT - Interactive Video-Interactive White Board- video-conferencing –M-learning, Social Media- Community Radio: Gyan Darshan, Gyanvani, Sakshat Portal, e-Gyankosh, Blog, MOOC, Whatsapp, Facebook, Twitter etc.-Recent experiments in the third world countries and pointers for India with reference to Education.

#### **UNIT – III: COMMUNICATION AND INTERACTION**

Communication - Concept, Elements, Process, Barriers and nature - Types of classroom communication-verbal, non - verbal classroom communication- its barriers and solutions.

#### **UNIT – IV: ICT ENRICHED LEARNING EXPERIENCES**

Application of ICT for Enriching Classroom Experiences – Application and use of Multimedia Educational Software for Classroom situations – Use of Internet based media for teaching and learning enrichment – Project based learning using computers, Internet and Activities – Collaborative learning using group discussion, projects, field visits, blogs, etc.

#### **UNIT - V: ICT IN EDUCATION**

E-learning: Meaning, Advantages and Disadvantages – Open Educational Resources: Concept and Significance - Internet and Education, Critical Issues in Internet usage – Authenticity, Addiction, Plagiarism, Ethical and Legal Standards.

#### **UNIT VI: INTERNET AND ITS APPLICATIONS**

Introduction - History of the internet- Understanding WWW- Web browsers - Favourites and bookmarks - Kinds of information available - Parts of internet, searching the net, researching on the net.

#### **UNIT -VII: CONCEPT, CHARACTERISTICS OF MULTI - MEDIA TECHNOLOGY AND INNOVATIONS IN TEACHING AND LEARNING**

Concept and Characteristics of Multi-media Technology - Multi-media packages in teacher training - Multi-media laboratory - need for multi-media laboratories in India - functions of multimedia laboratory - setting up of multi-media laboratory in class rooms - Personalized System of Instruction(PSI) - Meaning and concept, origin and growth of PSI- Current status and Research on PSI - problems involved in using PSI in India - Learner Controlled Instruction (LCI), Meaning and Concept of LCI - Advantages and Limitations of LCI.

### **UNIT – VIII: ICT IN EDUCATIONAL INSTITUTIONS**

Use of ICTs to simplify record keeping, information management in education administration – ICT infrastructure – Automated and ICT managed school process – School Management Information System(school MIS) – Learning management systems – Timetable – Student record systems – Library systems – Finance systems.

### **UNIT- IX: ORGANIZING AND LEARNING THROUGH ICT**

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 - Framework for Creation of Learning resources- Concept mapping - Developing a topic for a class room - Learning outcomes - Activity based learning.

### **UNIT – X: ICT IN EVALUATION**

ICT in Evaluation – Purposes and Techniques of Evaluation - Scope of ICT in evaluation - Data analysis; look at data, read and make meaning – Graphs - Exploring Sources of data - Evaluation of Data – Communicating data and data analysis.

### **SUGGESTED ACTIVITIES:**

- Use various social networks in teaching and learning and report their effectiveness on learning of the students.

- Prepare a communication module on any one topic and analyse its effectiveness for student learning.
- prepare a multimedia package on any one topic to enrich the teaching - learning process.
- Submit a report on critical issues in utilization of internet among learners.
- organize a seminar on the impact of ICT in Educational institutions.
- Prepare various types of graph highlighting the performance of students.

**SUGGESTED READING:**

1. Aggarwal, J. C. (2000). Innovations in Educational Technology. New Delhi: Vikas Publishing House.
2. Aggarwal.D.D.(2004). Educational Technology. New Delhi: Sarup Publishing House.
3. Aggarwal, J. C. (2013). Modern in Educational Technology. New Delhi Black Prints.
4. Bharihok, D. (2000). Fundamentals of Information Technology. New Delhi: Pentagon Press.
5. Bhattachary, S.P. (1994). Models of Teaching. Regency Publications.
6. Byran, P. (1997). Discover the Internet Comdex Computer. New Delhi: Dream Tech Publishing.
7. Conrad, K. (2001). Instructional Design for Web based Training. HRD Press
8. Crouton, T. E. (1962). Programmed learning and computer based instruction. New York:
9. Edwards, F. B. (1973). Teaching Machines and Programmed - New York: McGraw Hill Book.
10. Gupta, M., &Arya. (1993). The Illustrated Computer Dictionary. New Delhi: Dream land

11. Kumar, K.L (2000), Educational Technology, New Delhi, New Age International Pvt. Ltd.
12. Madhu, P. (2006). Satellite in Education. Delhi: Shipra Publications.
13. Mangal, S.K. & Uma Mangal (2009). Essentials of Educational Technology. New Delhi: PHI Learning Pvt. Ltd
14. Mrunalini, T. & Ramakrishna, A. (2014). ICT in Education. Neelkamal Publications, Hyderabad.
15. Sampath K(1981). Introduction to Educational Technology, Sterling Publishers, New Delhi.
16. Saxena, S. (2000). A First Course in Computers. New Delhi: Vikas Publishing House Pvt.Ltd.
17. Shukla, Sathish S(2005). Basics of Information Technology for Teacher Trainees, Ahmedabad, Varishan Prakashan.
18. Venkataiah, (1996), Educational Technology, New Delhi: APH Publishing Corporation.

## B.Ed. - Second Year Curriculum Framework

### I - Theory Components

<b>Group - A: Perspectives in Education</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>Internal Mark</b>	<b>External Mark</b>	<b>Total Mark</b>
SPEKC	Knowledge and Curriculum Development	30	70	100
SPEPI	Perspectives of Inclusive Education	30	70	100
SPEGI	Gender Issues in Education	30	70	100
<b>Sub - Total</b>		<b>90</b>	<b>210</b>	<b>300</b>
<b>Group - B : Curriculum and Pedagogic Studies</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>Internal Mark</b>	<b>External Mark</b>	<b>Total Mark</b>
SCPTA	Pedagogy of Tamil : Part - II	30	70	100
SCPEN	Pedagogy of English : Part - II			
SCPUR	Pedagogy of Urudhu: Part - II			
SCPMA	Pedagogy of Mathematics : Part-II			
SCPCS	Pedagogy of Computer Science : Part- II			
SCPPS	Pedagogy of Physical Science : Part- II			
SCPBS	Pedagogy of Biological Science : Part- II			
SCPHI	Pedagogy of History : Part - II			
SCPGE	Pedagogy of Geography : Part- II			
SCPEC	Pedagogy of Economics: Part- II			
SCPCA	Pedagogy of Commerce and Accountancy : Part- II			
SCPHS	Pedagogy of Home Science : Part- II			
SCPSS	Pedagogy of Social Science : Part- II			
SCPLT	Pedagogy of Language - Tamil	30	70	100
SCPLE	Or Pedagogy of Language - English			

SCPSC	Curriculum Integration: Language and Discipline	30	70	100
<b>Sub - Total</b>		<b>90</b>	<b>210</b>	<b>300</b>
<b>Group - C: Optional Course (Student - teachers have to select Any One of the following)</b>				
<b>Course Code</b>	<b>Name of the Course</b>	<b>Internal Mark</b>	<b>External Mark</b>	<b>Total Mark</b>
SOCIP	Innovations in Pedagogical Sciences	30	70	100
SOCEA	Educational Administration and Management			
SOCVE	Value Education			
SOCWE	Work Education			
SOCGC	Guidance and Counselling			
<b>Sub - Total</b>				
<b>Grand Total</b>		<b>210</b>	<b>490</b>	<b>700</b>

**B.Ed : Second Year**  
**II. Practicum Components**

Sl.No	ACTIVITIES	Level - I	Level - II	Total Marks
		Marks	Marks	
1	<p><b>School Internship (16 Weeks)</b> (Allotment of Schools for School Internship for student- teachers are subject to prior approval from the concerned District Educational Authorities. The Principals of the Colleges of Education have to submit the School Internship Schedule to the Tamilnadu Teachers Education University)</p> <ul style="list-style-type: none"> <li>- Observation of Peer Teaching Classes : Level - I &amp; Level - II</li> <li>- Involving in Co- teaching with Mentor Teachers : Level - I &amp; Level - II</li> <li>- Preparation and Demonstration of Lesson Plans : Level - I &amp; Level - II</li> <li>- Conducting Action Research</li> <li>- Preparation and Administration of Achievement Tests : Level – I &amp; Level - II</li> <li>- Preparation and Use of Teaching Learning Materials (TLM) : Level - I &amp; Level - II</li> <li>- Module Preparation : Level - I &amp; Level - II</li> <li>- Power Point Preparation and Presentation: Level - I &amp; Level - II</li> <li>- Organisation of Non - scholastic Activities: Level - I or Level - II</li> <li>- Writing a Report on the Records and Registers maintained in the Co -operative Schools : Level - I or Level - II</li> <li>- Organisation and Performance of Drama and Art : Level – I or Level – II</li> </ul>	-	-	-
2	<p><b>Teaching Competency</b> (a) Level – I (Pertaining to the Language Subject – Tamil/English) (b) Level – II (Pertaining to the Basic Subject of the student-teachers)</p>	100	100	200

3	<b>Observation Records</b> (a) Observation Record : Level - I (10 Observation of Peer teaching classes pertaining to the Basic Language Subject – Tamil/English) (b) Observation Record : Level - II (10 Observation of Peer teaching classes pertaining to the Basic Subject of the student-teachers)	15	15	30
4	<b>Reflective Journal on Co-teaching with Mentor Teachers</b> a) Reflections on Co - teaching with Mentor Teachers : Level - I (5 Sessions related to the Language Subject – Tamil/English) b) Reflections on Co-teaching with Mentor Teachers : Level - II (5 Sessions related to the Basic Subject of the Student - teachers)	15	15	30
5	<b>Lesson Plan Records</b> a) Lesson Plan Record : Level - I (30 Lesson Plans pertaining to the Language Subject – Tamil/English) b) Lesson Plan Record : Level - II (30 Lesson Plans pertaining to the Basic Subject of the Student - teachers)	30	30	60
6	<b>Action Research Report</b> (Each student - teacher has to identify one unique problem for action research, which should be different from other student - teachers)	-	-	30
7	<b>Test and Measurement Records</b> (Based on the Achievement Tests conducted by the Student Teachers) Level – I (Pertaining to the Language Subject – Tamil/ English) Level – II (pertaining to the Basic Subject of the Student - teachers)	25	25	50
8	<b>Preparation and Use of TLM</b> a) Preparation and Use of 30 TLM : Level – I b) Preparation and Use of 30 TLM : Level – II	20	20	40

9	<b>Preparation and Use of the Module</b> a) Level - I (Related to Language Subject – Tamil/English) b) Level – II (Related to the Basic Subject of the Student - Teachers)	10	10	20
10	<b>Website Analysis Report</b> (Identifying and Downloading 2 different Web based materials on the same topic related to Language Subject (Tamil/English) and Basic Subject of the student – teachers and preparing a comparative detailed analysis on their salient features) Level - I Level - II	10	10	20
11	<b>Power Point Preparation and Presentation (PPT)</b> (Soft and Hard copy are to be submitted at the time of Practical Examination) a) Preparation and Use of PPT : Level - I (related to any one of the Language (Tamil/English) Lessons taught in the Co-operative schools) b) Preparation and Use of PPT : Level - II (related to any one of the Lessons pertaining to the Basic Subject of the student teachers taught in the Co- operative schools)	15	15	30
12	<b>Work Experience Record</b> (Preparation of socially useful productive materials like pickles, phenol, soap powder, candle, files, office covers, etc.)	-	-	25
13	<b>Report on Organisation of Non - scholastic Activities</b> (Conducting any 4 non-scholastic activities such as Exhibition, Celebration of Important Days, Festivals, Role Play, Dramatization, Quiz, School Assembly, Awareness Programmes, Rally, etc. in the Co-operative schools either at Level – I or Level – II by the student - teachers)	-	-	20
14	<b>Report on Maintenance of Records and Registers in Schools</b> (A detailed report on the maintenance of various Records and Registers in the Co-operative Schools either at Level – I or Level - II)	-	-	20

15	<b>Field Trip Record</b> (Organisation, participation and reporting on One-day Field Trip related to any concept of B.Ed Curriculum with prior approval from the competent authorities and the Tamilnadu Teachers Education University)	-	-	25
16	<b>Drama and Art Record</b> (Conducting any 5 activities by the student-teachers with an emphasize on self- realization through Drama, Puppet show, Dance, Music, Song, Painting, Drawing, Clay modeling, Rangoli, Paper cutting, Paper folding, Visits to places of importance of Art & Architecture, Exhibitions, Cultural centers, Fair, Art Gallery etc. either at Level – I or Level - II)	-	-	50
17	<b>Practicum / Field work related Tasks and Assignments for each Theory Courses carry the weightage of 25 marks. List of Tasks and Assignments to be carried out by the Student-teachers based on the Suggested Activities given at the end of the Syllabus of each Theory Course. Coursewise Tasks and Assignments to be submitted in the form of separate Records at the time of Practical Examinations.</b>			6 Theory Courses x 25 marks = <b>150</b>
		-	-	<b>800</b>

**NOTE:** (a) Level - I refers to Standard VI to VIII (Upper Primary), compulsory for all student - teachers.  
For activities pertaining to Level - I, student-teachers shall select either Standard VI or VII or VIII as per the requirement of the Co-operative schools.

(b) Level - II refers to Standard IX & X (Secondary) for UG qualified student - teachers / Standard XI & XII ( Higher Secondary / Senior Secondary) for PG qualified student - teachers.