# CURRICULUM FOR TWO YEAR SECONDARY TEACHER EDUCATION PROGRAMME (B.Ed.) (With Effective From 2015-16)

### I. INTRODUCTION

The Ministry of Human Resources Development, Government of India after prolonged deliberations with all the stake holders of Teacher Education across the Country has decided to increase the duration of B.Ed. programme from the present one Year to two years. The MHRD directed National Council for Teacher Education (NCTE) to develop Curriculum frame for Two Year B.Ed. programme. Accordingly the NCTE developed the curriculum frame for Two Year B.Ed. programme after having a series of consultative meetings with the experts in the field of Teacher Education across the Country. All the States and Union Territories in the country are advised to develop a detailed syllabus for the two year B.Ed. programme on the basis of curriculum frame suggested by NCTE.

#### II. SYLLABUS OF DIFFERENT COURSES

# Course-I PHILOSOPHICAL FOUNDATIONS OF EDUCATION

### **Objectives**

After completion of the course, the student-teacher will be able to

- 1. understand the concepts of Education and Philosophy
- 2. understand the Indian Philosophical thought on Education
- 3. understand the Implications of various western schools of thought on Education
- 4. understand the implications made by recent thinkers on education.
- 5. appreciate the nobility of teaching as a profession.
- 6. understand the need and importance of values and their role in making an individual a humane.

#### Course Content

### Unit-1: Introduction to Philosophy and Education

- 1.1 Concept and Scope of Philosophy
- 1.2 Concept and Scope of Education
  - 1.3 Types and Functions of Education
  - 1.4 Relationship between Philosophy and Education.

### 1.5 Philosophy and aims of Education

### Unit-2: Indian Education: Historical Perspective

- 2.1 Education during Ancient Period (Vedic Education, Buddhist Education and Jainism)
- 2.2 Education during Medieval Period (Including Islamic Education)
- 2.3 Education during Modern Period (Pre-Independent and Post Independent era)

- i. Rabindranath Tagore
- ii.Sri Aurobindo Gosh
- iii. Mohandas Karamchand Gandhi
- iv. Jiddu Krishna Murthy
- v. Dr. BR. Ambeddkar
- vi Moulana Abdul Kalam Azad

### Unit-3: Eastern Systems and Western Schools of Philosophy

- 3.1 Eastern Systems of Philosophy
  - i. Sankhya ii. Yoga iii. Nyaya iv. Vedanta
- 3.2 Western Schools of Philosophy
  - i. Idealism ii. Naturalism iii. Pragmatism iv. Existentialism

#### **Unit-4: Value Education**

- 4.1 Concept of Value
- 4.2 Classification of Values
- 4.3 Value Crisis
- 4.4 Approaches to inculcate Values
- 4.5 Values and Harmonious Life

#### Unit-5: Teaching as a Profession

- 5.1 Teacher: Professional Competencies and Commitments.
- 5.2 Teacher as a Nation Builder
- 5.3 Teacher as a Creator and Facilitator of Knowledge
- 5.4 Professional ethics of teachers
- 5.5 Teacher and the Future Society

#### Activities

- 1. Critically review a selected book written by Contemporary Educationalist in India.
- 2. Thoughts and reflections of Western Philosophical schools and its relevance to the present day Indian Education A Report
- 3. Identify the different roles played by an ideal teacher in the classroom, school and community and report
- 4. Vişit nearby schools under different managements and describe the functioning of the schools
- 5. List out the values which make an individual a righteous human being

#### **Text Books**

Foundations of education, Telugu Academy publications, 2014, Hyderabad.

Foundations of education, Neelkamal publications, 2013, Hyderabad

Aggrawal, J.C. (1996) 10th rev. ed. *Theory and Principles of Education*. New Delhi: Vikas Publication.

Altakar A.S. (1957). Education in Ancient India. Varanasi: Nand Kishore Publication. Anand, C.L. (1993). Teacher and Education in the Emerging Indian Society. New Delhi: NCERT.

#### Reference Books

Bipan Chandra (2000). India after Independence. New Delhi: Roopa.

M. Keynes, 5th Edition. Cambridge: Cambridge University Press.

Dhavan, M.L. (2005). *Philosophy of Education*. Delhi; Isha Books.

Introduction to history of Philosophy, Frank Thilly.

History of Philosophy, R S Peters, Orient Longman, New York

Thakur, A. S. & Berwal, S. (2007). Education in Emerging Indian Society, New Delhi:

National Publishing House.

Jaffar, S.M. (1972). Education in Muslim India. Delhi: Idrah-I-Ababiyat.

John Brubacher (2007). Modern Philosophy of Education. New Delhi: Surject Publication.

Mookerjee, R.K. (1960). Ancient Indian Education. Delhi: Moti Mahal.

Mukherjee, S.N. (1955). History of Education in India. Baroda: Acharya Book Depot. Mukharji, Shankar (2007). Contemporary Issues in Modern Indian Education. Authors Press.

Nurullah & Naik (1951). *History of Indian Education*. Bombay: Macmillan & Co. Passi, B. K. (2004). *Value Education*. Agra: National Psychological Corporation. M.L. Dharam, Philosophy of Education, Delhi Esha Books History of Indian Education, Mumbai (Mc Millan and Co)

# Course-II PERSPECTIVES IN CHILD DEVELOPMENT

### **Objectives**

After completion of the course, the student-teacher will be able to

- 1. compare relative merits and applications of different Approaches of Human Development
- 2. recognize that childhood is a period of socialization and how socialization practices affect their development
- 3. critically analyze developmental variations among children placed and exposed to different socio-cultural contexts
- 4. appreciate the process of development with special focus on childhood and
- 5. recognize that adolescence as a period of transition and threshold of adulthood
- 6. examine characteristics of adolescents and reflect on how their needs act as genesis of certain unique problems
- 7. illustrate different factors influencing on child development and their applications to education
- 8. examine different theories of development and their relevance to understand the nature of child

### **Course Content**

### Unit-1: Approaches of Human Development

- 1.1 Concept of Growth, Development and Maturation
- 1.2 Principles of Development
- 1.3 Stages of Growth and Development (Infancy Childhood, Adolescence)
- 1.4 Dimensions of Growth and Development (Physical, Cognitive, Emotional, Social, Moral, language)
- 1.5 Longitudinal and cross sectional approaches of understanding development

### **Unit-2: Theories of Development**

- 2.1 Cognitive theory of Development (Piaget)
- 2.2 Psycho-social theory of development (Erikson).
- 2. 3 Theory of Moral Development (Kohlberg).
- 2. 4 Theory of psycho- sexual development (Freud).
- 2. 5 Theory of Emotional Development (Goleman).

### Unit-3: Childhood as a period of Socialization

- 3.1 Characteristics of childhood developmental tasks.
  - 3.2 Child development Physical, cognitive, social, emotional, moral and language development during childhood.
- 3.3 Child in different socio-cultural contexts.
- 3.4 Process of socialization conflicts resolution and social development.
- 3.5 Stages of Social development Isolated play, parallel play and social play. Characteristics of socially matured person.

### Unit-4: Adolescence as a period of transition

- 4.1 Characteristics and needs in Adolescence
  - 4.2 Genesis of problems during adolescence-Physical, cognitive, emotional, social, moral and language development.

- 4.3 Adolescent Groups Gangs
  - Mechanisms of adjustment with special reference to defense mechanisms and holistic development
  - Leadership: Types of Leadership, Development of Leadership qualities in 4.5 adolescents and its educational implications.

### **Unit-5: Individual Differences**

- 1.1 Dimensions of Individual differences-cognitive abilities, interests, aptitude, creativity, personality and values
- 1.2 Theory of multiple intelligence (Gardner) Implications for understanding differences in children
- 1.3 Difference in children based on learning styles and socio cultural context (home language and Instructional language)
- 1.4 Individual differences based on cognitive abilities learning difficulties, slow learners and intellectually challenged, intellectual giftedness - implications for catering to individual variations in view of "differences" rather than "deficits" perspective.
- 1.5 Fostering creativity among children.

#### Activities

- 1. Visit a balwadi centre/ NGO centers for orphans/ street children homes and prepare a detailed report on the care taken by these centers
- 2. Description of cases -1. A Child with any type of disability and 2. A child from disadvantaged section of the society
- Describe the salient features of Child Rights Act 2005
  - 4. Interact with five adolescents and collect information about their attitudes, interests, aspirations in respect of their educational and occupational choices

#### **Text Books**

3.

Mangal, S.K.(2002). Advanced Educational Psychology, Printice-Hall. of India, Pvt.Ltd., New Delhi.

Dandapani (2002). Advanced Educational Psychology, Second Edition. New Delhi: Anmol Publication Pvt. Ltd.

### Reference Books

Beggie, H.L. and Hunt M. P: Psychological Foundations of Education Erickson, Eric, H. (1972). Play and Development. New York: W. W. Norton

Gardner, H. (1980). Frames of mind: The theory of multiple intelligence.

London: Paladin Books

Gauvian, M. and M. Cole (eds). Readings on the development of children. New York: W. H. Freeman

Hurlock, E.B. (1999). Developmental Psychology. New Delhi: Tata McGraw-Hill Publishing Company Ltd, New Delhi

Piaget, J. (1926). Psychology of Intelligence. New York: Basic Books

Sharma, K.N. (1990). Systems, Theories and Modern Trends in Psychology. Agra:

Yakaiah, P. & Bhatia, K.K. (2005). Introduction to Educational Psychology. Ludhiana: Kalyani Publishers.

### . Course-III

### INFORMATION AND COMMUNICATION TECHNOLOGY (ICT) FOR ENRICHING TEACHING AND LEARNING

### **Objectives**

After completion of the course, the student-teacher will be able to

- 1. explain the concept of educational technology
- 2. explain the concept of ICT in education
- 3. appreciate the influence of ICT for improving the professional competencies
- 4. comprehend communicative skills and effective classroom interaction
- 5. use different approaches of ICT integration in education
- 6. appreciate the application of E-learning in education
- 7. explain the instructional strategies in instructional strategies and models
- 8. explain the fundamentals of the operating systems and application software
- 9. use internet for effective classroom teaching and maintain the ethical values
- 10. utilize the ICT for professional development of teachers

### Course Content

## Unit-1: Information and Communication Technology (ICT)

- 1.1 Educational Technology Concept, Growth, Objectives, Characteristics, Advantages, Challenges and Impact
  - 1.2 Information Technology Knowledge Explosion, Preservation and Retrieval
- 1.3 Communication Concept, Elements, Process, Barriers & Types Teaching as Communication - Communication Technology - Its application in Education
  - 1.4 Instructional Media and Aids Aural, Print, Visual and multimedia
- 1.5 Concept. Importance, Characteristics and Scope of Information Communication Technology (ICT)

### Unit-2: ICT in Education

- 2.1 Knowledge Acquisition and Multi-sensory approach
- 2.2 Classroom Communication and Communicative Skills for Teachers and Students -Flander"s Interaction Analysis Category System
  - 2.3 Individualised Instruction Concept, Need, Principles and Techniques
- 2.4 Programmed Learning Principles, Types, modes of presentation, development, application and role of teacher
- 2.5 Changing roles of the learner and the teacher in ICT-Integration and Challenges

### Unit-3: Computer Fundamentals and Applications

- 3.1 Types, Characteristics and features of Computers
- 3.2 Components of Computers Hardware, Software, Memory and Maintenance of computers
- 3.3 Operating Systems DOS, Windows and Macintosh and Mobile Apps for Teaching
- 3.4 Software for Word Processing, Presentation, Statistical & Graphical, Page Layout, multimedia and webpage creator
  - 3.5 Concept, Applications and Challenges of Computer networks, Internet, E-mail

## Unit-4: ICT Enriched Learning Experiences

- 4.1 Application of ICT for Enriching Classroom Experiences
- 4.2 Application and use of Multimedia Educational Software for classroom situations
- 4.3 Use of Internet based media for teaching and learning enrichment -
  - 4.4 Project based learning using computers, Internet and Activities
  - 4.5 Collaborative learning using group discussion, projects, field visits, blogs, etc.

## **Unit-5: Application of Computers in Education**

- 5.1 Computer as a learning tool Concept of E-learning
- 5.2 Web 2.0 Technologies-characteristics, types and examples
- 5.3 Virtual Classroom, Smart Boards, Tools and Opportunities
- . 5.4 Open Educational Resources Concept and Significance
- 5.5 Critical issues in Internet usage Authenticity, Addiction, Plagiarism, Ethical and

#### Activities

- 1. Use various visual aids in the classroom and report their effectiveness on learning
- 2. Prepare Self Instructional Material on any one topic and analyse its effectiveness for individualized learning
- 3. Observe and analyse classroom Interaction and report the dynamics of classroom
- 4. Prepare a computer assisted lesson of your choice from school curriculum

### **Text Books**

Agarwal J P (2013) - Modern Educational Technology - Black Prints, Delhi

Barton R (2004) - Teaching Secondary Science with ICT - McGrawhill International Das R C (1993), Educational Technology - A Basic Text, Sterling Publishers, New Delhi

Intel® - Teach to the Future - Pre-service Binder Version 2.0

Kirwadkar A and Karanam P.(2010) E-Learning Methodology - New Delhi- Sarup Book Publishers

### Reference Books

Agarwal J P (2013) - Modern Educational Technology - Delhi Black Prints -Douglas, E C, Computer Networks and Internet, Prentice Hall

Imison T and Taylor PH (2001) - Managing ICT in Secondary Schools Heinman-Oxford

Jones, B Technology and Future of Works, Oxford University Press

Kumar, K L (2000), Educational Technology, New Delhi, New Age International Pvt.

Norton P (2000) Introduction to Computers, New Delhi, Tata McGraw Hill **Publications** 

Sampath K (1981) Introduction to Educational Technology, Sterling Publishers, New Delhi

Sharma, R A (1983) Technology of Teaching, IPH, Meerut

Shukla, Satish S (2005), Basics of Information Technology for Teacher Trainees, Ahmedabad, Varishan Prakashan

Venkataiah, N (1996), Educational Technology, New Delhi: APH Publishing Corporation

# Course-IV PEDAGOGY OF MATHEMATICS

### **Objectives**

After completion of the course the student will be able to

- 1. develop insight into the meaning, nature, scope and objectives of mathematics education
- 2. appreciate the role of mathematics in day to day life
- 3. understand history, development of mathematics and the contributions of Indian mathematicians to mathematics
- 4. understand aims and objectives of different branches of mathematics
- 5. identify the role of branches of mathematics and their implications on the society.
- 6. understand and practice various methods and approaches of teaching mathematics
- 7. understand the selection, preparation and uses of learning resources

#### **Course Content**

#### Unit-1: Meaning, Nature, and Scope of Mathematics

- 1.1 Meaning, Nature, and scope of mathematics.
- 1.2 History of Mathematics with special emphasis on teaching of mathematics.
- 1.3 Contributions of Indian Mathematicians a) Aryabhatta b) Brahmagupta c) Varahamihira d) Bhaskaracharya e) Srinivasa Ramanujan.
- 1.4 Contributions of Western Mathematicians a) Euclid b) Pythagoras c) Renedescarte d) Geroge Cantor.
- 1.5 Correlation of Mathematics with other school subjects and with other branches of mathematics.

### Unit-2: Aims and Objectives of Teaching Mathematics

- 2.1 Need for establishing general objectives for teaching mathematics.
- 2.2 Aims, Values and general objectives of teaching mathematics.
- 2.3 Specific objectives and teaching points of various content areas in different branches of secondary school mathematics.
- 2.4 Recommendations of various Educational Committees and Commissions as regards to Aims and Objectives of Teaching Mathematics.
  - 2.5 Meaning and Concept of Academic Standards of CCE.
  - 2.6 Linking Blooms Taxonomy with Academic Stands.

### Unit-3: Methods, Approaches and Strategies in Teaching and Learning of Mathematical Concepts

- 3.1 Nature of Concepts, types of Concepts, Concept Formation and concept assimilation; distinguishing and stating necessary and sufficient conditions in the process of teaching concepts. Comparing and contrasting. Giving counter example and non example in teaching concepts. Planning and implementation strategies in teaching concepts.
- 3.2 Creating awareness among student teachers on various concepts of Arithmetic, Algebra, Geometry, Trigonometry and Probability and Statistics from classics VI to X.
- 3.3 Methods of Teaching Mathematics: Inductive and Deductive : Analytic and Synthetic: Laboratory. Heuristic, Project Method and Activity Based

Teaching.

- Problem solving- Stages and Steps in problem solving; Discovering or 3.4 Exploring various options for solving a given problem in Algebra, Arithmetic, Geometry, Trigonometry, Probability and Statistics.
- 3.5 Concept Attainment Model of Jerome Bruner.

### Unit-4: Planning for Teaching – Learning Mathematics

- Microteaching: Concept, Definition, Microteaching cycle, Components of Microteaching, Merits and Limitations.
- Microteaching Skills: Introducing a lesson, Explaining a Concept, Stimulus 4.2 Variation, Illustrating with Examples, Probing Questioning, Reinforcement, Structuring Classroom Questions, and Blackboard writing.
- Planning of Instruction: Unit plan, Period plan based on Blooms Taxonomy and 4.3 academic standards.
- Technology Integrated Lesson-Planning the Lesson by digital technology. 4.4

### Unit-5: Learning Resources in Mathematics

- Mathematics Text Book Importance and Criteria of good Mathematics text 1.1 book.
- A Critical Analysis of existing Secondary School Mathematics Text Books. 1.2
- Audio, Visual and Multimedia resources Selection and designing. 1.3
- On line Resources ICT based Pedagogical tools. 5.4
  - Using community resources for mathematics learning. Visits, mathematical field 5.5 trips and excursions.
  - Handling hurdles in utilizing resources.

#### Activities

- 1. Create different activities to realize concept attainment by children in any unit from Mathematics Text books of 6-10 classes
- 2. Each student has to collect and present history and contributions of one Indian or Western mathematician
- 3. Preparation of T.L.M. for any one topic from classes 6-10 mathematics
  - 4. Preparation of power point presentation (PPP) for any one topic from a different branch of mathematics
  - 5. Identifying suitable methods/ approaches of teaching different topics from mathematics text of any one class (Inductive/ Deductive/ Analytic/ Synthetic/ Laboratory/ Heuristic/ Project methods and Activity based learning)

### **Text Books**

Davis, David R. The Teaching of Mathematics. New Delhi: Surject Publications Mangal, S.K. (1993). Teaching of Mathematics. New Delhi: Arya Book Depot. NCERT (2012). Pedagogy of Mathematics, New Delhi: NCERT Siddu, K.S. (1990). Teaching of Mathematics. New Delhi: sterling Publishers.

### Reference Books

Benjamin, S. Bloom, Ed. (1958). Taxonomy of Educational Objectives – Handbook 1 – Cognitive Domain. New York: Harcourt Brace & World Inc. James, Anice. Teaching of Mathematics. Hyderabad: Neelkamal Publications Pvt. Ltd., Kulshrestha, A. K., & Dynostha Kulshrestha, A. K., & Dynostha, A. K., & Dynosth

Kulshrestha, A.K. & Puneetha Kumar. Teaching of Mathematics. Meerut: R. Lal Book Depot.

NCERT (2000). National Curriculum Framework for Teacher Eduction. New Delhi: NCERT

NCERT (2005). National Curriculum Framework. New Delhi: NCERT

NCTM (1970). The Teaching of Secondary School Mathematics, XXXIII Yarbook Washington: NCTM.

Packiam, S. Methods of Teaching Mathematics.

Rao, N.M. Mathematics Projects and Mathematics Laboratory, New Delhi: NCERT

SCERT (2011) Andhra Pradesh Curriculum Framework, Hyderabad: SCERT, Government of AP

SCERT (2011). Position papers for Mathematics. Hyderabad: SCERT, Government of A.P

### Course-IV PEDAGOGY OF SOCIAL SCIENCES

### **Objectives**

After completion of the course, the student-teacher will be able to

- 1. understand the meaning and scope of Social Sciences
- 2. develop general and specific aims of teaching social sciences
- 3. inculcate values through teaching of Social Sciences
- 4. understand major concepts and develop critical thinking through teaching inter disciplines of Social Sciences
- 5. acquire knowledge on different strategies and approaches of teaching and developing skills in connection of resources.

### **Course Content**

### Unit-1: Social Sciences as an integrated area of Study

- 1.1 Meaning, Nature and Scope of Natural and Social Sciences
- 1.2 Distinction between Natural and Social Sciences
- 1.3 Meaning, History, Nature, Scope and Development of Social Studies
  - 1.4 Distinction between social sciences and social studies
  - 1.5 Understanding society through various social sciences

### Unit-2: Aims Objectives and Academic Standards of Social Sciences

- 2.1 Major aims and objectives of teaching Social Sciences
- 2.2 Bloom"s taxonomy of Educational Objectives
- 2.3 Academic Standards and Learning outcomes of teaching Social Sciences
- 2.4 Recommendations of NPE 1986, NCF 2005, APSCF 2011
- 2.5 Values of Teaching Social Sciences

### Unit-3: Approaches, Methods, Strategies and Techniques of Teaching Social Sciences

- 3.1 Meaning, need and significance of various approaches, methods, strategies and techniques of Teaching Social Sciences
- 3.2 Teacher Centred Approaches Lecture, Lecture-demonstration, Source and Supervisory Study
- 3.3 Learner centered approaches -Project, Problem Solving, Discussion, Inductive and Deductive, Observation, Constructivistic Approach
- 3.4 Strategies / Techniques Brain Storming, Team Teaching, Mind Mapping, Questioning
- 3.5 Activities Dramatisation, Role play, Field Trips, Social Science Clubs. Exhibitions

### Unit-4: Planning in Teaching Social Sciences

- 4.1 Microteaching Meaning, Concept and Steps
- 4.2 Microteaching Skills Introduction, Explanation, Questioning, Reinforcement, Stimulus Variation
  - 4.3 Year Plan and Unit Plan
  - 4.4 Need and Importance of Lesson Planning (Period Planning)
  - 4.5 Technology Integrated Lesson Planning

### Unit-5: Teaching Learning Resources in Social Sciences

- 5.1 Community Resources Human and Material
- 5.2 Social Science Library, Laboratory and Museum
- 5.3 Need and Significance of Current and Controversial issues in teaching social sciences
  - 5.4 Handling hurdles in utilizing resources
  - 5.5 Professional Development of Social Sciences Teacher

#### Activities

- Lildentify values in depicted in the lessons of social sciences of any one class and prepare a report
- 2. Select and plan appropriate strategies for teaching a lesson of social science of your choice and submit
- 3: Identify any village/ward/ colony and make social survey and find out the literacy rate, adult education programmes, electricity, toilets, sanitary and water facilities, maintenance of roads, etc and submit village/ward description report

Organise a programme in the school in connection with celebration of national festivals, birthdays of social scientists/ National leaders, etc.

#### **Text Books**

Telugu Academy – 2002 – B.Ed. Methods of Teaching Social Studies – Hyderabad Aggarwal J.C(1993) – Teaching of Social Studies – a practical approach, second edition, New Delhi, Vikas Publishing House

Aggarwal J.C (1983) - Teaching of History New Delhi, Vikas Publishing House Kochhar, SK(1988) Teaching of Social Studies, New Delhi, Sterling Publishers Private Ltd

Bining, A.C and Bining BH (1952) Teaching of Social Studies in Secondary schools

3<sup>rd</sup> Ed., Bombay, TATA Mc Graw- Hill publishing Company Ltd.

#### Reference Books

Aggarwal D.D (2008) – Modern Methods of Teaching Geography new Delhi current publications

Edwin, Fenton (1967) – The New Social Studies in Secondary Schools – An Inductive Approach – New York – Holt Binchart and Winston Inc.

Martorella, Peter M (1976) – Social Studies Strategies – Theory into Practice, New York, Harper and Row Publishers Inc.

Mechlinger M D (1981) – UNESCO Handbook of Teaching Social Studies – London – Croom Helm

Moffat, M P (1955) – Social Studies Instruction – 2<sup>nd</sup> Ed. New York – PHI NCERT (1990) – Teaching History in Secondary Schools – New Delhi

Ruhela, S P (2009) – Techniques of Teaching Social Sciences – Hyderabad – Neelkamal Publications

Edgar B W & Stareky, P W (1958) – Teaching Social Studies in High Schools – Health and Company, Boston 11C

Dr Rambhai N Patel, Educational Evaluation – Himalaya Publishing House, Mumbai

### Course-IV PEDAGOGY OF BIOLOGICAL SCIENCES

### **Objectives**

After completion of the course, the student-teacher will be able to

- 1.1 develop an insight on the meaning, scope, nature and aims of biological science
- 1.2 identify and relate everyday experiences with the learning of biological science
- 1.3 integrate the knowledge of biological science with other school subjects
- 1.4 facilitate the development of scientific attitude in the learners of biological science
- 1.5 develop competencies for teaching and learning biological science through Herbartion and Constructivist approaches
- 1.6 stimulate curiosity, creativity and inventiveness in the learners towards biological science

### Course Content

### Unit-1: Introduction to Science

- 1.1. Meaning and Functions of Science
- 1.2. Nature and Scope of Science
- 1.3. Structure of Science
- 1.4. Branches of Science
- 1.5 History of Biological Science

# Unit-2: Aims and Values of Biological Science

- 2.1. Aims of Teaching Biological Science
- 2.2. Values of Teaching Biological Science
  - 2.3. Competences of a Biological Science Teacher
- 2.4. Correlation of Biological Science with other school Subjects

# Unit-3: Objectives of Teaching Biological Science

- 3.1. Meaning and Importance of objectives
- 3.2. Revised Blooms Taxonomy of Educational Objectives.
- 3.3. Instructional Objectives and specifications with examples
- 3.4. Academics Standards mentioned in the school biological science text Book published by government of Andhra Pradesh

# Unit-4: Methods and Techniques of Teaching Biological Science

- 4.1 Micro Teaching Techniques
- 4.2 Lecture Method, lecture Demonstration Method, and Laboratory Method
- 4.3 Scientific Method (Inductive and Deductive Method)
- 4.4 Project Method

# Unit-5: Planning for Teaching Biological Science

- 5.1 Year Plan
- 5.3 Period Plan (Herbartian and Constructivist approach and CCE Model)
- 5.4 Learning Experiences
- 5.5 Planning ICT Applications in Learning Biology

### Activities

- 1. Visit any zoological park/Botanical Garden/Agro based industry/ food park/institution of scientific interest or Science and Technological Museum in your vicinity and report.
- 2. Identify and write the objectives and specifications under the three domains on any topic of your choice
- 3. Sketch the life history and write his/her contributions of any one Biologist
- 4. Name any common branch of both Botany and Zoology and explain how you integrate the pedagogy in dealing with the content.
- 5. Organize an event on Earth Day/ Environment Day/ Population Day, etc. in the school during the internship and report.

### Text Books

Agarwal, D.D. (2001). Modern Methods of teaching Biology. Newdelhi: Sarup \& Sons

 $Ahmed, J. (2011). \ Teaching \ of \ Biological \ Science \ . \ New \ Delhi: PHI \ Learning \ Pvt. Ltd.$ 

Benjamin, S.Bloom, Ed. (1958). Taxonomy of educational objev=ctives- handbook I –Cognitive Domain, New York: Harcourt Brace & World Inc.

Chikara, M.S. and S. Sarma (1985) Teaching of Biology , Ludhiana: prakesh Brothers.

Gupta, S.K. (1983) technology of science Education, New Delhi: Vikas Publishing House Pvt.Lt

### Reference Books

Hassard, J. (2000) science as Inquiry, New Jersey: Good Year Books.

Krathwohl, David R.,Ed (1964) Taxonomy of Educational Objectives , Hand Book II – Affective Domain, New York: David Mckay.

Mohan, R. (2004) Innovative Science Teaching for Physical Science teachers. New Delhi: Practice-Hall India Ltd.

New UNESCO Source Book for science teaching (1978). New Delhi: Oxford & IBH Publishing House.

### Course-V PEDAGOGY OF PHYSICAL SCIENCES

#### **Objectives**

After completion of the course, the student-teacher will be able to

- 1. know the nature of science, structure, value and correlation with other school subjects.
- 2. draw the attention on development of science and the contributions of western and Indian scientists.
- 3. understand the aims and objectives of teaching physical sciences.
- 4. develop the skill of organizing science curriculum and critique on the present secondary school physical sciences curriculum.
- 5. organize the content into plan of action and practice the micro and macro teaching skill.
- 6. cope up with adoption of methods of teaching physical sciences and use the learning experiences.

### **Course Content**

### Unit-1: Introduction to Science and Physical Sciences

- 1.1 Science and Physical Sciences Meaning, Nature, Scope and Importance
- 1.2 Structure of Science Syntactic Structure (Process of Science Domain of Inquiry), Substantive Structure - Product of Science-Facts, Concepts, Theories, Laws and Principles - characteristics in the context of Physical sciences (citing examples)
- 1.3 Values of Learning Physical Sciences
- 1.4 Correlation of Physical Sciences with Mathematics, Biological Sciences, Social Studies, Languages, Fine Arts, Environment, Health, Development, Peace and
  - 1.5 Analysis of selected concepts of Physics and Chemistry from 6-10 classes

# Unit-2: Development of Science - Physical Sciences

- 2.1 Milestones in the Development of Sciences Physics and Chemistry
- 2.2 Contributions of Western and Indian Scientists
- 2.3 Landmarks, Status and Development Indian Science and Technology
- 2.4 Physical Science and Human Life
- 2.5 Rationale in Inspiring Students to study Physical Science

# Unit-3: Aims. Objectives and competencies of Teaching Physical Sciences

- 3.1 Aims and Objectives of Teaching Physical Sciences
- 3.2 Taxonomy of Educational Objectives Bloom, Krathwohl, Simpson, et al -Revised Bloom"s Taxonomy and Higher Order Thinking Skills
- 3.3 Instructional Objectives of Teaching Physical Sciences
- 3.4 Behavioural or Specific Objectives of Teaching Physical Sciences
- 3.5 Competencies for Teaching of Physical Sciences

# Unit-4: Approaches, Methods and Techniques of Teaching Physical Sciences

- 4.1 Concept of Teaching with special reference to Physical Science Approaches and Methods - Student Participation in Learning
  - 4.2 Teacher-centred Methods Lecture, Lecture-cum-Demonstration, Historical
    - Student-centred Methods Heuristic, Project, Scientific and Laboratory (Illustration of each method by taking examples from specific contents of Physics and Chemistry)

- 4.4 Modern Teaching Techniques Brainstorming, Team Teaching and Models of Teaching Concept Attainment Model and Enquiry Training Model
- 4.5 Microteaching Concept and Meaning, Skills of Microteaching, Practice of Microteaching Skills

### Unit-5: Planning for Teaching Physical Sciences

- 5.1 Importance of Planning for Teaching
- 5.2 Year Plan
- 5.3 Unit Plan
- 5.4 Period Plan (Lesson Plan) Herbertian Steps vs. Constructivist Approach
- 5.5 Teaching Strategies and Academic Standards, CCE model period plan for classroom teaching

#### Activities

- 1. Identify the most abstract concepts (difficult topics) from any class physical science textbook suggest ways and means to make it easy to understand and concrete.
- 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 assignment on any physical sciences and its application and implications with other branches of knowledge
- 4. Prepare biographical sketch of and scientist and his/her contributions to Physics/ Chemistry
- 5. List out different content aspects of a unit in Physics/ Chemistry and write down the objectives and specifications under Cognitive Domain associated with them

#### **Text Books**

Bhouthika Rasayana Shasthra Bodhana Paddhatulu (Methods of Teaching Physical Science) – Telugu Academy

Vaidya, Narendra (1989) *The Impact of Science Teaching*. New Delhi: Oxford and IBH Publishing Co. Pvt. Ltd.

Sharma, R.C. (1987). *Modern Science Teaching*. New Delhi: Dhanpat Rai and Sons.

Vanaja, M. (2004). *Methods of Teaching Physical Sciences*. Hyderabad: Neelkamal Publications Pvt. Ltd.

Das, R.C. (1990). Science Teaching in Schools. New Delhi: Sterling Publications Pvt. Ltd.

#### Reference Books

Siddiqui and Siddiqui (1998). *Teaching of Science Today and Tomorrow*. New Delhi: Doaba House.

Kumar, Amit (1999). *Teaching of Physical Sciences*. New Delhi: Anmol Publications Pvt. Ltd.

Soni, Anju (2000). *Teaching of Science*. Ludhiana: Tandon Publications. Nagaraju, M.T.V. (2008). *Hand Book for Teaching Physical Sciences - Methods and* 

M.T.V. (2008). Hand Book for Teaching Physical Sciences - Methods & Techniques. New Delhi: Kanishka Publishers and Distributors.

Mohan, Radha (2004) – Innovative Science Teaching for Physical Science Teachers, New Delhi, PHI

UNESCO - Teaching of School Physics - Penguin Books UNESCO - Teaching of School Chemistry - Penguin Books

### Course-V PEDAGOGY OF ENGLISH

### Objectives

After completion of the course, the student-teacher will be able to

- 1. understand the place of English Language Teaching in India
- 2. understand the different roles of language
- 3. understanding the importance of home language, school language and the role of
- 4. understand different skills of English language
- 5. identify different Methods, Approaches and Techniques needed for teaching different skills of ELT in the Indian context
- 6. improve their ability in planning a lesson in Prose, Poetry and Supplementary
- 7. develop integrated skills in ELT
- 8. prepare different activities and tasks for learners

### Course Content

### Unit-1: Introduction to ELT

- 1.1 Meaning, nature and scope of ELT
- 1.2 Status of English Language in the global and Indian contexts
- 1.3 Aims and Objectives of Teaching English in India
- 1.4 Language and Education Policy in India
- 1.5 Teaching English in Bilingual/Multi-lingual contexts

### Unit-2: Methods and Approaches in ELT

- 2.1 Method, Approach and Technique
- 2.2 Grammar Translation Method, Direct Method, Bilingual Method and Dr. West"s Method
- 2.3 Oral. Situational and Structural Approaches
- 2.4 Communicative Language Teaching
- 2.5 Micro skills in ELT

### Unit-3: Listening and Speaking Skills

- 3.1 Types and Sub-skills of Listening
- 3.2 Techniques of and materials for teaching Listening
- 3.3 Sub-skills of Speaking
- 3.4 Techniques of and materials for teaching Speaking
- 3.5 Activities to develop Listening and Speaking skills.

### Unit-4: Reading and Writing Skills

- 4.1 Types and Sub-skills of Reading; Methods of Teaching Reading
- 4.2 Reading and Reflecting on text
- 4.3 Mechanics of Writing
- 4.4 Sub-skills and techniques of Writing
- 4.5 Activities to develop Reading and Writing skills.

### Unit-5: Developing integrated skills and use of ICT in English Language Teaching

- 5.1 Teaching of Prose
- 5.2 Teaching of Poetry
- 5.3 Use of Multi-media in ELT
- 5.4 Online resources for ELT
- 5.5 ELT and Social Networking.

#### Activities

- 1. Prepare a report on Language policies given in the reports of Kothari Commission, NPE 1986 and POA 1992.
- 2. Prepare a detailed report on how, when and why you are going to use various methods, approaches and techniques in teaching the English language skills.
- 3. Enumerate ten activities (5 for listening and 5 for speaking) from the text books of classes VI to X. Suggest your own activities using supplementary materials.
- 4. Critically analyse the writing activities given in the text books of classes VI to X and report.
- 5. Analyze the tasks given at the end of any one unit in the textbook and check their relevance to cognitive, affective

#### **Text Books**

Graham Butt (2008): Lesson Planning. New York: Continuum International Publishing Group.

Grillet, F. (1983): Developing Reading Comprehension. Cambridge, CUP. Krishnaswamy, N. and Sriraman, T. (1994): Teaching English in India. Chennai:

T.R. Publishers

M. L. Tickoo (2003): Teaching and Learning English. Hyderabad: Orient Longman.

Makey, Sandra L. (1985): Teaching Grammar. Oxford: Pergamon Press

### Reference Books

Doff, A. (1981): Teach English. London: Cambridge University Press (CUP)
Parrott, M. (1993): Developing Reading Comprehension, Oxford: Pergamon Press.

Richards, J.C. and T. Rogers (1998): Approaches and Methods to Language Teaching. London: CUP

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

Cruttenden Allan (VII Ed.) (2008): Pronunciation of English. Hodder Education, UK

Frank, C. and Rinovolucri Mario (1983): Grammar in Action. Oxford: Pergamon

Mario (1984): Grammar Games. Cambridge: Cambridge University Press (CUP) Roach Peter (III Ed.) (2007): English Phonetics and Phonology. Cambridge: CUP

### Course-V PEDAGOGY OF TELUGU

- 🛘 తెలుగు భాష-అంద్రద్రవేశ్ రాష్ట్రంలో తెలుగు భాష
- 1) స్వాతంత్ర్యానికి పూర్వను తెలుగు భాష స్వాతంత్ర్యానంతర కాలంలో తెలుగు జాన శాసన భాష-గ్రాంధిక బార్ట - వ్యవహారిక భాష - ఆధునిక ప్రామాణిక భాష
- 2) తరగత్లో భాషాపయోగం సహవిద్యార్హులతో ఉపాధ్యాయులు తల్లిదండులు ఇతర పొద్దలు అధికారులతో భాషా వ్యవహారం, మెలకువలు
- 3) జాతీయ స్థాయిలో, అంతర్జాతీయస్థియిలో తెలుగు భాషాస్థితి. తెలుగు భాషకు ప్రాచీన హోదా కల్పన - ప్రయోజనాలు
- 4) ప్రధమ, ద్విత్తీయ, తృత్తీయ భాషలుగా తెలుగు మాతృభాషగా తెలుగు III భాపాభ్యసనం – భాషా బోధన
- 1) భాషా సంపాదన పిల్లల భాషా సంపాదన · తాత్వైక. మనోవైజ్ఞానిక, సామాజిక దృక్పధాలు
- 2) భాష ఆలోచన జ్ఞాన నిర్మాణం అభివ్యక్తి-సృజన
- 3) బాషాభ్యసనం అనుమానాపపత్తి, నిగమోపపత్తి ఉపగమాలు జ్ఞాన నిర్మాణవాద ఉపగమాలు భాషా బోధన - అభ్యసనాలు భారతీయ దృక్పదం. భాషా బోధన - అభ్యసనాలు పాశ్చాత్యులు దృక్పదాలు. పాణిని, పతంజలి, కాత్యాయనుడు. జాన్డ్యూయీ-బూనర్ ప్రయాజి, వైగాటస్కీ, చోమ్స్కీ ప్రభృతుల ఆలోచనలు.
- 4) భాషాభ్యసన బోధన పద్ధతులు- విమర్శణాత్మక విశ్లేషణము-ప్రాచినుల, ఆధునికుల అభ్యహాయాలు.
- 🕝 పద్ధతి ప్యూహాం: అంటే ఎందుకు వ్యూహాల (పయోజనాలు పరిమితులు
- ప్రాక్షకరణానువాదపడ్డత్తి, భత్యక్షప్డుత్త్ పఠనపట్టత్ సందర్భపడ్డత్ మాక్కపడ్డత్, పద పడ్డత్, నంజాషణా పడ్డతి భశ్భత్వర పడ్డత్ మివరణ పడ్డత్ మిశ్రేషణ పట్టత్ - వ్యాఖ్యన పద్దత్ - విమర్శనా పద్ధత్ వాటక్కరణ పట్టత్ - కథన పద్ధత్ - పూర్హపద్దత్ - ఖండ పడ్డత్ - భత్ పదార్హ సద్దత్.
  తాతృర్యపడ్డత్ - భంశంసా నద్దత్.
  - 🔑 పరస్పరచర్యాపర్వత్. అన్వేషణ పద్దత్. ప్రాటెక్టుపద్దత్
  - · > పరయుక్త అభ్యస్వరం, సహకార అభ్యస్వరం , పనటల ఆధారిత అభ్యస్వరం
    - . > స్వీయనిర్ధేశితఆభ్యసనం, పరిశీలనాత్మక అభ్యసనం
    - 🔎 మేతోమధన పల్లిత్ ఆప్రవాక్యపద్ధతి

### 🕦 భాష - స్వరూపం - స్వభావం

- 1) ఒక నయమ బద్ధి వ్యవస్థిగా భావ రాషా స్ట్రవర్లను భాషాన్స్పోనా భాషా <sub>ప్రా</sub>గరి-భాగా ఎవ్ఎవ జైనవ్యం
- 2) జాషా మాండ్రికాలు, కళింగింద్ర మాండ్రికం, ఉభయిగోదాదరి జిల్లాల మాండ్రకం, కృష్ణమాండ్రికం, నెల్లూరు మాండ్రికం, రాయలసీమ మాండ్రికం (స్థానిక మాండ్రికాలం పైదే, వాక్య రూపాల్లో సాదృశ్య భేదాలు
- 3) బాస్తర పుస్తకాల్డ్ తెలుగుభాష పరిభాషా కల్పన
- 4) భాషావ్యవస్థ : బాపోత్పత్తి విధం నిర్వచనాలు అక్షణాలు- స్వభావం ధ్వనిప్యవస్థ చాగింద్రియ వ్యవస్థ (ఉచ్చారణ)-ధ్వని విజ్ఞానం వర్ణవిజ్ఞానం పద విజ్ఞానం, వాక్య పిజ్ఞానం. ఆక్ర విజ్ఞానం - అర్ధవిపరిణామం.
- 5) భాష వ్యాకరణం: పాఠ్యపుస్తకాలలోని వ్యాకరణాంశాలు-సంధులు సమాస్తు చంధన్ను- అలంకారాలు - రూపం-ఫర్యాయ పదాలు - (ప్రశృతి - ఏకృతులు నానారాలు-పృశ్వృత్యర్ధాలు- జాతీయాలు (నుడికారాలు), సామొతలు, మహితోక్తులు (Quotations)-సంప్రదాయ వ్యాకరణం - విశ్వవ్యాకరణం
- 6) భాపోపాధ్యాయున్ సన్నడ్డత: విశిష్ట లక్షణాలు సాధారణ లక్షణాలు- పూర్ప న నృద్ధ త బాధనానంతర సమీక్ష భాషోపాధ్యాయుల తరగతి గద్భిపర్తన-తరగతిలో భాషాపయోగం పరిమతులు-వృద్ధత్పన్నత (Resourcefulness) -నూక్ష్మభోధన-నైపుణ్యూల సంపాదన, ఆదరణ
- 7) భాషాభ్యసనం- భాషాభాధన: ప్రథమ ద్వితీయభాషలుగా తెలుగు బోధన గమ్యాలు: ఆశయాలు -ఉద్దేశాలు- లక్ష్యాలు - కనిష్ట అభ్యసన ప్రమాణాలు సామర్థ్యాలు (కమీషన్లు NCT- SCF ల ఆధారంగా)
- జ్యానం- విషయజ్యానం భాషాజ్ఞానం సాహిత్య జ్ఞానం-అవగాహన (శవణమూలక ఆవగాహనం - పఠనమూలక ఆవగాహనం అభివ్యక్షి-వాగ్రూప అభివ్యక్షి - లిఖితరూప అడిన్వక్షి. స్వియ అభివ్యక్షి, సృజ*ూత్మక* అభివ్యక్షి

భాపాధిరుచి - ఆసక్తి: ెళనానక్తి. అన్వేషణానక్తి, రచనానక్తి రహిసుభూతి: దృజనాత్మకత నముచితమునోమైఖరులు: భాషాంతరీకరణం. దకల్పనా కృత్యాలు. ఎర్వాహణ ప్రద్యాతన చెద్దింది.

### 🕦 భాషాకొశలాల సంపాదన:

1. కౌశలం సామర్ట్యం సైపుణ్యం శక్తియుక్తులు భావనలు

2. (8500

త్రవణం అంటే శ్రవణం బ్రయోజనాలు చక్ష్మతోత్పుసంబంధాలు-అవధానం-(గహణం సూర్య పరిశీలన-వినేచన - అవగాహన- శ్రవణం- అరోధాలు - నివారణోపాయాలు మౌఖక బాస్ సంకేతాలు ధ్వనులను వినుట- శ్రవణ అఖ్యాసాలు (కమీకృత అభ్యాసాలు

### 3. భాషణం:

భాషణం అంటే - భాషణం ప్రయోజనాలు - ఉత్తమ భాషణం లక్షణాలు భాషణంలో వక్ష్మణోత్రు సంబంధాలు - భాషణంలో అవధానం (ఏకాగ్రత), గ్రహణం, సూక్ష్మ దరిశీలన. వివేచన - అనగాహన-భాషణం - అవరోధాలు-నివారణోపయాలు.

భాషణం - మౌన భాష. సంకేత భాషణం - బాషణాశైలులు - బాషణ అలవాట్లు భాషణం - వకృత్వం - వాద్రపతివాదాలు - ఉపన్యాసం - చర్చ- మేధోమధనం భాషాణాభ్యాసాలు -బాషణ బోధన-సంభాషణ, కథాకథనం-సందర్భోచిత భాషణం - నాటకీకరణం. • భాషణ దోషాలు ఉచ్చారణ దోషాలు - పదాల ఎంపిక దోషాలు - వాక్యనిర్మాణ దోషాలు భావదోషాలు - వ్యాకరణ దోషాలు

### 4. పఠనం:

పఠనం అంటే-పఠనం ప్రయోజనాలు - లిప్ పఠనం - చిత్రపఠనం - పటాల పఠనం పఠనం లక్షణాలు - పఠన అలవాట్లు - వాచక పఠనం - ప్రతికా పఠనం - గ్రంథ పఠనం సాహిత్య పథనం.

పఠనం పేద్ధతులు: క్లుణ్ణపఠనం - విస్తార పఠనం పకనం-భేదాలు: మౌన పఠనం మరియు ప్రకాశ పఠనం-పఠనం-అవధానం - గ్రహణం -పరిశీలన - పఠనావగాహన- పఠనం - అవరోధాలు-పఠన సన్నద్ధత - వఠన పరిణితి - పద్యపరనం, పరనాభ్యానం - బోధన పద్ధతులు - పద పద్ధతి - వాక్యపద్ధితి,

### 5. లోఖనం:

భాషాలెమ్ - తొలుగు లిమ్ పరిణాము క్రమం - తెలుగు లిమ్ లక్షణాలు. జేఖనం - దృష్టతోఖనం - ఉక్షలేఖనం - దస్సూరీ తొళవాభ్యానం - నంద్రదాయపద్ధతి - ఆధునిక పద్దతులు - లోఖనం లక్షణాలు తోఖనం అవరోధాలు. లోఖన**రూపాలు:** ఎన3 ప్రత్**ల అభ్యర్తన ప్రత్ల (ప్రకటన కర ప్రత్లం** జాస్ట్రికు ప్రత్యేకలన, లోఖ తల్లిదెం(మంకు, స్నేహితులకు లోఖ - వ్యాపార లోఖ - ఆహ్వాన ప్రత్ కచన, స్వానిన ప్రత్ రచన , నివేదికా రచన, అభినందనరచన - వ్యాపార రచన, కృత్యుత/ పందన కమక్పం రచన (ప్రకెంసా రచన - ప్రభ్యత్మకరచన - ఏనచర్య రచణ, స్వీయ వివరాల కచన, లోఖనం -అనువాదం : మూల విదేయానువాదం - వాక్యవిధేయానువాదం భావానువాదం అనువాదంలో పరిణాప్

ెలుగు - హెంద్ - అంగ్లభాషల మద్య అనువాదం. చేఖనం- శైల్, ప్రాచ్న శైల్, మాండల్క శైల్, ప్రామాణిక శైల్ 6 భాషాకౌశలాల మధ్యగల అంతర సంబందాలు.

### బోధనా సంబంధ కృత్యాలు:

- 1. 6, 7 తరగతుల సామాన్య, సాంఘిక శాస్త్ర పుస్తకాల్లోని.
  - 1) భాషారూపం భావస్పష్టతలు
  - 2) అభ్యాసకుని అవగాహనకు అనువైన భాషారూపం
  - 3) భాష పరిభాష కాఠిన్యస్థాయిలు
  - 4) భాషాధ్యసనానికి తోడ్పాటుకు పరిశీఖించుట, నివేదిక రాయుట.
- 2. పరిసరాల్లోని ఇదు పాఠశాలల సందర్శన తెలుగు బోధన తీరు తెన్నులు తెలుగు బోధనకు పాఠశాలల్లో లభ్యమగు వనరులపై నివేదిక తయారు చేయుట
- 3. ఏదైనా ఒక పార్యాంశమునకు జ్ఞాన నిర్మాణవాదం అనుసరణకు తగిన కృత్యాలు రూపొందించుల.
- 4. 6 నుండి 10 తరగతులు పార్భాంశాలనుండి ఏదైనా ఒక తరగతి వాచకంలోని వ్యాకరణాంశాలని పట్టికగా కూర్చుట.
- 5. పిల్లల సంభానబల్లోని మాందెట్లక భాపా రూపాల గుర్తింపు ఎట్టికను తయారు చేయిన

### పరామర్శ గ్రంధాలు

Kadambari Sharma & Tripat Tuteja- Teaching of Language and Linguistics

Common wealth Publishers.

Lanugage Education, 2. U.K. Singh & K.N. Sudharsan

D.P.H. P. Whications

Dr. Santosh Areekkuzhigil. 3. Instructional approaches

Neelkamal publications

4. Santosh Sharma (Ed)

Constructvist Apporaches to Teaching and

Learning (NCERT 2006)

5. NCERT - Teaching Reading- A Challange - NCERT

6. రెలుగు బోధన పద్ధతులు - దాగి దహగాం సొందమూర్తి నీల్క్ముల్ (పచురణలు

7. దాగ్ల శివరత్నం రెడ్డి & డాగ్ల దీ. సొంబమూర్తి (సంపాదకీయలు) – తెలుగు బోధన పద్ధశులు (ఓ.ఎఓ) తెలుగు అకారమ్)

8. దాగ ఆర్. వెంకటేశ్వరరావు ఈ దాగ టీ. సాంబమూర్తి – తెలుగు బోధన పద్ధతులు (డి.ఎడ్) తెలుగు అకాదమీ)

9. Cameron, L.(2001)-Teaching Lanugages to Young Learners - Cambridge University Press

National curriculum frame work (2005) 10, NCERT

AP State Curriculum Frame work (2011) 11. SCERT - AP

Position Paper on Teaching Indian Languages (2006) 12. NCERT

భాషాభాభాధన అధారపత్రం (2011) 13. SCERT - AP

14. Butler, A and Turbill, J. (1984) - Towards Reading - Writing in Class Room.

New Yark: Cormel University

15. Tompkins, Gail E (1994) Teaching writing - Macwillon

• 16. డాగ్ పోరంక్ దక్షణామూర్త్ – భాష ఆధునిక దృక్పరం - నీల్కమల్ ప్రచరణలు

17. రాజ భవిరాజు కృష్ణమూర్తి - శాష, సమాజం, సంస్మతి - నీలోకమల్ ప్రచురణలు

18. దార్శకుడున్న్ నుణ్హహ్మణ్యం, ఆధునక భాషా శాగ్రస్త ద్వాంశాలు - తెలగు విశ్వవిద్యాలయం.

19. Noam Chamsky - Syntartic Structures

20. Atkinson - Teach your elf Linguistics

21. వేకూర్ రామారావు - తెలుగు వాక్యం తెలుగు ఏశ్వవిద్యాలయం

22 డాగ్రామ్ చల్చడానేఖర్ రెస్ట్ - మన భాష్ - మీరియా ద్రమనలు