

UNIVERSITY OF MUMBAI

No.UG/ 217 of 2008

CIRCULAR :-

A reference is invited to the Ordinances, Regulations and syllabi relating to the Bachelor of Education (B.Ed) degree course vide Pamphlet No. 166 and to this office circular No. UG/ 93 of 2003 dated 4th March, 2003 and the Head, University Department of Education and the Principals of the affiliated training colleges in Education are hereby informed that the recommendation made by the Board of Studies in Education at its meeting held on 28th March, 2008 has been accepted by the Academic Council at its meeting held on 15th April, 2008 vide item No. 4.53 and that, in accordance therewith, syllabus for the B.Ed. degree course is revised as per Appendix and that the same has been brought into force with effect from the academic year 2008 – 2009.

MUMBAI- 400 032

6th June, 2008

for REGISTRAR

To,

The Principals of the affiliated training colleges in Education.

AC/4.53/15.04.2008

No. / 217-A of 2008

MUMBAI-400 032

6th June, 2008

Copy forwarded with compliments for information to :-

- 1) The Dean, Faculty of Education.
- 4) The Chairperson, Board of Studies in Education.
- 3) The Controller of Examinations,
- 4) The Co-ordinator, University Computerization Center.

for REGISTRAR

Copy to :

The Director, Board of College and University Development, , the Deputy Registrar (Eligibility and Migration Section), the Director of Students Welfare, the Executive Secretary to the Vice-Chancellor, the Personal Assistant to the Pro-Vice-Chancellor, the Registrar and the Assistant Registrar, Administrative sub-center, Ratnagiri for information.

The Controller of Examinations (10 copies), the Finance and Accounts Officer (2 copies), Record Section (5 copies), Publications Section (5 copies), the Deputy Registrar, Enrolment, Eligibility and Migration Section (3 copies), the Deputy Registrar, Statistical Unit (2 copies), the Deputy Registrar (Accounts Section), Vidyanaigari (2 copies), the Deputy Registrar, Affiliation Section (2 copies), the Director, Institute Distance Education, (10 copies) the Director University Computer Center (IDE Building), Vidyanaigari, (2 copies) the Deputy Registrar (Special Cell), the Deputy Registrar, (PRO) , the Assistant Registrar, Academic Authorities Unit (2 copies) and the Assistant Registrar, Executive Authorities Unit (2 copies) . They are requested to treat this as action taken report on the concerned resolution adopted by the Academic Council referred to in the above Circular and that no separate Action Taken Report will be sent in this connection. the Assistant Registrar Constituent Colleges Unit (2 copies), BUST (1 copy), the Deputy Registrar Unit V (1 copy), the In-charge Director, Centralize Computing Facility (1 copy), the Secretary MUASA (1 copy), the Telephone Operator (1 copy), the Superintendent, Thesis Section (2 copies), the Graduate Section (2 copies), the Superintendent, Thesis Section (2 copies).

WJW/DV3/ 6560

UNIVERSITY OF MUMBAI



**REVISED SYLLABUS
FOR
THE DEGREE OF THE
BACHELOR OF EDUCATION
(B.ED.)**

(with effect from the academic year 2008-2009.)

Paper—1
FOUNDATIONS OF EDUCATION
SECTION-1: PHILOSOPHICAL FOUNDATIONS OF
EDUCATION

OBJECTIVES:

1. To develop an understanding of the relationship between philosophy and education..
2. To develop an understanding of the contribution of Indian and Western philosophers.
3. To create an awareness of the goals and provisions in the indian constitution.
4. To develop an understanding of the basis of curriculum designing.
5. To develop an awareness of professional ethics and multifaceted role of teacher.

UNIT I: PHILOSOPHY AND EDUCATION (10 Lectures)

- a) Meaning, Nature and Branches (Metaphysics, Epistemology, Axiology and its educational implications) of Philosophy.
- b) Philosophical Models of Education. (Impressionist, Insight and Rule)
- c) Meaning of education (Education as acquisition, manifestation and transaction) and Characteristics.
- d) Relationship between Philosophy and Education.
- e) Functions of Education in present context- Individual and National (economic, social, political and cultural).

UNIT II: SCOPE OF EDUCATION (4 Lectures)

- a) Scope - Disciplines, Areas and Forms of Education.
- b) Non-formal Education: Objectives and Need.

UNIT III: IMPACT OF PHILOSOPHY ON EDUCATION (10 Lectures)

- a) The impact of Idealism, Naturalism, Pragmatism and Realism on Education with reference to Aims, Curriculum, Methodology, Textbooks, Discipline and Role of the Teacher.
- b) Educational Contributions of following Indian and Western Thinkers with its Implications.
 - i. Mahatma Gandhi
 - ii. Swami Vivekananda
 - iii. Rabindranath Tagore
 - iv. Jean J. Rousseau
 - v. John Dewey

UNIT IV: -DEVELOPMENT OF GOALS OF EDUCATION IN INDIA.

(10 Lectures)

- a) Ancient Indian Goals: Purusharthas.
- b) Indian Constitution and the status of education with reference to the following:
 - i. Universalisation of Education. Article: Directive Principles: 41, 45, 46,
 - ii. Equality of Opportunities in Education. Article 28, 29, 350, 351,
 - iii. Education and Fundamental Rights and Duties. Article 14,15,16, 30 & Duties: 51A (a to h)
- c) National Policy on Education (NPE – 1986)
- d) National Policy of Education-1992
- e) Sarva Shiksha Abhiyan (SSA – 2000) (Features, Aims and Objectives)
- f) National Curricular Framework-2005 (Need and Objectives)

UNIT V: TEACHING AS A PROFESSION (4 Lectures)

- a) Principles of Professional Ethics.
- b) Role of Teacher in inculcating Intrinsic Values
- c) Purpose of Teachers' Organizations

UNIT VI: CURRICULUM

(4 Lectures)

- a) Concept, Principles and Determinants of Curriculum Design.
- b) Integrated Curriculum.

REFERENCES

1. Brubacher, John S Philosophy Of Higher Education San Francisco, Jossey – Ban 1978
2. Brubacher, John S Modern Philosophies of Education, McGraw-Hill Book Company Inc. New York, 1962.
3. Brubacher, John S Eclectic Philosophy of Education, Prentice Hall, Engellwood Cliffs, New Jercey, 1962.
4. Kilpatrick, WH Source Book in the Philosophy of Education, McMillan and Company, New York, 1934.
5. Mayer, F Foundations of Education, Charles E Merril Books Inc., Ohio, 1963.
6. Anand, CL (1993) Teacher and Education in the Emerging Indian Society, New Delhi: NCERT.
7. Coombs, Philips H., (1985), the World Crisis in Education, New York: Oxiford University Press.

8. Delors, Jacques (1996), learning the Treasure within, UNESCO: Report to UNESCO of the International Commission on Education for Twenty first Century.
9. Kar, N. K.: Value Education – A Philosophical Study, Ambala, The Associated Publication, 1996.
10. Aggrawal, J. C.: Basic idea's in Education, Delhi, Shipra Publications, 2001.
11. Panday, R.S. :An Introduction to Major Philosophers of Education, Agra, Vinod Pusatak Mandir.
12. Passi, B. K. :Value Education, Agra, National Psychological Corporation, 2004
13. Dhavan, M. L. : Philosophy of Education, Delhi, Editor, Isha Books 2005
14. Panday, V. C.: Value Education and Education for Human Rights, Editor, Delhi, Isha Books 2005.
15. Singh, M.S.: Value Education, Delhi, Adhyayan, Publication and Distribution, 2007.
16. Somnath Agrawal, Philosophical foundation of Education. Authors Press, 2007
17. Shankar Mukharji, Contempory issues in Modern Indian education, Authors Press, 2007
18. Saiyidain, K. G. (1970), Facts of Indian Education, New Delhi: NCERT.
19. Ross, James (1962), Groundwork of Educational Theory, London: George Harre and Sons.
20. Mohanti, J. (1987), Democracy and Education in India, New Delhi: Deep and Deep Publishers.
21. Tyagi, P. N. (1991), Education for All: A graphic Presentation, New Delhi: NIEPA.
22. Govt. of India (1993), Education for All: The Indian Scene, Widentry Horizons, New Delhi: MHRD.
23. Nayar, P. R., Dave, P.N., and Arora, K. (1982), Teacher and Education in Emerging Indian Society, New Delhi.
24. Ram Murti Acharya (1990), Towards an Enlightened and Humane Society – A Committee Report, New Delhi MHRD.
25. Ruhela, S. P. (1969), Social Determinants of Educability in India, New Delhi: Jain Publishers.
26. Srimali, K. L. (1970), The Prospects for Democracy in India, Southern Illinois: University Press.
27. Bhattacharya and Srinivas (1977). Society and Education, Calcutta : Academic Publishers.
28. Durkhiem, Emile (1956), Education and Sociology, New York: Free Press.

29. Singh, Karan; Perspectives on the constitution
30. Yadulal, Kusum; Perspectives of educational CHANGES
31. Venkateshwaran; Principles of Education
32. Sharma, Ramnath (2000), Textbook of educational philosophy, New Delhi: Kanishka publ.
33. Aggrawal, J.C.(1996), 10th rev. ed. Theory and principles of education, New Delhi, Vikas publ.
34. Raheja, S.P. Human values and education
35. Aggarwal, Somnath Philosophical Foundations of Education
36. Kashyap, Subhash (1993), Perspectives on the constitution Delhi, Shipra publ.

SECTION II

SOCIOLOGICAL FOUNDATIONS OF EDUCATION

OBJECTIVES:

1. To develop an understanding of the mutual influence of Society and Education.
2. To develop an understanding of the concept and need for Peace Education.
3. To sensitize students about Human Rights.
4. To develop an awareness about the essential components of Democracy and Modernization in the Indian Context.
5. To create an awareness about various essential approaches in Education for a dynamic Indian society.

UNIT I: - EDUCATIONAL SOCIOLOGY (5 Lectures)

- a) Meaning and Scope of Educational Sociology
- b) Influence of Educational Sociology on
 - i. Aims
 - ii. Curriculum
 - iii. Methods of Teaching

UNIT II: DEMOCRACY AND MODERNISATION (10 Lectures)

- a) Concept of Democracy
- b) Education for Democracy—Secularism, Egalitarianism, Effective Citizenship.
- c) Concept and Characteristics of Modernization
- d) Role of Education in Modernization--Scientific Temper, Productivity and Economic development.

UNIT III: EDUCATION FOR PEACE (10 Lectures)

- a) Concept and Need of Peace Education
- b) Education and National Integration
 - i) Barriers to National Integration: Regionalism, Linguism & Communalism.
 - ii) Role of Education in promoting National Integration
- c) Education and International Understanding
 - i) Barriers to International Understanding: Terrorism, Racism & War
 - ii) Role of Education in promoting International Understanding

UNIT IV: EDUCATION FOR HUMAN RIGHTS (10 Lectures)

- a) Concept of Human Rights.
- b) Need for Human Rights Education.
- c) Deprivation of Human Rights: Child Exploitation, Gender Discrimination & Casteism.
- d) Role of Education in promoting Human Rights.

UNIT V: ESSENTIAL APPROACHES IN EDUCATION FOR DYNAMIC INDIAN SOCIETY (12 Lectures)

- a) Role of Family & School.
- b) Alternative Learning Systems.
- c) Role of Voluntary Organizations in catering to the need of Marginalized groups.
- d) Integration of Population Education with the School Curriculum.

SUGGESTED ACTIVITIES

1. Projects on Women's Issues.
2. Visits to places of significance- Rural schools, Voluntary and Government Organizations etc.

REFERENCES

1. Aggarwal, J. C. : Philosophical and Sociological Bases of Education.
2. Aggarwal, J. C. : Theory and Principles of Education.
3. Anand, C. L. : The Teacher and Education in Emerging Indian Society.

4. Bhatia & Narang : Philosophical and Sociological Bases of Education.
5. Gupta, S. : Education in Emerging India.
6. Murty, S .K. : Philosophical and Sociological Bases of Education.
7. Sharma, Yogendra : Sociological Philosophy of Education.
8. Dutta, S. : Teacher Education in the Emerging Indian Society.
9. Mathur, S S : A Sociological Approach to Indian Education.
10. Ram, Ahuja. : Social Problems in India.
11. Singh, Y. M. : Sociological Foundations of Education.
12. Gillin, J. I. : Social Problems.

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. अकोलकर ग . वि .: शिक्षणाचे तात्विक सामाजिक अधिष्ठान
२. कुलकर्णी, काळदाते: उदयोन्मुख भारतीय समाज संस्कृती आणि शिक्षण
३. कुंडले म . वा .: शैक्षणिक तत्वज्ञान व शैक्षणिक समाजशास्त्र
४. गाजरे महंत: उदयोन्मुख भारतीय समाज, संस्कृती आणि शिक्षण भाग १ व २
५. पवार ना . ग .: शिक्षणक्षेत्रातील विचारवंत
६. पवार ना . ग .: भारतीय शिक्षणक्षेत्रातील आधुनिक विचार प्रवाह
७. पारसनिस व . रा .: शिक्षणाची तात्विक आणि समाजशास्त्रीय भूमिका
८. भगत रा . ग .: सात शिक्षणतज्ञ
९. वाशईकर श . श्री .: चार शिक्षणतज्ञ
१०. डॉ . दुनाखे अरविंद: प्रगत शैक्षणिक तत्वज्ञान
११. प्रा . कुलकर्णी पी . के .: प्रगत समाजशास्त्रीय सिद्धांत
१२. डॉ . अहेर हिरा: उदयोन्मुख भारतीय समाजातील शिक्षण व शिक्षक
१३. डॉ . दुनाखे, देशपांडे लिना शिक्षणाचे समाजशास्त्र : एक रूपरेखा
१४. प्रा . चौधरी पा . दा .: भारतीय तत्वज्ञान इतिहास

- १५ . डॉ . वास्कर आनंदः भारतीय शिक्षणाचे बहुजनीकरण
- १६ . प्रा . पवार ना . ग .ः उदयोन्मुख भारतीय समाजातील शिक्षणतज्ञ
- १७ . डांगे चंदकुमारः शिक्षण आणि समाजशास्त्र
- १८ . अकोलकर ग . वि .ः शैक्षणिक समाजशास्त्राची रूपरेशा

PAPER - II
EDUCATIONAL PSYCHOLOGY
SECTION-I
PSYCHOLOGY OF THE LEARNER

OBJECTIVES:

1. To develop an understanding of the nature, scope and methods of Educational Psychology
2. To acquire knowledge of the characteristics of growth and development at various stages
3. To create an awareness of the problems of adolescents.
4. To develop an understanding of the various theories of intelligence and the role of the teacher in fostering intelligence and creativity.
5. To develop an understanding of the concept of individual differences and its implications
6. To develop an appreciation of the concept, need and strategies for inclusion in schools.
7. To develop an understanding of the concept of Personality and the role of the teacher in promoting mental health of students.

UNIT I: EDUCATIONAL PSYCHOLOGY (7 Lectures)

- a) Meaning, Nature, Scope and relevance of Educational Psychology.
- b) Methods of Educational Psychology.
 - i. Introspection
 - ii. Observation
 - iii. Experimental

UNIT II: UNDERSTANDING THE DEVELOPMENT OF THE LEARNER (10 Lectures)

- a) Concept and Principles of Growth and Development.
- b) Theories of Development and their Educational Implications.
 - i. Piaget's theory of Cognitive Development.
 - ii. Kohlberg's theory of Moral Development.
 - iii. Erikson's theory of Psychosocial Development.
- c) Developmental Characteristics of 'Adolescence' with reference to Physical, Cognitive, Emotional & Social aspects
- d) Current Issues related to Adolescent Stress and Role of the Teacher - (early puberty, identity crisis, increasing loneliness, changing family

structures, rising permissiveness. Peer pressure, substance abuse, materialism, depression and suicide, Information overload, early exposure of adult issues through media/Internet)

UNIT III: INTELLIGENCE & CREATIVITY (10 Lectures)

- a) Nature of Intelligence
- b) Theories of Intelligence
 - i. J.P. Guilford's Structure of Intellect
 - ii. Gardner's theory of Multiple Intelligence.
 - iii. Goleman's theory of Emotional Intelligence.
- c) Creativity:
 - i) Meaning of Creativity and Identification of Creative Learner.
 - ii) Process of Creativity.
 - iii) Teacher's role in fostering Creativity.

UNIT IV: LEARNER DIVERSITY (9 Lectures)

- a) Concept of Individual Differences.
- b) Concept and need for Inclusive Education
- c) Understanding Exceptional learners
 - i) Gifted
 - ii) Slow Learners.
- d) Concept of Learning Disability (LD)
- e) Special Educational Needs:
 - i. Dyslexia
 - ii. Dysgraphia
 - iii. Dyscalculia
 - iv. Hearing Impairment
 - v. Visual Impairment
- f) Characteristics of the above types of disabilities and strategies for Inclusive Education
- g) Concept of Individualized Education Plan (IEP)

UNIT V: PERSONALITY (9 Lectures)

- a) Concept of Personality and Self Concept.
- b) Types of Conflicts and Defense Mechanisms (Escape- regression, day-dreaming, Denial rationalization, projection, repression and Substitution- sublimation, displacement and compensation)
- c) Mental Health: Concept and Importance.
- d) Role of Education in preventing Maladjustment.

PRACTICAL WORK (Any One)

Conduct a Case study of a secondary school student
Prepare a draft of Individualized Education Plan (IEP) for a hypothetical case.

REFERENCES: -

1. Aggarwal JC: Essential Of Educational Psychology
2. B R Hergenhahn: An Introduction to Theories of Learning
3. Chatterjee Saroj: Advanced Educational psychology
4. Chauhan SS: Advanced Educational Psychology
5. Dandekar W N: Fundamentals of Experimental Psychology
6. Dandpani S: A text book of Advanced Educational Psychology
7. Edward E Smith: Cognitive Psychology
8. Henson Kenneth; Eller Ben F: Educational Psychology for effective teaching
9. Janda L H & Kllenke H K E: Psychology its study and Uses
10. Lefrancois Guy R: Psychology for teaching
11. Lefrancois Guy R: Theories of Human Learning
12. Mangal S K: Advanced Educational Psychology
13. Mathur S S: Educational Psychology
14. S K Mangal: Essentials of Educational Psychology
15. S. K Mangal: Advanced Educational Psychology
16. Walia J S: Foundations of Educational Psychology

SECTION II PSYCHOLOGY OF LEARNING

OBJECTIVES:

1. To develop an understanding of the nature, concept and factors affecting Learning.
2. To develop an understanding of the processes of Learning through various theoretical perspectives. .
3. To acquaint the learners with the concept and process of Group Dynamics.
4. To evolve effective strategies for creating a conducive socio-emotional climate in the classroom.
5. To gain an insight into the mental processes through Psychological Experiments.

UNIT I: LEARNING

(12 Lectures)

- a) i. Concept of Learning - (Meaning, Definition & Characteristics)
- ii. Process / Steps of Learning.
- iii. Typical Learning Curve with Educational Implications.
- b) Factors affecting Learning: -
 - i. Maturation - Concept & Educational Implications.
 - ii. Attention - Concept, Types & Educational Implications.
 - iii. Fatigue - Concept, Types & Educational Implications.
 - iv. Motivation - Concept and Theories (Maslow's Theory of Self-Actualization & Achievement Motivation by David McClelland.)

UNIT II: THEORIES OF LEARNING

(14 Lectures)

- a). Concept & Educational Implications of Behaviorist Theories with reference to Thorndike, Pavlov & Skinner.
- b) Cognitivist Theories: -
 - i. Ausubel's Theory of Meaningful Verbal Learning,
 - ii. Bruner's Discovery Learning.
- c) Social Learning Theories: -
 - i. Bandura's Theory of Observational Learning
 - ii. Vygotsky's Social Development Theory.

UNIT III: MENTAL PROCESSES OF LEARNING (10 Lectures)

- a) Thinking Process:- Concept & Tools
- b) Types of Thinking: - Divergent, Convergent, Critical, Reflective & Lateral Thinking.
- c) Mental Processes: -
 - i. Memory - Concept, Types & Strategies to develop Memory.
 - ii. Forgetting - Nature, Causes, Factors & Strategies to minimize Forgetting.
 - iii. Imagination - Meaning, Types and Educational Implications.

UNIT IV: GROUP DYNAMICS / GROUP LEARNING; STRATEGIES (8 Lectures)

- a). Meaning & Characteristics of a Social Group.
- b). Group Dynamics - Process and its Importance in Learning.
- c). Importance of developing Group Mind (Group Cohesiveness)
- d). Sociometry: - Use and Importance.
- e). Psychological Perspectives -
Co-operative Learning and Constructivist Learning.

UNIT V: EXPERIMENTS: - (16 Lectures)

(With reference to Concept, Process / Laws / Types etc.)

- a) Fatigue
- b) Perception.
- c) Concept Formation
- d) Association
- e) Transfer of Learning
- f) Suggestion

(Questions to be asked on Educational Implications only.)

In addition to the above, students should carry out any two of the following activities and record their observations and findings in their Psychology Journal. A rubric may be attached to assist the recording of experiences.

- a) Carry out any one of the following Co operative Learning Based Activity and note your observations (Jigsaw Class Technique, Round Robin Technique or any other such group activity).
- b) Perform any one activity using Sociometry in a class and record the results to prepare a Sociogram / Social Distance Scale.
- c) Prepare a Lesson Plan based on Constructivist Learning.

REFERENCES: -

1. Agarwal. J.C- Essentials of Educational Psychology, Vikas Publishing House Pvt Ltd, 1995
2. Bhatnagar Suresh & Saxena Anamika - Advanced Educational Psychology, R Lall Book Depot, Meerut 2007.
3. Bhatnagar, R.P.- Educational Psychology. Meenakshi Publications Kanpur
4. Cascio, Wayne F. & Aguinis Herman - Applied Psychology in Human Resource Management - Prentice-Hall of India, New Delhi.
5. Charles Skinner - Educational Psychology.
6. Chauhan, S.S- Advanced Educational Psychology, Vikas Publication House, N.D.1990
7. Crow L.D and Crow A "Educational Psychology"
8. Dandapani, S A Textbook of Advanced Educational Psychology
9. Dandekar & Makhija- Psychological Foundations of Education
10. Dash, B.N & Dash, N- A Textbook of Educational Psychology.
11. David W. Martin- Doing Psychology Experiments.
12. Dr. Tiwari, G.R; Dr. Roma Pal - Experimental Psychology- A Dynamic Approach, Vinod Pustak Mandir
13. E. G. Parameswaran & K. Ravichandra- Experimental Psychology.
14. Guy Lefrancois - Psychology for Teaching.
15. Hergenhahn, B. R. & Olson, Matthew H. - An Introduction to Theories of Learning - Prentice-Hall of India. New Delhi.
16. J. S. Walia - Foundations of Educational Psychology.
17. Kenneth T. Henson, Ben F. Eller - Educational Psychology for Effective Teaching.
18. Lahey, Benjamin- Psychology- An Introduction (Sixth Edition), Tata McGraw Hill Publ.
19. Lawson, Robert B., Graham Jean E. & Baker, Kristin M. - A History of Psychology - Globalization, Ideas, and Applications - Prentice-Hall of India, New Delhi.
20. Lefrancois Guy R: Theories of Human Learning
21. Leo Postman, James Egan- Experimental Psychology.
22. Mangal S. K. - Essentials of Educational Psychology, Prentice-Hall of India, New Delhi.
23. Mangal S.K - Educational Psychology
24. Mathur, S.S- Educational Psychology
25. Micheal Pressley, Christine B. McCormick - Child & Adolescent Development for Educators.
26. Rajamanickam, M. - Experimental Psychology with Advanced Experiments- Vol.I & II, Concept Publishing company, New Delhi.
27. Richard D. Parsons, Stephanie Lewis Hinson, Deborah Sardo-Brown- Educational Psychology.

28. Robert A. Baron - Psychology.
29. Robert S. Feldman- Understanding Psychology.
30. S. B. Kakkar - Educational Psychology.
31. S. K. Chatterjee - Advanced Educational Psychology.
32. Sharma, R.A- Essentials of Educational Psychology, R Lall Book Depot, Meerut, 1996
33. Smith, Edward & Kosslyn, Stephen M. – Cognitive Psychology – Mind and Brain – Prentice-Hall of India, New Delhi.
34. W. N. Dandekar - Fundamentals of Experimental Psychology.

WEB SITES: -

www.funderstanding.com,
www.co-operation.org
courses.ed.asu.edu/clark/CoopLearn/
www.learning-theories.com
www.KaganOnline.com
<http://www.kolar.org/vygotsky>
<http://www.marxists.org/archive/vygotsky>
<http://www.clcrc.com/pages/cl.html>

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. आफळे, वापटः शिक्षणाचे मानसशास्त्रीय अधिष्ठान
२. आळंदकर ज. झा. : अभिनव शैक्षणिक मानसशास्त्र
३. काळे प्रेमलाः बालमनोवृत्ती परिचय
४. कुलकर्णी के. वी. : शैक्षणिक मानशास्त्र
५. कुंडले म. वा. : सर्जनशीलता
६. खरात आ. पां. : प्रगत शैक्षणिक मानसशास्त्र
७. जगताप ह. ना. : शैक्षणिक व प्रायोगिक मानशास्त्र
८. जगताप ह. ना. : अध्ययन उपपत्ती व अध्यापन
९. जगताप ह. ना. : अध्ययन उपपत्ती व अध्ययन
१०. पांडेकर वा. ना. : शैक्षणिक व प्रायोगिक मानसशास्त्र

११. मानकर प्रभाकर : सुबोध शैक्षणिक मानसशास्त्र
१२. पटवर्धन वा . पु . : सामान्य मानसशास्त्र
१३. करकरे शा . ग . : शैक्षणिक मानसशास्त्र
१४. पारसनिस न . रा . : प्रगत शैक्षणिक मानसशास्त्र
१५. सॉरेनसन हर्वर्ट [अनुवादक गोगटे] : शिक्षणातील मानसशास्त्र
१६. देशपांडे सविता : सामान्य मानसशास्त्र
१७. बनारसे / गोगटे : प्रायोगिक मानसशास्त्र
१८. काले प्रेमला : मानसशास्त्रीय मापन
१९. हिरोलोकर ल . भळवंत : शिक्षणाचे मानसशास्त्र
२०. पठाण वसीम : शैक्षणिक वाल मानसशास्त्र
२१. काले प्रमला : भाल मानसशास्त्र
२२. प्रा . देशपांडे : माध्यमिक मानसशास्त्र

Paper III
Section I
EDUCATIONAL MANAGEMENT

OBJECTIVES:

1. To develop an understanding of the concept of Educational Management.
2. To develop an understanding of the various functions of an Educational Institution.
3. To develop an understanding of the role and functions of an Educational manager.
4. To develop an understanding of essential components of democratic classroom management.
5. To develop an awareness of various structures/levels of Educational management.
6. To develop an awareness of the characteristics of quality institutions.
7. To sensitize students towards effective management of human and material resources.
8. To develop an appreciation of role of various administrative authorities in maintaining quality of Educational Institutions.

UNIT I: CONCEPT OF EDUCATIONAL MANAGEMENT
(7 Lectures)

- a) Meaning, Need, Importance & Objectives of Educational Management
- b) Functions of Educational Management: Planning, Organizing, Directing, Controlling, Evaluating.
- c) Systems Approach to Educational Management.

UNIT II: ORGANIZATIONAL MANAGEMENT (10 Lectures)

- a) Organizational Climate:
 - i. Concept and dimensions
 - ii. Characteristics of democratic institutional climate
- b) Role of the leader in fostering democratic institutional climate for effective performance and job satisfaction.
- c) Effective Classroom Management (Content Management, Conduct Management and classroom as a learning community)
- d) Discipline: Ways of ensuring effective institutional discipline.
- e) Staff Meeting: Types and principles of effective staff meeting

UNIT III INSTITUTIONAL MANAGEMENT (10 Lectures)

- a) Institutional Planning: Meaning, Importance, Process (steps) & Features.
- b) Time table: Principles of time table construction for curricular and co-curricular activities.

- c) Event Management
 - i. Principles of organizing curricular and co-curricular events.
 - ii. Steps of organizing events.
- d) Maintaining institutional quality: meaning, importance and criteria of assessing quality of educational institutions.
- e) Institutional Network.

UNIT IV: RESOURCE MANAGEMENT: HUMAN & MATERIALS (10 Lectures)

- a) Professional Qualifications and Qualities of Headmaster/Principal
 - i. Knowledge: subject matter, pedagogy, administrative rules and procedures, government rules and policies.
 - ii. Skills: assertiveness, interpersonal relations, stress management, and conflict management.
 - iii. Attitudes: openness, secular, pro-activeness, innovativeness and moral values
- b) Performance Appraisal: meaning and importance, criteria of performance appraisal of Teachers and Principals/Headmasters.
- c) PTA: role and activities.
- d) Importance of essential records and its maintenance using technology. General Register, Attendance Register for Staff & Students, Log Book for Teachers, Service Book and Cumulative Record Card.

UNIT V ADMINISTRATION AUTHORITIES (8 Lectures)

- a) Functions of N.C.E.R.T and S.C.E.R.T.
- b) Secondary School Code: need and salient features: School Tribunal, Types of Leave, Code of Conduct. Types of Grant-in-Aid
- c) Characteristics of National and International Systems of Education in India

REFERENCES:

1. Aggarwal J C: Educational administration management and supervision
2. Aggarwal J C: Landmarks in the history of modern education
3. Bhatnagar S S, Gupta: P K Educational Management
4. Kochhar S k: Secondary School Administration
5. S R Pandya: Administration and Management of Education
6. Sachdeva M S: A New Approach to School Organization
7. Sachdeva M S: School Organization. Administration and Management
8. Safya R N & Shaida: B D School Administration And Organization
9. Sidhu Kulbir singh: School Organization And Administration
10. L M Prasad: Principles and Practice of Management
11. Sukhia S P: Educational Administration
12. Tharayani, D K: School Management

13. Koontz, O Donnelly : Gibson Management

14. J S Walia: Foundations of school Administration And Organization

Section-II: EDUCATIONAL EVALUATION

OBJECTIVES:

1. To develop an understanding about concept of measurement, assessment and evaluation.
2. To develop an understanding about the areas and concept of internal assessment.
3. To develop an understanding of taxonomy of educational objectives.
4. To develop the skill of writing of objectives and specifications.
5. To acquire knowledge of different types of tools and its uses in evaluation.
6. To develop an understanding of various statistical measures and their use for interpretation of results.
7. To develop the skill of preparing year plan, unit plan, unit test & blue print.

UNIT I: CONCEPT OF EDUCATIONAL EVALUATION (8 lectures)

- a) Concept of Measurement, Assessment & Evaluation in Education.
 - i) (Meaning, Nature & Functions of Measurement, Assessment and Evaluation)
 - ii) Principles of Evaluation
- b) Internal Assessment:
 - i) Meaning, Significance & Areas (Scholastic, Non scholastic & Personality).
- c) Types of Evaluation
 - i) Formative Evaluation
 - ii) Summative Evaluation

UNIT II: EDUCATIONAL OBJECTIVES (8 Lectures)

- a) Relationship between Aims and Objectives
- b) Taxonomy of Educational Objectives
 - i) Cognitive Domain.
(Revised Bloom's taxonomy by Anderson and Krathwohl)
 - ii) Affective Domain
 - iii) Psychomotor Domain.
- c) Criteria for writing statements of Objectives and Specifications.

UNIT III: LEARNING EXPERIENCES

(6 Lectures)

- a) Concept
- b) Types- Direct and Indirect.
- c) Value based Learning Experiences
- d) Relationship between Objectives, Specifications, Learning Experiences and Evaluation.

UNIT IV: TOOLS OF EVALUATION

(12 Lectures)

- a) Essential Characteristics of Measuring Tools
- b) Factors affecting Validity and Reliability
- c) Types of test-
 - i Performance Tests: Oral test and Practical test (merits, limitations, suggestions for improvement, criteria for evaluation)
 - ii Paper –Pencil/Written test- Essay type and Objective type (Merits, limitations, suggestions for improvement)
 - iii. Norm- Referenced tests and Criterion Referenced tests (meaning, characteristics).
- d) Observation Tools- Check list, Rating scale and Anecdotal record.

UNIT V: INTERPRETING TEST RESULTS

(6 Lectures)

(Use of 4-function calculator is allowed)

- a) Calculation and interpretation of Mean and Median.
- b) Interpretation of Standard Deviation with reference to Normal Probability Curve
- c) Interpretation of Percentile and Percentile Rank.

UNIT VI: PLANNING AND TESTING

(5 Lectures)

(To be covered through a workshop and no theory question to be asked in the Examination. The test should be based on the latest board pattern and student teachers must administer it in schools. The central tendency can be calculated using the raw scores)

- a) Year plan
- b) Unit plan
- c) Unit test
 - i) Planning stage
 - ii) Editing stage
 - iii) Reviewing stage

REFERENCES

1. Bloom, B.: Taxonomy of Educational Objectives-Book-1
2. Bloom, B. :Taxonomy of Educational Objectives-Book-2
3. Dandekar, W.N.: Evaluation in School
4. Gronland, N. E. & Linn, R. L.: Measurement & Evaluation in Theory
5. Khan, Mohd. Sharif :School Evaluation
6. Lulla, B. P. et al: Essentials of Evaluation and Measurement in Education
7. Noll, V. H. & Schonell, D.P.: Introduction to Educational Measurement
8. Patel, R. N. :Educational Evaluation: Theory and Practice
9. Phillips, R. C. :Evaluation in Education
10. Rawat, D. S. :Measurement and Statistics
11. Remmers, H.H. et al :A Practical Introduction to Measurement and Evaluation
12. Schwart & Stuart: Evaluating Students' Progress
13. Upasani, N. K. :Evaluation in Higher Education
14. Wandt, E& Brown, G. :Essentials of Educational Evaluation
15. J. C. Agarwal.: Essentials of examination system
16. Wrightstone, W. et al: Evaluation in Modern Education
17. C. P. S. Chauhan,: Emerging Trends in Educational Evaluation
18. George Brown & Joanna Bull :Assessing Student Learning
19. Theodore and Adams :Measurement and Evaluation
20. Thorndike and Hagan: Measurement and Evaluation in Psychology & Education
21. Richard H. Lindeman: Educational Measurement
22. Robert Ebel & David Frisbie: Essentials of Educational Measurement
23. Nancy Wittrock & Mitry Wiley: The Evaluation of Instructional Issues & Problems
24. L. R. Gay: Educational Evaluation & Measurement
25. R. N. Agarwal :Educational & Psychological Measurement
26. Derek Rown Tree :Assessing Students
27. Garette :Educational Statistics

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१. अकोलकर / पाटणकर: शालेय व्यवस्थापन आणि पशासन
२. गाजरे / नानकर / पुराणिक व लवणे: शालेय व्यवस्थापन

३. ताम्हणकर एस . डी .: शैक्षणिक प्रशासन व नियोजन
४. पाटील लीला: माध्यमिक शाळा संचालन व संवर्धन
५. वापट भा . गो .: शैक्षणिक संघटना प्रशासन व प्रश्न
६. शिवणेकर ल . मा .: शालेय व्यवस्थापन व प्रशासन
७. अरगडे ब . ब .: शैक्षणिक मूल्यामापनाची रूपरेषा
८. उपासनी वा . के . / कुलकर्णी के . व्ही .: नवे शैक्षणिक मूल्यमापन व संख्याशास्त्र
९. उपासनी / जोशी / वझे: शैक्षणिक मूल्यमापन तंत्र व मंत्र
१०. गद्रे / सामंत / विरकर: परिक्षा पद्धतीतील क्रांती
११. चौधरी / झावरे / अग्रेसर: शैक्षणिक मूल्यमापन पद्धती
१२. दांडेकर वा . ना .: शैक्षणिक मूल्यमापन व संख्याशास्त्र
१३. वापट भा . गो .: मूल्यमापन आणि संख्याशास्त्र
१४. दुनाखे अरविंद / पारसनीस: शैक्षणिक व्यवस्थापन व प्रशासन
१५. दुनाखे अरविंद: शालेय व्यवस्थापन प्रशासन व संघटन
१६. पारसनीस न . रा .: भारतीय शिक्षणातील नियोजन
१७. उपासनी / गावडे: शाळांचे व्यवस्थापन सिद्धांत आणि व्यवहार
१८. शिवणेकर ल . मा .: माध्यमिक शिक्षण : संरचना व कार्यपद्धती
१९. कक्कड / गायकवाड : शालेय प्रशासन व प्रबंधन
२०. नागतोंडे किरण : शालेय व्यवस्था, शैक्षणिक संरचना आणि आधुनिक विचारप्रवाह
२१. फाटक माणिक : शिक्षणातील परिक्षण आणि मापन

Paper IV

Sec I

INFORMATION AND COMMUNICATION TECHNOLOGY IN EDUCATION AND SPECIAL FIELD

OBJECTIVES

1. To develop an understanding of the concept of ICT in Education.
2. To develop an understanding of the importance and need of communication through ICT.
3. To develop an understanding of the use of various support media required for ICT.
4. To enhance the skill of communication in teaching.
5. To familiarize student - teachers with contemporary teaching -learning techniques.
6. To develop an understanding of the process of technology mediated communication.

UNIT I: CONCEPT OF ICT

(6 Lectures)

- a) Concept (meaning, definition & characteristics) of ICT in Education.
- b) Advantages & limitations of ICT.
- c) Difference between Educational Technology, Communication Technology and Information Technology.

UNIT II: - SUPPORT MEDIA IN ICT

(12 Lectures)

- a) Psychological bases of using Support Media:
 - i. Dale's Cone of Experience
 - ii. Multi-Sensory Instruction
- b) Use, Advantages & Limitations of Support Media:
 - i. OHP
 - ii. LCD
 - iii. Slide-Projector
 - iv. Broadcast:- Radio and TV

UNIT III:-PROCESS OF COMMUNICATION (8 Lectures)

- a) Communication
 - i. Meaning
 - ii. Types:- Verbal, Non- verbal
 - iii. Process: Elements and Cycle
 - iv. Principles
 - v. Barriers
- b) Transactional Analysis: Concept and Educational Implications.

c) Effective Classroom Communication.

UNIT IV: METHODS AND MODELS OF TEACHING (10 Lectures)

- a) Methods of Teaching:- (Meaning, Organization and Importance)
 - i) Large Group: Team-Teaching and Seminar
 - ii) Small Group: Brain Storming and Workshop.
 - iii) Individualized: Programmed Learning (Linear and Branching)
- b) Strategies: Co-operative Learning and Simulation
- c) Models of Teaching: CAM, JIM and ITM

UNIT V TECHNOLOGY MEDIATED COMMUNICATION.
(10 Lectures)

- a) E-Learning:- Concept (Meaning, Characteristics)
- b) Types:
 - i. Off-line Learning (Meaning, Importance)
 - ii. On-line Learning-(Synchronous and Asynchronous)
- c) Use and Importance of Resources: Chat
World Wide Web, E-mail and Discussion Forum
- d) Computer Application: - CAI and CMI
- e) Teleconferencing: Audio, Video and Computer
- f) Role of the Teacher in Technology Mediated Communication

REFERENCES

1. Information and Communication Technologies: Visions and Realities by William H. Dutton. 467 pgs.
2. Information Society: Wireless ICTs' Transformative Potential, in Futures by A. Grantham, G. Tsekouras. 19 pgs
3. The Impact of ICT on Literacy Education. Edited by Richard Andrews London And New York
4. Developing Thinking and Learning with ICT: Raising Achievement in Primary Classrooms By Rupert Wegerif, Lyn Dawes & Routledge Falmer. 2004
5. Information and Communication Technologies: Visions and Realities by William H. Dutton, Malcolm Peltu; Oxford University Press, 1996
6. New Communication Technologies in Developing Countries by Jarice Hanson, Uma Narula; Lawrence Erlbaum Associates, 1990
7. Using Communication Technology: Creating Knowledge Organizations by Bettina S. T. Büchel; Palgrave, 2001
8. Handbook of Information Management by Alison Scammell. 546 pgs.

9. Information Technology by Vincent B and Vincent T; Kaban Page 1985
10. Classroom Teaching Methods & Practices Author: Nayak Ak / Rao
Vk Publisher: Aph Publishing Corporation
11. Advanced Teaching Methods for the Technology Classroom
Author: Petrina, Stephen Publisher: Idea Group Pub
12. Models of teaching Author: Joyce B and Weil M, Prentice Hall of India, 1985
13. Sharma, R.A Shikshan Adhigaman Mein Naveen Pravartan Meerut R.Lall 2000.
14. Mathur, S.S. Shikshan Kala Agra Vinod Pustak Mandir 1994.
15. Bhatiya, K.K. Aroda, J.N. Shikshan kala (Methodology of Teaching) 3rd ed. Ludhiana Prakash Brothers 1977.
16. Kulshrestha, S.P. Shaikshik takaniki ke mool adhar Agra Vinod Pustak Mandir 1982.
17. Pathak, P.D.; Tyagi, S.D., Safal shikshan kala 7th ed. Agra Vinod Pustak Mandir 1980.
18. Mathur, S.S, shikshan kala shikshan takniki evam naveen paddhatiyam 10th ed. Agra, Vinod Pustak Mandira 1980.
19. Mangal, S.K, Educational Technology Ludhiyana Prakash Brothers.

SECTION II

SPECIAL FIELDS

1- ACTION RESEARCH

OBJECTIVES:

1. To develop an understanding of the concept, principles, process & steps of Action Research.
2. To develop an appreciation of the importance of Action Research for the professional growth of the teacher.
3. To develop an understanding of the importance of validating Action Research at each step.
4. To acquaint with the different types of Action Research.
5. To develop an understanding of different methods(tools) of data collection of Action Research.
6. To develop the skill of constructing appropriate tools while conducting an Action Research.
7. To develop an understanding of different aspects of reporting an Action Research.
8. To develop the spirit of inquiry in the students.

9. To develop the skill of writing Action Research Report.

UNIT I: FUNDAMENTALS OF ACTION RESEARCH: **(12 Lectures)**

- a) Concept of Action Research
 - i. Meaning & Characteristics of Action Research.
 - ii. Difference between Fundamental and Action Research
 - iii. Principles of Action Research.
 - iv. Uses and Limitations of Action Research.
 - v. Identifying the areas of Action Research
- b) Action Research and Teacher
 - i. Action Research for the Professional Growth of Teachers.
 - ii. Collaborative Research – Concept and Need.
 - iii. Ethical considerations while carrying out Action Research.

UNIT II: PROCESS OF ACTION RESEACH (8 Lectures)

- a) Cycles of Action Research:
 - i. Stephen Kemmi's A. R. Cycle.
 - ii. Michael Bassey's A.R. Cycle.
- b) Concept and Types of Validation:
 - i. Self Validation
 - ii. Peer Validation
 - iii. Learner Validation

Unit III: TYPES OF ACTION RESEARCH (8 Lectures)

- a) Approaches of Action Research:
 - i. Qualitative Research
 - ii. Quantitative Research
- b) Methods of Action Research:
 - i. Survey
 - ii. Experimental
 - iii. Diagnostic
 - iv. Case Study

UNIT IV: TOOLS OF ACTION RESEARCH: (10 Lectures) **(Characteristics, Uses and Limitations.)**

- a) Diary and Documentation.
- b) Participant Observation Recording and Non-Participant Observation Recording.
- c) Questionnaire.
- d) Rating Scale

- e) Structured, Unstructured & Semi-Structured Interviews.
- f) Audio-Video Recordings.
- g) Photographs.

UNIT V. STEPS OF ACTION RESEARCH PLAN / PROPOSAL: (8 Lectures)

- a) Identifying and framing the General Research Question.
- b) Review of the Related Literature – Meaning and Importance.
- c) Draft Action Research Plan (research question, rationale, data collection methods, research team, consultation, costs, equipment, and schedule).
- d) Site Description (where and who sample).
- e) Data Collection Methods.
- f) Analysis and Interpretation of Data:
 - i. Qualitative (Immersion; reflecting, standing back, analyzing; synthesizing; relation to other work; locating reflecting back; returning for more data Presenting disseminating and sharing.
 - ii. Quantitative (measures of Central Tendency, variability and relationship) findings.
- g) Reflection of the results.
- h) Implication of subsequent action.
- i) List of references
- j) Writing of Synopsis

UNIT VI: REPORT WRITING

(To be covered through a project and no theory questions to be asked in written examination.)

- a) The Research Question
- b) Rationale
- c) Sample
- d) Methods of Data Collection
- e) Analysis and Interpretation of Data
- f) Reflection of the Results
- g) Development of Strategic Plan of Action.

Since 6th unit is based on the practical aspect- students will be doing this via project.

References:

1. Best John W: Research in Education
2. Rao, Usha: Conducting Educational Research
3. Aggarwal, J C: Educational Research : an introduction

4. Sukhia S.P.: Elements of Educational Research.
5. Lulla B P: Essentials of Educational Research.
6. Tharayani: Action Research.
7. Usha Rao: Action Research
8. Carr, W And Kemmis s: Becoming Critical
9. Jean McNiff: Action Research : Principals and Practice
10. Cohen L And Manion L: Research Methods in Education
11. Lokesh Kaul: Research Methodology

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१. उपासनी ना. के. : शैक्षणिक कृतीसंशोधन
२. भिंताडे, वि. रा. : शैक्षणिक संशोधन पद्धती
३. मुळे / उमाटे : शैक्षणिक संशोधनाची मूलतत्वे
४. संशोधन पद्धती व संख्याशास्त्र : कुंभोजकर, ग. वि.
५. पण्डित, वन्स्तीबिहारी : शिक्षणातील संशोधन
६. वापट, भा. गो. : शैक्षणिक संशोधन

2 - COMPUTERS IN EDUCATION

OBJECTIVES

1. To develop an understanding of the fundamentals of computer.
2. To develop an understanding of the educational uses of various features of MS Office.
3. To create an awareness of the various uses of computer as a tool, tutor and tutee.
4. To develop the skills of operating computers and accessing internet.
5. To develop thinking skills, argumentation and learning through interactive computer programs.
6. To develop the skill of preparing multimedia presentation and instructional material using computers.

UNIT I: FUNDAMENTALS OF COMPUTERS (4 Lectures)

a) Computer Architecture

- i. Diagram of Computer Structure
- ii. Features of Computer

b) Knowledge of Computer Hardware:

Input / Output Devices – Disk Drive, CD Rom, RAM, Monitor, Mouse, Printer, Keyboard, Microphone, Web Camera, Scanner, Projector and Electronic Smart Board.

UNIT II: COMPUTER AS A TOOL (15 Lectures)

a) Skills to prepare program using the appropriate software for teaching/ learning

i. Basic File Handling

- o Concept of a file/ folder
- o Saving a file and retrieving file.
- o Management of Data files – creating new file, updating, storing and deleting.
- o Saving files on external storage devices, CD, DVD, Floppy and Pen Drive.

b) Use of Word Processor

- i. Basic formatting techniques (Editing, use of graphics and tables)
- ii. Use of templates (mark sheets, mail merge and letters)
- iii. Saving word documents as web pages
- iv. Convert word document into presentations.
- v. Scan, print and prepare transparency.
- vi. Writing research paper and research project.
- vii. Preparation of question paper using spread sheet data.

c) Use of Spreadsheet

- i. Knowledge of basic terminology – rows, columns, cells, header and footer.
- ii. Basic functions of spreadsheet – insert (row/column), delete (row/column), format (cell, table) – alignment, data types
- iii. Calculations (date, summation, count, sort, average and use of filters), text processing and graphics.
- iv. Preparation of database – books, records of various types, accounting, results sheet and cumulative records card.

d) Use of presentation

- i. Basic features of presentation software – elements of a slide, formatting a slide (font, color, graphics, animation, design template, slide transitions and sound)
- ii. Characteristics of a good presentation – use of visual graphics, arrangement of content, pedagogy of content analysis, navigation, scope of presentation, linear and branched program and depth of the presentation.

- iii. Knowledge of converting presentation to web page and word document

UNIT III: USE OF COMPUTER AS A TUTOR (15 Lectures)

- a) Knowledge of Computer Aided Instructions in Classroom teaching
 - i. Constructivist Approach to designing presentations.
 - ii. Increasing interactivity by introducing visual aids – text and graphics
 - iii. Use of multimedia – sound, animation and movies
- b) Knowledge of Computer Aided Learning
 - i. Classroom learning – Synchronous and Asynchronous learning
 - ii. Use of readymade CAI for learning
 - iii. Preparation of questionnaire, quiz and interactive games (Age of Empire, Civilization 1 and 2 and National Geographic)
- c) Use of Simulation, drill and practice and review exercises for learning
- d) Use of Computer aided tests for self paced learning and classroom testing.
- e) Use of e learning media (readymade CD ROMS, dictionaries, thesaurus, tutorials, Discovery, Animal Planet, National Geographic and Vidya Vahini)
- f) Use of Computer as Tutee
 - i. Preparation of Pivot tables
 - ii. Preparation of Web pages using basic HTML
 - iii. Writing and using a Macro.

UNIT IV: INTERNET TECHNOLOGIES (9 Lectures)

- a) Browser
 - i. Names of different types of browsers
 - ii. Elements of a browser – buttons (back, front, refresh, home etc), navigation, status bar and address bar
- b) Internet
 - i. Knowledge of history of internet
 - ii. LAN , MAN and WAN
 - iii. WWW and HTTP concept
- c) Search Engine
 - i. Concept of Search – text based, image based and multi media
 - ii. Names of Different types of search engines (Google and Yahoo)
 - iii. Logic for Search – understanding of keywords and symbols

- d) Use of Internet
 - i. Finding learning resources, reference material. and online journals
 - ii. Email, chat, blogs, forums and conference
 - iii. Uploading and downloading data.

REFERENCES

1. Computers in Education by Merrill, Paul F.; Reynolds, Peter L.; Christensen, Larry B.; ISBN: 0205185177 EAN: 9780205185177 Edition: 3 Publisher: Allyn & Bacon (Published: 9/1995) Media: Paperback.
2. Computers in Education by Hirschbuhl, John J.; Kelley, John; ISBN: 007339727X EAN: 9780073397276 Edition: 12 Publisher: Dushkin/McGraw-Hill (Published: 10/2006) Media: Paperback
3. Computers in Education by Sharma, Sita Ram; ISBN: 8126101474 Publisher: Anmol Publications (Published: 1998)
4. Windows Xp For Dummies by Rathbone, Andy;
5. Computer Concepts And Windows Details by Russel Stolins
6. Computer training handbook the: strategies for helping people to learn technology by Elliott Masie
7. Encyclopedia of computer terminology 4/E by H. R. Banerjee Publisher JAICO Publishing House Year 2006.
8. Mcgraw-hill Dictionary of Computing & Communications by Tata McGrawhill, Publisher: Tata McGraw-Hill Publishing Company Ltd Year: 2004
9. Fundamentals of computers 4/E, Author : V. Rajaraman Publisher: Prentice-Hall Of India Pvt. Ltd. Year : 2004
10. Knowledge Management , Author: Elias M. Awad, Hassan M. Ghaziri , Publisher : Pearson Education Asia , Year : 2007 , ISBN: 8129700972
11. Computer Fundamentals - 3rd Revised Edition by Sinha , Publisher: BPB Publications
12. Cross National Policies And Practices On Computers In Education by Plomp Tjeerd , Publisher: Kluwer Aca
13. Net-oriented Education by Na Publisher: Akansha Publishing House
14. Windows On The Future: Education In The Age Of Technology by McCain Ted D E , Publisher: Corwin Pre
15. Information And Communication Technologies In Education, The School Of The Future by Taylor Harriet G , Publisher: Kluwer Aca
16. Software Goes To School: Teaching For Understanding With New Technology by Perkins David N Publisher: Oxford Uni
17. Hands-on Computer Activities For Teaching Math: Grades 3-8 by Burnley Beverly , Publisher: Jossey-Bas

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१. बरवे, मीनाक्षी : संगणक शिक्षण व शिक्षक
२. देसाई रविद : क . क . कम्प्युटरचा
३. मंत्री राजेंद्र : डीटीपी म्हणजे काय?
४. मंत्री राजेंद्र : कॉम्प्युटर म्हणजे काय?

3 - EDUCATION FOR RURAL DEVELOPMENT

OBJECTIVES

1. To acquaint with the characteristics of Rural Community.
2. To develop an understanding of the problems of education pertaining to rural areas.
3. To develop an appreciation of the role of education for rural development.
4. To create an awareness of the role of teacher in Rural Development.
5. To develop an appreciation of the contribution of social reformers for rural education.
6. To create an awareness of various Government policies and programmes for Rural Development

UNIT I: INTRODUCTION OF RURAL AREA AND RURAL DEVELOPMENT

(8 Lectures)

- a) Concept of Rural Area, Need and Scope of Rural Development
- b) Structure of Rural Community (Caste & Class)
- c) Characteristics of Rural Areas in Democratic India.
 - i. Density of Population
 - ii. Environment; Physical and Social
 - iii. Literacy Rate
 - iv. Basic Facilities
 - v. Occupation
 - vi. Traditions and Culture.
- d) Tribal and Remote Villages: Characteristics and Needs

UNIT II PROBLEMS OF RURAL EDUCATION (8 Lectures)

- a) Physical Facilities
- b) Literacy Level of the Community
- c) Attitude to Girl Education
- d) Economic Problems (Dependence on rains, Industrial venture, Child Labour and Extinction of old vocations)
- e) Health Issues
- f) Rigid Social Inequality
- g) Role of Education

UNIT III: CURRENT TRENDS AND PRACTICES IN RURAL EDUCATION (8 Lectures)

- a) Non formal programmes for Rural Development
 - i. Women Empowerment
 - ii. Gender Equity
 - iii. Disease and Illness
 - iv. Rural Unemployment
 - v. Adult Education
- b) Role of NGO's in rural development- programmes and strategies
- c) Development of rural leadership for social change.
- d) Educational Practices:-
 - i) One teacher school.
 - ii) Neighbourhood Schools
 - iii) Anganwadi

UNIT IV: - POLICIES AND SCHEMES FOR RURAL DEVELOPMENT (10 Lectures)

- a) Policies and Provision for Rural Development by central and state government.
- b) Five Year Plans.
- c) Khadi and Village Industries Commission:-
- d) Objectives and K.V.I.C. during Five Year Plans.
- e) Panchayat Raj Institutions: Evolution, Structure and Functions, 73rd Amendment and Role of PRIs in Rural Development
- f) Integrated Rural Development Programmes, Swarna Jayanthi Grama Swarojgar Yojana and Employment Assurance Scheme.

UNIT V: CONTRIBUTION OF SOCIAL REFORMERS (8 Lectures)

- a) Vinobha Bhave (Education for Rural Reconstruction)
- b) Tarabai Modak and Anutai Wagh (Kosbad Project)

- c) Mahatma Gandhi (Rural Reconstruction)
- d) Water Conservation Movement by Rajendra Singh

Unit VI PRACTICAL WORK

- a) Project and visits based on rural areas should be organized.
- b) Such projects should be considered as essays for 10 marks.

References

1. Education and rural development – Sudha Rao Sage publication, New Delhi
2. Education in rural areas : Constraints and prospects- A.S Sestharamu and M.D. Ushadevi Ashish Publishing house, New Delhi
3. Growing up at Kosbad hill- Chitra Naik, Gram bal Shiksha Kendra Kosbad
4. Integrated Rural Development – R.C Arora
5. Rural Development R Subramananyam, Yatan Publication, New Delhi
6. Rural Sociology in India- A. R Desai, Popular Prakashan, Mumbai

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. सुरवसे मगन : ग्रामीण शिक्षण आणि ग्रामीण विकास .
२. नाडगोंडे, गुरूनाथ : ग्रामीण समाजशास्त्र
३. चोपडे, टी . एन . : ग्रामीण शिक्षणाची मूलतत्वे
४. कर्णिक वा . व . / गोखले, मदधुसूधन : ग्रामीण पुनर्रचना व शिक्षण
५. अकोलकर, ग . वि . : ग्रामीण विकास आणि शिक्षण

4 - ENVIRONMENTAL EDUCATION.

OBJECTIVES:.

1. To develop an understanding of the concepts of environmental education, its need and principles.
2. To develop an understanding of the environmental situation and issues at the Global and Indian level.
3. To develop an understanding of the concept of pollution with respect to loss of energy.
4. To create an awareness of sustainable development and environmental management.
5. To develop an attitudinal change regarding environmental protection..
6. To develop an appreciation of implementing environmentally sustainable practices.
7. To develop an understanding of the various approaches in the teaching of environmental education.
8. To acquaint with various movements, projects and laws of environment.

UNIT I: ENVIRONMENT EDUCATION (12 Lectures)

- a) Environment: Meaning, Components- Biotic and Abiotic, Types of Eco System, Ecological Pyramids (numbers, mass, Energy), Food Chain and Food Web.
- b) Environmental Education: Meaning, Goals, Objectives, Principles & Need
History of Environmental Education: (Indian context in relation to the introduction of constitutional articles, regulations and laws prior to 1972) salient features of Stockholm conference (1972), UNESCO-UNEP IEEP (1975), Inter-governmental conference EE (1977), Brundlandt commission(1985), Montreal protocol (1987), Earth summit (1992), Rio +5 (1997), World summit(2002), Kyoto protocol (2005) and Tbilisi+30 (2007)
- c) Environmental Philosophy: based on Buddhism, Jainism, Hinduism, Islam, Christianity and Sikhism (Any three events/parables/religious practices based on scriptures to be dealt with the above mentioned religions)
- d) Concept of pollution in context to loss of energy.

UNIT II: ENVIRONMENTAL SITUATIONS AND ISSUES

(8 Lectures)

(Meaning, Causal factors, Effects and Remedies)

- a) Climate change, Ozone Depletion, Pollution of the Oceans, Loss of Bio-diversity and Energy crisis.
- b) Impact of Environmental pollution- physical, psychological, Social and economic life of an individual.

UNIT III: EDUCATION FOR SUSTAINABLE DEVELOPMENT

(8 Lectures)

- a) Sustainable Development: Meaning, Need and Sustainable practices (Measures to be taken at the Governmental and Individual level).
- c) Sustainable Environmental Management (Meaning, Significance and Process)
 - (i) Rain water Harvest
 - (ii) Solid waste Management
 - (iii) Mangroves Management

UNIT IV: APPROACHES TO THE TEACHING OF ENVIRONMENTAL EDUCATION

(6 Lectures)

- a) Co-relation of Environmental Education with school subjects
- b) Integrating Environmental Education through Curricular activities and Co-curricular activities.

UNIT V: ENVIRONMENTAL MOVEMENTS, PROJECTS AND LAWS.

(8 Lectures)

- a) Movements: Chipko and Raleganj Siddhi (Anna Hajare)
- b) Projects: Tiger Project and Ganga action plan.
- c) Laws of conservation and Protection: Environment Protection Act, Wild life Protection Act and Noise Pollution Act.

Practical work to be done at college level (tentative) - (Any one activity)

(6 Lectures)

- a) Vermi composting
- b) Greening Institutions
- c) Paper recycling
- d) Conservation of water
- e) Conservation of energy
- f) Market survey

REFERENCES:

1. Environmental studies- Chand publication, R.A. Sharma.
2. The Hindu – survey of the Environment
3. Education for the environmental concerns – A.B. Saxena
4. State of India's Environment – Citizens report 2001
5. UNESCO-UNEP International Environment Education Programme Report.
6. Environmental Education – Deb, Sikdar and Agarwal.
7. Environmental Education- V Krishnamachayulu
8. A textbook of Environmental Science- Arvind Kumar
9. Environmental Education- K Purushotham and D Narasimha Reddey
10. Environmental Science: A Global Concern - Willam P Cunningham
11. Environmental Science: Richard T Wright and Bernard J Nebel.
12. Environmental Science: A study of interrelationship – Eldon D Enger and Bradely F. Smith

Websites:-

www.cee.india.org
www.science.org.au
www.greenpeace.org
www.eoearth.org
www.cseindia.org
www.greenbiz.com
www.globalissues.org
www.indp.org

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१. प्रभु सुधाकर / प्रभु वर्षाः पर्यावरण - शालेय उपक्रम
२. भांडारकर के. एम. : पर्यावरण शिक्षण
३. जोशी विजय : पर्यावरण विषयक कायदे
४. रोपळेकर नंदकुमार : वेध पर्यावरणाचा
५. शिक्षक हस्तपुस्तिका : इयत्ता नववी
६. अहिरराव वा. र. व इतर : पर्यावरण विज्ञान
७. करमरकर, प्र. व इतर : पर्यावरण शास्त्र
८. जोशी, भा. प. / चौधरी अ. ना. : निसर्ग - पर्यावरण प्रदूषण
९. मगर, जयकुमार : पर्यावरणशास्त्र परिचय

१०. पटवर्धन भूषण : आरोग्यदायी पर्यावरण
११. शिंदे, पी. जी. व इतर : पर्यावरण शास्त्र

5 - GUIDANCE AND COUNSELLING

OBJECTIVES:

1. To develop an understanding of the concepts of guidance and counselling
2. To develop an understanding of educational , vocational and personal guidance
3. To acquaint the students with the testing devices and techniques of guidance
4. To develop an understanding of collection and dissemination of occupational guidance
5. To sensitize student-teachers to the problems faced by students in the contemporary world.
6. To create an awareness of the working of guidance centers.

UNIT I: CONCEPT OF GUIDANCE (8 Lectures)

- a) Meaning, Nature & functions of guidance
- b) Principles of guidance
- c) Need of guidance at various stages of life
- d) Types of guidance:
 - i. Educational Guidance - Meaning and need at Secondary and Higher Secondary level.
 - ii. Vocational Guidance – Meaning and need at Secondary and Higher Secondary level.
 - iii. Personal Guidance – Meaning and need at Secondary and Higher Secondary level.

UNIT II: COUNSELLING (12 Lectures)

- a) Concept of Counselling
- b) Theories of Counselling:
 - a) Theory of Self (Rogers)
 - b) Rational Emotive Behavioral Therapy (Albert Ellis).
- c) Types of Counselling: Directive, Non directive, Eclectic.
- d) Process of counselling (Initial disclosure, in depth exploration and Commitment to action)
- e) Skills in counselling (Listening, Questioning, Responding, Communicating)
- f) Role of teacher as a Counsellor and professional ethics associated with it.

UNIT III: TESTING AND NON TESTING DEVICES FOR THE STUDY OF AN INDIVIDUAL (10 Lectures)

- a) Tests: Intelligence, Aptitude, Attitude, Interest, Achievement and Personality.
 - a) Techniques used in guidance: Questionnaire, Anecdotal records, Interview schedule, Case study, Diary and Autobiography.

UNIT IV: JOB ANALYSIS AND OCCUPATIONAL INFORMATION (8 Lectures)

- 1. Job analysis: Concept and need
- 2. Job satisfaction: Concept and factors affecting job satisfaction
- 3. Relation between job analysis and job satisfaction
- 4. Concept of Occupational Information & Sources of Collection
- e) Career Counselling and Dissemination of Occupational Information

UNIT V: CONTEMPORARY ISSUES IN SCHOOL GUIDANCE (5 Lectures)

- a) Dealing with substance abuse, grief, relationship, depression and academic stress (with regard to their identification and intervention)

PRACTICAL WORK: (Any One)

- a) Make a study of the guidance services available in any one school.
Prepare a report
- b) Make a study of a guidance centre. Prepare a report
- c) Interview a school counsellor to find the problems faced by students in the present context.

REFERENCES

- 1. Aggarwal J C: Educational, Vocational Guidance and Counseling
- 2. Bengalee M D: Guidance and counseling
- 3. Bengalee Mehroo D.: Child Guidance
- 4. Bhatia K K: Principles of Guidance and Counseling
- 5. Bhatnagar R P, Rani Seema: Guidance and counseling in education
- 6. Chauhan S S: Principles and Techniques of Guidance
- 7. Kochhar S.K.: Educational and Vocational guidance in Secondary Schools
- 8. Nanda S.K.; Chadha P.C.: Educational and vocational guidance
- 9. Patterson L E; Welfel E R The counseling Process
- 10. Sharma R A Fundamentals of Guidance and Counseling
- 11. Nambiyar K: Strategies Guidance Based Education

12. M. Asch: Principals of Guidance and Counseling
13. Srivastava: Guidance and Counseling

मराठी माध्यमाकरिता संदर्भ.ग्रंथ

१. पत्की श्री . मा . : व्यवसाय मार्गदर्शन आणि सल्लाकार्य
२. परनेरकर पु . रा . : शिक्षण व व्यावसायविषयक मार्गदर्शन
३. पिंपळखरे मो . ह . : शैक्षणिक व व्यावसायविषयक मार्गदर्शन
४. दुनाखे अरविन्द : शैक्षणिक व व्यावसायिक मार्गदर्शन आणि समुपदेशन
५. वैद्य पु . ग / वांळिबे गिरीश : शैक्षणिक व्यवसाय मार्गदर्शन
६. प्रा . वझे ना . आ . : व्यवसाय मार्गदर्शन
७. पिंपळकर / चौधरी : व्यावसायिक जीवनाची प्रवेशद्वारे

6-Inclusive Education

OBJECTIVES:

- 1) To develop an understanding of the concept and philosophy of inclusive education in the context of education for all.
- 2) To identify and address diverse needs of all learners
- 3) To familiarize with the trends and issues in Inclusive Education
- 4) To develop an attitude to foster inclusive education
- 5) To develop an understanding of the role of facilitators in inclusive education

UNIT I: INTRODUCTION TO INCLUSIVE EDUCATION

(8 Lectures)

- a) Concept, Need and Meaning
- b) Philosophy: Transition from segregation to inclusion
- c) Principles
- d) Models

UNIT II: SPECIAL EDUCATIONAL NEEDS (SEN) OF LEARNERS IN INCLUSIVE SCHOOL. (11 Lectures)

- a) Identification of diverse needs of SEN learners and Referrals
- b) Disabilities in children and their SEN : Hearing Impairment, Visual Impairment , Low Vision, Orthopedic , Intellectual Impairment , Cerebral Palsy, Learning Disabilities and Multiple Disabilities
- c) Types and Use of Assistive Devices for learners with SEN
- d) Adaptations & Accommodations: Physical & Curricular

Unit III: PLANNING AND MANAGING INCLUSIVE CURRICULUM IN SCHOOLS (8 Lectures)

- a) School Readiness and School transition
- b) Individualized Educational Plan (IEP): Development & Implementation
- c) Practices and Classroom Management in Inclusive Education: Seating Arrangement, Whole Class Teaching, Activity Based Learning, Peer Tutoring and Cooperative/Collaborative Learning
- d) Barriers and Facilitators in Inclusive Education: Attitude, Social and Educational

UNIT IV: LEGISLATION, EMERGING ISSUES AND CURRICULAR CONCERNS (8 Lectures)

- a) Legislations for Inclusive Education: National Policy of Disabilities 2006
- b) Sarva Shiksha Abhiyan (SSA) (2002)
- c) Educational Concessions and Facilities
- d) Continual Education Programmes
- e) National Institutes for Rehabilitation of Disabled

UNIT V: FACILITATORS FOR INCLUSIVE EDUCATION (8 Lectures)

- a) Need for Multidisciplinary Approach
- b) Role Responsibilities: General, Special and Resource
- c) Teachers, Family, Community
- d) Parent - Professional Partnership: Need and Relevance

SUGGESTED ACTIVITIES:

- a) Plan two activities for cooperative learning in inclusive classrooms
- b) Planning of two lessons and teaching in inclusive schools

REFERENCES

1. Baquer, A. & Sharma, A. (1997) .Disability: Challenges Vs. responses, Can Pub.
2. Bartlett, L. D., Weisentein, G.R.(2003) Successful inclusion for educational leaders, Prentice Hall, New jersey.
3. Chaote Joyce, S. (1991) . Successful mainstreaming, Allyn & Bacon
4. Daniels, Harry(1999) .Inclusive Education, London – Kogan.
5. Deiner, P. L.(2000) . Resource for Teaching children with diverse abilities, Harcourt Brace & Company, Florida
6. Dessent. T. (1987). Making ordinary school special, Jessica Kingsley Pub.
7. Gargiulo. R. M. (1997). Special education in contemporary society : an introduction to exceptionality, Wadsworth, Belmont
8. Gartner, A. & Lipsky, D. D. (1997) Inclusion and school reform transferring America's classrooms, P. H. Brookes Pub. Baltimore.
9. Gathoo, V. (2004).Curriculum strategies and adaptations for children with hearing impairment.RCI, Kanishka Pub.New Delhi
10. Giuliani, G. A. & Pierangelo, R. (2007) Understanding, developing and writing IEPs . Corwin press , sage Pub
11. Hegarthy, S. & Alur, M. (2002) Education of children with special needs: From segregation to inclusion, Corwin press, sage Pub
12. Hollahan & kauffman (1978) . Exceptional Children : An introduction to special education ,Prentice Hall
13. Joyce S. Choate (1997).Successful inclusive teaching , Allyn & Bacon
14. Karant, P. & Rozario, J. ((2003) . Learning Disabilities in India, Sage Pub.
15. Karten, T. J. (2007). More inclusion strategies that work. Corwin press , sage Pub
16. M. C. Gore(2004) .Successful Inclusion strategies for secondary and middle school teachers ,Crowin Press, Sage Pub.
17. Madan Mohan Jha(2002). School without walls : inclusive education for all, Heinemann edu. Oxford
18. Mathew ,S. (2004) Education of children with hearing impairment . RCI, Kanishka Pub.New Delhi
19. Panda , K. C. (1997). Education of exceptional children. Vikas Pub. New Delhi
20. Patt Daird (1980). Curriculum Design and Development, Harcott Brace, New York.
21. Rainer's. (2007) . Managing Special and inclusive education
22. Ruth E. Cook, Annette Tessier, M. Diane Klein(1996), Merrill Prentice Hall
23. Sedlak, Ribert, A. & Schloss Patrice, C. (1986). Instructional methods for students with learning and behaviour problems ,Allyn & Bacon

7. INTERNATIONAL EDUCATION

OBJECTIVES:-

1. To acquaint the student-teachers with the concept and need for International Education.
2. To prepare student-teachers to face challenges of International Education
3. To analyze the educational systems of different countries
4. To explore the notions of multicultural perspectives
5. To develop an understanding of WTO, GATS and its implications for Education
6. To familiarize student-teachers with the requirements as a teaching professional in an international set up

UNIT I: INTERNATIONAL EDUCATION (8 Lectures)

- a) Concept of International Education
- b) Objectives of an International Education
- c) Need and Importance for International Education
- d) International Baccalaureate Organization (History, Purpose and Functions)

UNIT II: EDUCATION SYSTEMS IN DIFFERENT COUNTRIES (8 Lectures)

With reference to an Overview of Educational Objectives and Structure

- a) USA
- b) UK
- c) Australia
- d) Singapore

UNIT III: WTO, GATS AND EDUCATION (6 Lectures)

- a) Introduction to WTO & GATS
- b) Education as a Service under WTO & GATS
- c) Implications of GATS on Education in general and with specific reference to India

UNIT IV: TEACHING IN THE DIVERSE WORLD (12 Lectures)

- c) Catering to Diversity
 - i. Concept of Multicultural Education
 - ii. Global Perspectives in the Classroom
 - iii. Challenges faced by a Teacher in a Multicultural World

- b) Teaching for a Sustainable and Equitable World
 - i. Paulo Freireian thoughts on Education
 - ii. Millennium Development Goals

UNIT V: TEACHER IN INTERNATIONAL EDUCATION (8 Lectures)

- a) Teaching Overseas
- b) Licensing and Certification of Teachers
- c) Qualities and Skills for Teaching on the International Circuit
- d) Professional Development Avenues – through educational Networking, student/teacher exchange (reciprocal) programs, schools linking

PRACTICAL WORK

- a) Project Work on any aspect related to International Education.
- b) Visit to an IB or International School and Preparation of a Report.
- c) Study and prepare a report of recent or ongoing international projects in schools involving India and other countries
- d) Prepare lesson plans infusing global perspectives through school subjects

REFERENCES

1. Sharma, R.S : A Comparative Perspective on Education,
2. Khanna, P.K: Education in the New Millennium,
3. Khemchand .: Culture in Educational Institutions,
4. Lasley T., Matczynski T. & Rowley J: Instructional Models: Strategies for Teaching in a Diverse Society,
5. Tan Oon Seng : Problem-based learning Innovation,
6. Marshall P.L. : Cultural Diversity in our Schools,
7. Suarez-Orozco M.M.: Learning in the Global Era: International Perspectives on Globalization and Education
8. Senge P.: Schools that Learn: A Fifth Discipline Field book
9. Shalaway L.: Learning to Teach: The Essential Guide for all Teachers
10. Taylor L.S. : Schools for All: Educating Children in a Diverse Society

WEBSITES

1. www.globaled.org
2. www.cie-wis.org
3. www.internationalled.org
4. www.pbs.org
5. www.facingthefuture.org
6. www.ibe.unesco.org
7. www.ibo.org

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१. आळंदकर जयकुमार : शिक्षणाचे आणि अध्यापनाचे शास्त्र
२. उपासनी / कुलकर्णी : यशस्वी अध्यापन
३. उपासनी / कुलकर्णी : दर्जेदार शिक्षण
४. ओक सुमन : शैक्षणिक तंत्रविज्ञान
५. कुंडले म. बा. : अध्यापन : शास्त्र व पद्धती
६. गद्रे : अध्यापन पद्धती
७. गाजरे, लवणे : अध्यापन पद्धती
८. जगताप ह. ना. : शैक्षणिक तंत्रज्ञान
९. पाटील लीला : आजचे अध्यापन
१०. राव उषा : शैक्षणिक तंत्रविज्ञान
११. कुलकर्णी / कामत : शैक्षणिक तंत्रविज्ञान
१२. जगताप, ह. ना. : प्रगत शैक्षणिक तंत्रविज्ञान
१३. फडके, वासंती : अध्यापनाची प्रतिमाने

Paper V
Special Method
ENGLISH METHOD

OBJECTIVES:

1. To acquire information on current directions in English language teaching.
2. To identify and be sensitive to the proficiency, interests and needs of learners.
3. To practise learner centered methods and techniques in the classroom.
4. To enable the students to use technology to enrich language teaching.
5. To facilitate the effective use of learning resources.
6. To encourage continuous professional development.
7. To develop an appreciation of the role of English in both academics and life.

UNIT I: FUNDAMENTALS OF LANGUAGE (14 Lectures)

- a) Importance of English in a Multi-lingual Society
- b) Factors Affecting Language Learning: Physical, Psychological and Social
- c) Role of Language in Life: Intellectual, Emotional, Social and Cultural Development
- d) Method and Approaches: Direct Method, Communicative Approach, and Constructivist Approach (Co-operative Learning and Learning in Network)
- e) Intra Inter correlation: Prose, Poetry, Grammar and Composition History, Geography, Mathematics, Science, Economics and Commerce
- f) Principles and Maxims of Language teaching

Unit II: Language Acquisition Inside /Outside the Classroom (12 Lectures)

- a) Listening: Concept, Characteristics of Real Life Listening
- b) Speaking: Concept, Techniques of Teaching Pronunciation, Stress, Intonation and Voice Modulation.

- c) Reading: Concept, Methods (Phonic, Whole Word, Shared Reading Big Books, Talking Books), Types (Loud, Silent, Intensive, Extensive and Supplementary), Techniques to Increase Speed of Reading (Phrasing, Skimming, Scanning, Columnar Reading, Key word Reading).
- d) Writing: Types of Composition (Guided, Free and Creative), Evaluating Compositions, Letter Writing (Formal, Informal)
- e) Supplementary Skills: Study Skills (Note Taking and Making), Reference Skills (Dictionary, Encyclopedia, Thesaurus)

UNIT III: ASPECTS OF LANGUAGE TEACHING (8 Lectures)

- a) Prose: Techniques (Discussion, Narration, Questioning), Methods (Story Telling, Dramatization)
- b) Poetry: Methods (Recitation, Song-action), Techniques of Appreciation
- c) Grammar: Types (Functional, Formal), Methods (Inductive, Deductive)

UNIT IV: LEARNING RESOURCES (4 Lectures)

- a) Computer Assisted Language Learning (CALL)
- b) Library

UNIT V :

a) THE ENGLISH TEACHER (1 Lectures)

- i. Qualities of an English Teacher
- ii. Professional Growth

b) DIAGNOSTIC AND REMEDIAL TEACHING (4 Lectures)

- i. Identifying Learning Difficulties in Language
- ii. Dealing with Language Difficulties of the Learner
- iii. Organizing and Conducting Supportive Teaching Activities

UNIT VI: PEDAGOGY (6 Lectures)

- a) Lesson Planning
- b) Instructional Objectives and Specifications
- c) Integration of Core Elements
- d) Evaluation of Textbook

Note: Only for Practical Not to be Evaluated in Examinations

REFERENCES:

1. Bond, L G et al (1980): Reading Difficulties- Their Diagnosis and Correction, New York, Appleton- Century Crafts.
2. Valdmen., (1987) Trends in Language Teaching, New York, London Mac Graw Hill.
3. Johnson, K (1983): Communicative Syllabus Design and Methodology, Oxford, Pergamon Press.
4. Widdowson, HG (1979): Teaching language as Communication, London, OUP.
5. David, E (1977): Classroom Techniques- Foreign Languages and English as a Second Language, New York, Harcourt Brace.
6. Parrot, M (1993): Tasks for the Classroom Teacher, London, Pergamon.
7. Grillett, M (1983): Developing Reading Comprehension, London, CUP.
8. Byrne, D (1975): Teaching Writing, London, Longman.
9. Morgan & Rinvolduri (1991): New Ways of Dictation, London, Longman.
10. Mukalel, J C. (1998): Approaches to English Language Teaching, Sterling Publishing House, New Delhi.
11. Palmer, H E: The Principles of Language Study.
12. Sharma, K L.: Methods of Teaching English in India.
13. Thomson & Wyatt HG: Teaching of English in India, University of London.
14. Varghese, Paul: Teaching of English as Second Language.
15. Kohli, A. L: Techniques of Teaching English
16. Jain, R.K.: Essentials English Teaching.
17. Bhatia K. K: New Techniques of Teaching English as a Foreign Language.
18. Venkateshwaran, S: Principles of Teaching English
19. Yoakum G.A. & Simpson R.G: Modern Methods and Techniques of Teaching.
20. Dave, Pratima S, (2002): Communicative Approach to the Teaching of English as A Second Language, Himalaya Publish House, Mumbai
21. Halbe Malati, (2005) :Methodology of English Teaching , Himalaya Publish House, Mumbai
22. Choudhary, N.R, (2002) :English Language Teaching, Himalaya Publish House, Mumbai
23. Sachdeva, M.L: A New Approach to Teaching of English in India
24. Sunwani, V.K, (2005): The English Language and Indian Culture
25. Adams, M.J, (1990): Thinking and Learning about Print. Cambridge, Ma: MIT Press.

26. Amritavalli, R, (1999): Language as a Dynamic Text: Essays on Language, Cognition and Communication. CIEFL Akshara series. Hyderabad: Allied Publishers .
27. Davis, Paul and Mario Rinvulcri, (1988): Dictation: New Methods, New Possibilities. Cambridge Handbook for Language Teachers
28. Khan, Nasiruddin. (2005): Introduction of English as a subject at the primary level. Ms., NFG-English
29. Prabhu, N.S. (1987): Second Language Pedagogy. Oxford University Press, NY.
30. Tudor, Ian: Learner-Centeredness in Language Education, Cambridge University Press.

हिन्दी भाषा अध्यापन अभ्यासक्रम के उद्देश्य-

- १ बालक के सर्वांगीण विकास में हिन्दी भाषा को समझना ।
- २ हिन्दी भाषा शिक्षक के उत्तरदायित्व व चुनौतियों को समझना ।
- ३ हिन्दी भाषा अध्यापन के सूत्र व सिद्धांतों की जानकारी प्राप्त करना ।
- ४ हिन्दी भाषा की विविध विधाओं, उद्देश्यों एवम् विधियों की जानकारी प्राप्त करना ।
- ५ भाषा के दृढीकरण में भाषा कौशलों की जानकारी प्राप्त करना ।
- ६ भाषा अध्यापन के उभरते आयामों की जानकारी और उनका उपयोग करना ।
- ७ हिन्दी भाषा अध्यापन में विभिन्न शैक्षणिक साधनों का उपयोग करना ।

[I]

बालक के सर्वांगीण विकास में भाषा व
भाषा शिक्षक का महत्व

१.१ हिन्दी भाषा का उद्गम (संक्षिप्त अध्ययन) १

१.२ (अ) मानसिक विकास

(ब) सामाजिक विकास २

(क) संवोगात्मक विकास

१.३ विद्यालयीन पाठ्यक्रम में हिन्दी भाषा का स्थान
व महत्व

(अ) त्रिभाषा सूत्र (कोठारी आयोग-६४-६६
के सुझाव एवम् संवैधानिक प्रावधान) २

(ब) वर्तमान समयमें भाषा का बदलता स्वरूप १

१.४ भाषा शिक्षक

(अ) हिन्दी भाषा शिक्षक के विशेष
गुण एवम् व्यावसायिक वृद्धि १

(ब) बदलते परिवेश में हिन्दी भाषा
शिक्षक के उत्तरदायित्व एवम् चुनौतियाँ १

कुल

[II] भाषा अध्यापन के सूत्र और सिद्धान्त

२.१ (अ)

भाषा अध्यापन के सूत्र
ज्ञात से अज्ञात की ओर
सरल से जटिल की ओर
मूर्त से अमूर्त की ओर
पूर्ण से अंश की ओर

२

२.२ (ब)

भाषा अध्यापन के सिद्धान्त
अनुकरण का सिद्धान्त
रुचि का सिद्धान्त अभ्यास का सिद्धान्त
बोलचाल का सिद्धान्त
अनुपात और क्रम का सिद्धान्त
व्यक्तिगत विभिन्नता का सिद्धान्त

२

घटक	उपघटक	प्रकरण	कालांश	अंकभार
२.३	(क)	सहसंबंध - महत्त्व एवम् प्रकार आन्तरिक - गद्य, पद्य एवम् रचना बाह्य - विद्यालयी विषयों के साथ (इतिहास, भूगोल, विज्ञान, अर्थशास्त्र, ३ पर्यावरण शिक्षण एवम् कला (हस्त, संगीत व नृत्य)		
			कुल -	
७				
[III]		भाषा अध्यापन की विधाएँ-		
३.१		गद्य-		
	(अ)	उद्देश्य		
	(ब)	विधियाँ - चर्चा, कथाकथन, अभिरूप, (नाट्यीकरण, भूमिका अभिनय)	३	
३.२		पद्य -		
	(अ)	उद्देश्य-	२	
	(ब)	विधियाँ - चर्चा, रसास्वादन		
३.३		व्याकरण -		
	(अ)	उद्देश्य -		
	(ब)	विधियाँ - आगमन-निगमन, खेल विधि	२	
३.४		रचना -		
	(अ)	उद्देश्य		
	(ब)	प्रकार - नियमबद्ध एवम् मुक्त रचना	२	
			कुल-९	

डि. ४.१	भाषा कौशल
४.१	श्रवण - महत्त्व एवम् दोष
४.२	भाषण - महत्त्व एवम् दोष (अशुद्ध उच्चारण के कारण एवम् अभिव्यक्ति का महत्त्व - के विशेष सन्दर्भ में)
४.३	पठन/वाचन - महत्त्व एवम् दोष वाचन के प्रकार (मौन वाचन एवम् सस्वर वाचन)
४.४ कारण के	लेखन - महत्त्व एवम् दोष (अशुद्ध वर्तनी के विशेष सन्दर्भ में)
४.५ भूमिका	(अ) उपरोक्त भाषा कौशलों के विकास में शिक्षक की भूमिका ? (ब) निदानात्मक परीक्षण व उपचारात्मक शिक्षण (उपरोक्त कौशलों को ध्यान में रखकर) ?

कुल -

घटक	उपघटक	प्रकरण	कालांक्ष	अंकभार
[V]		भाषा अध्यापन के आयाम (पहलू) व शैक्षणिक साधन		
५.१		भाषा अध्यापन में संगणक का उपयोग	१	
५.२		भाषा अध्यापन में बहुआयामी बुद्धिमत्ता का उपयोग - शाब्दिक, संगीतात्मक, शारीरिक, आंतरवैयक्तिक, प्राकृतिक	१	
५.३		हिन्दी भाषा को प्रचलित व प्रभावित बनाने आकाशवाणी एवम् विज्ञापन) एवम् दृश्य-श्राव्य साधनों का महत्त्व एवम्		
उपयोग	२			
५.४		विद्यालयीन स्तर पर आयोजित किए जाने वाले उपक्रम - भाषा परिषद एवम् भाषा प्रतियोगिताएँ (उद्देश्य, महत्त्व एवम् आयोजन)	२	
५.५	(अ)	पाठ्य पुस्तक - आवश्यकता एवम् महत्त्व	१	
	(ब)	पुस्तकालय - आवश्यकता, महत्त्व व उपयोग	१	
			कुल -	

[VI] आवश्यकता विश्लेषण

राष्ट्रीय शिक्षानीति १९८६ द्वारा दिए गए गामाघटकों पर

आधारित

(परीक्षा हेतु नहीं, केवल कार्यशाला व दत्तकार्य)

रेफरन्स [हिन्दी]

१. भाषा की शिक्षा : डॉ. डी. के. थारयानी
२. भाषा कैसे पढ़ाये : योगेन्द्रनाथ
३. हिन्दी भाषा शिक्षण : भाटिया और नारंग
४. रचना की शिक्षा : हंसराज भाटिया
५. हिन्दी भाषा शिक्षण मंजूषा : तारकेश्वर सिन्हा
६. राष्ट्रभाषा हिन्दी : देरवेन्द्रनाथ शर्मा
७. कक्षा अध्यापन, पाठ संकेत निर्माण एवं विशिष्ट विधियाँ भार्ठ योगेन्द्र जीत
८. वुनियाद शिक्षा
९. राष्ट्र भाषा की शिक्षा : श्रीनाथ मुखर्जी
१०. सम्पर्क भाषा : डॉ. सुधांशू
११. भाषा की शिक्षा : सीताराम चतुर्वेदी
१२. मातृभाषा की शिक्षा : रायवर्न

प्रात्यक्षिक कार्य (परीक्षा हेतु नहीं) - मात्र छात्र शिक्षक के अतिरिक्त ज्ञान के लिए

घटक प्रात्यक्षिक कार्य

- I संविधान में भाषा के लिए उपलब्ध प्रावधान
- II भाषा के वाहय सहसंबंध का एव प्रारूप
- III व्याकरण के अध्यापन हेतु कोई एक खेल
- IV लेखन कौशल - रचनात्मक कार्य का एक नमूना (केवल मौलिक रचना-कविता, कहानी, नाटक, संवाद, अनुभव आदि पर आधारित)
- V -संगणक की सहाय्यता से एक पाठ योजना
-दूरदर्शन के किसी एक कार्यक्रम की समीक्षात्मक आलोचना (शैक्षणिक, समाजिक, समाचार, आदि कोई एक)
-किसी एक पाठ्य-पुस्तक की समीक्षात्मक आलोचना

मराठी भाषा अध्यापन पध्दती

उद्दिष्टे :-

- १) भाषेचा एक विषय म्हणून जीवनातील महत्त्व समजणे.
- २) भाषा अध्ययनाचे मानसशास्त्र समजणे.
- ३) भाषा अध्यापनाच्या विविध अंगांच्या अध्यापन पध्दती व तंत्रे समजणे.
- ४) भाषा अध्ययनासंबंधी विविध क्षमतांचा विकास करणे.
- ५) विविध मराठी भाषिक उपक्रमांचे आयोजन व त्याची कार्यवाही करणे.
- ६) भाषा संवेदनशिलता व बहुभाषिकतेबद्दल आदर विकसित करणे.
- ७) भाषा मूल्यमापनाच्या लेखी व मौखिक परीक्षा प्रकारांची माहिती प्राप्त करून देणे.

- ८) भाषा शैक्षणिक साधनांच्या प्रभावी उपयोगाची माहिती प्राप्त करून देणे.
- ९) पाठ्यपुस्तक मुल्यांकन करण्याची क्षमता विकसित करणे.
- १०) सद्यस्थितीत शिक्षकांसाठी आवश्यक अशा क्षमता व भूमिका बदल जाणिव विकसित करणे.
- ११) मराठी भाषेद्वारे सृजनशिलतेचा विकास करण्याचा दृष्टिकोन विकसित करणे.

घटक-१ : मराठीचे जीवनातील व अभ्यासक्रमातील स्थान

- अ) विद्यार्थ्यांच्या दैनंदिन जीवनातील भाषेचे महत्त्व व भाषेच्या माध्यमातून व्यक्तिचा विविधांगी विकास - बौद्धिक, भावनिक, सामाजिक, साहित्यिक, आध्यात्मिक.
- ब) शालेय अभ्यासक्रमातील मराठीचे महत्त्व - माध्यमिक व उच्चमाध्यमिक स्तरावर.
- क) अमराठी भाषिक विद्यार्थ्यांच्या जीवनातील मराठी भाषेचे महत्त्व.
- ड) भाषा संवेदनशिलता व बहुभाषिकतेबद्दल आदर.
- इ) समवाय-मराठीचा अंतर्गत समवाय व इतर विषयांच्या संदर्भातील समवाय.

घटक-२: मराठी अध्यापनाची उद्दीष्टे :

- अ) मराठी भाषा अध्यापनाची भाषिक व वाङ्मयीन उद्दीष्टे
- ब) महाराष्ट्राच्या अभ्यासक्रमात नमूद केलेली सर्वसामान्य उद्दीष्टे
- क) गद्य, पद्य व्याकरण,----- आणि वर्ग अध्यापनाची उद्दीष्टे व स्पष्टीकरणे.

घटक-३: भाषेचे शिक्षणशास्त्रीय विश्लेषण :

- अ) मराठी भाषेची संरचना
- ब) घटक विश्लेषण
- क) अध्यापन उद्दिष्टे आणि स्पष्टीकरणे
- ड) उपक्रम आणि मुल्यमापन तंत्रे व घटक चाचणी
- इ) नैदानिक चाचणी व उपचारात्मक अध्यापन

घटक-४: भाषा अध्यापनाची विविध अंगे व पध्दती :

अ) मराठी अध्यापनाची तत्त्वे व सुत्रे

ब) भाषा अध्यापनाच्या पध्दती : - १) नाट्यीकरण (गद्य, पद्य), २) कथाकथन (गद्य), ३) रसग्रहण (गद्य, पद्य), ४) चर्चा (गद्य, पद्य लेखन), ५) व्याख्यान (गद्य,), ६) उद्गामी, अवगामी ७) भूमिका अभिनय, ८) भाषिक खेळ

क) भाषा अध्यापनाची कौशल्ये व मुलभूत क्षमतांचा विकास

१) श्रवण-उच्चारण, अभिव्यक्ती, गती, ध्वनीबल, स्वराघात,

२) भाषण : संवाद

३) वाचन-प्रकट, मौन, आशयानुसार, सुक्ष्म, स्थूल, पूर्ववर्णी वाचन

४) लेखन-मुक्त आणि सृजनात्मक निबंध लेखन, श्रुत लेखन, संवाद लेखन, जाहिरात लेखन, अर्ज लेखन.

घटक-५: मराठीचे पाठ्यपुस्तक व शिक्षक

अ) १) चांगल्या पाठ्यपुस्तकाची वैशिष्ट्ये

२) पाठ्यपुस्तकाचे समीक्षण ९ ते १२वी पर्यंत.

ब) भाषा अध्यापक-गुणविशेष, भूमिका, जबाबदाऱ्या, व्यवसाय वृद्धी

घटक-६: भाषा अध्यापनाची साधने

अ) छापील साहित्य-वृत्तपत्रे, मासिके, हस्तपुस्तिका, शब्दकोष, विश्वकोष

ब) दृक्श्राव्य साधने-आकाशवाणी, दूरदर्शन, संगणक व ध्वनिमुद्रक

क) वाङ्मय मंडळ-उद्दिष्ट्ये, उपक्रम, महत्त्व

ड) भाषा अध्यापन अध्ययनासाठी सहशालेय कार्यक्रम

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. अकोलकर / पाटणकर : मराठीचे अध्यापन

२. अकोलकर : मातृभाषेचे अध्यापन

३. कुंडले म. वा. : मराठीचे अध्यापन
४. डांगे, च. : मातृभाषेचे अध्यापन
५. सराफ रा. सो. : भाषा मातृभाषा आणि परभाषा
६. पाटील लिला : मराठीचे अध्यापन व मूल्यमापन
७. खरे दि. ग. : मराठीचे अध्यापन
८. करंदीकर सुरेश : मराठीचे अध्यापन

URDU

OBJECTIVES:

1. To understand the importance of Language.
2. To understand the psychology of language learning.
3. To understand the methods and approaches of teaching language.
4. To understand teaching of various aspects of language.
5. To develop language competencies.
6. To acquire the knowledge of effective use of information technology.
7. To develop the skill of preparing achievement test

UNIT I: IMPORTANCE OF LANGUAGE (10 Lectures)

- a) As a medium of Development.
 - i. Intellectual
 - ii. Emotional
 - iii. Social
 - iv. Literary
- b) Objective of teaching language as a First language and as a Second/Third language.
- c) Psychology of Language Learning.

d) Principles of Language Learning and Maxims of teaching.

UNIT II: METHODS AND APPROACHES OF TEACHING LANGUAGE

(12 Lectures)

a) Methods

- i. Dramatization
- ii. Simulation
- iii. Discussion
- iv. Appreciation
- v. Inductive and Deductive.
- vi. Narration
- vii. Story telling

b) Approaches

- i. Grammar-Translation
- ii. Direct
- iii. Bi lingual

UNIT III: ASPECTS OF TEACHING LANGUAGE

(14 Lectures)

a) Prose

- i. Objectives
- ii. Types of Reading
- iii. Intensive
- iv. Extensive
- v. Supplementary

b) Poetry

- i. Objectives,
- ii. Teaching of Ghazal & different forms of Poetry (Only for Urdu)

c) Grammar

- i. Objectives,
- ii. Types of Grammar
Functional,
Formal

d) Composition

- i. Objectives,
- ii. Types of Composition
- iii. Guided,
- iv. Free,
- v. Correction of Composition
- vi. (Strategies for removal of errors in spelling, sentence, structure and pronunciation)

**UNIT IV: STRATEGIES FOR DEVELOPING LANGUAGE
COMPETENCIES AND ENRICHMENT CONTROL**
(9 Lectures)

a) Developing Basic competencies

- i. Aural
 - Expression
 - Phonetic Stress
 - Intonation
- ii. Oral
 - Conversation
 - Pronunciation

- iii. Reading
 - o Loud
 - o Silent
 - o Chorus
 - o Expressive

- iv. Writing
 - o Hand writing Skills
 - o Creative Writing
 - o Dictation

b) Diagnostic Testing and Remedial Teaching

c) Language Practice

- i. Games
- ii. Competitions,
- iii. Club

d) Curriculum and Textbook

- i. Development of Instructional Material
- ii. Use of Information Technology
- iii. Use of Library
- iv. Textbook
 - o Characteristics and Evaluation

UNIT V:

- a) Significance of Comprehensive and Continuous Evaluation.
- b) Oral Examination.
- c) Development of good test items (Objective, Short and Essay type).
- d) Preparation of an Achievement Test.

- c) Analysis and Interpretation of data obtained from Achievement Test.

Note: Only for Practical Not to be Evaluated in Examinations

REFERENCES:

1. Ansari Akhtar Tadrees-e-Ghazal
2. Moinuddin Urdu Kaise Padhaen
3. Moinuddin Urdu Zaban Ki Tadrees
4. Omkar Kaul & Masood Siraj Urdu Asnaf Ki Tadrees
5. Salim Abdullah Urdu Kaise Padhayen
6. Sherwani I. Khan Tadrees-e-Zaban-e-Urdu

GUJARATI/SANSKRIT

OBJECTIVES:

1. To understand the importance of languages as a subject and in life
2. To know the principles of language teaching
3. To acquire knowledge of the approaches to language teaching
4. To understand the methods of teaching various aspects of language teaching
5. To acquire knowledge of pedagogical analysis of various concepts of different aspects of language teaching
6. To develop language competencies
7. To develop understanding of the effective use of instructional material
8. To develop an awareness of the role of a teacher.

UNIT I Understanding the role of language

- a) Importance in life as a medium of development
 - i. Intellectual
 - ii. Emotional
 - iii. Cultural
 - iv. Social
 - v. Literacy
- b) Places of Gujarati as a subject in the secondary and higher secondary syllabus
- c) Objectives of teaching language at higher/lower level

- d) Correlation – Internal and external with other school subjects

UNIT II Teaching of Language

- a) Principles of language teaching
- b) Maxims of teaching
 - i. Simple to complex
 - ii. Whole to part
 - iii. Concrete to Abstract
 - iv. Known to unknown
 - v. Particular to General
- c) General methods of teaching language
 - i. Grammar – Translation
 - ii. Direct
 - iii. Audio- Lingual
- d) Teaching of Prose
 - i. Importance of teaching Prose
 - ii. Methods of teaching Prose- Storytelling, Dramatization
 - iii. Types of reading- intensive, extensive, supplementary
- e) Teaching of poetry
 - i. Importance of teaching poetry
 - ii. Methods of teaching Poetry- Recitation, Dramatization, Appreciation
- f) Teaching of Grammar
 - i. Importance of teaching grammar
 - ii. Methods of teaching grammar- Inductive, Deductive, Inducto-Deductive
- g) Teaching of Composition
 - i. Importance Of Teaching Composition
 - ii. Types- Guided, Free
 - iii. Correction Of Composition- Need And Ways

UNIT III: PEDAGOGICAL ANALYSIS

In relation to core elements as given in NEP 1986
(Poetry, Grammar and Composition)

- a) Unit Analysis
- b) Instructional Objectives and Specifications
- c) Activities and Procedures

Note: Only for Practical Not to be Evaluated in Examinations

UNIT IV: STRATEGIES FOR DEVELOPING LANGUAGE COMPETENCIES

- a) Developing Basic Competencies
 - i. Listening and Speaking- Pronunciation, Expression, Phonetic Stress, Intonation, Conversation and Drill
 - ii. Reading – Loud, Silent, Chorus, Expressive, Speed
 - iii. Writing- Handwriting Skills, Poetic And Non-Poetic
- b) Activities in the Teaching of Gujarati-
 - i. Assignments, Games, Competitions, Clubs and Simulations
- c) Use Of Multiple Intelligence in Language Teaching
- d) Application Of Instructional Material for Language Teaching – Radio, Tape Recorder, OHP, Audio- Video Recording, TV, Print Media Advertisements, Koshas and Dictionaries, Computer Technology – Off-Line, On-Line.
- e) Diagnostic Testing and Remedial Teaching

UNIT V: THE TEACHER AND TEXTBOOK

- a) Teacher
 - i. Qualities
 - ii. Catering to children with Learning Disabilities
 - iii. Professional growth
- b) Textbook
 - i. Characteristics of a textbook
 - ii. Critical analysis of a textbook (V to XII std)

HISTORY

OBJECTIVES:

1. To develop an understanding of the significance of history in the school curriculum and life
2. To familiarize the student- teachers with different approaches of organizing the history syllabus
3. To develop skills of Pedagogical and textbook analysis
4. To familiarize with different methods of teaching and its application in the classroom
5. To develop an understanding of the importance & organization of co-curricular activities in the teaching of history
6. To develop skills in the preparation and use of learning resources
7. To develop an understanding of the multifarious role of the history teacher in the present context.

UNIT I: PLACE AND IMPORTANCE OF HISTORY IN THE SCHOOL CURRICULUM AND LIFE (10 Lectures)

- a) Concept of History
- b) Place of History as a Core Subject (with reference to Commissions & NEP)
- c) Objectives of teaching History at Secondary and Higher Secondary Level
- d) Values of teaching History.
- e) Scientific Approach to teaching History (Concept based teaching & Generalization based teaching)

UNIT II: CURRICULUM ORGANIZATION AND ANALYSIS (10 Lectures)

- a) Approaches to Curriculum Organization
 - i. Concentric Approach
 - ii. Chronological Approach
 - iii. Regressive Approach
- b) Textbook Analysis
 - i. Characteristics of a good History Text Book.
 - ii. Critical Analysis of a History Text Books (std V to XII) (only for practical and not for theory examination)
- c) Pedagogical Analysis In Relation To Core Elements as given in the NEP (for practical work and not for theory examination)
 - i. Unit Analysis
 - ii. Instructional Objectives and Specifications
 - iii. Activities and Procedures
 - iv. Evaluation Techniques

UNIT III: ESSENTIALS OF TEACHING THE SUBJECT (10 Lectures)

- b) Maxims of Teaching (Known to Unknown, Simple to Complex, Concrete to Abstract)
- c) Correlation with other School Subjects: Geography, Literature, Mathematics, Economics, Science and Craft
- d) Methods of Teaching (Concept, Procedure, Advantage & Limitations)
- e) Story Telling
- f) Discussion
- g) Dramatization and Role play
- h) Project
- i) Source Method
- j) Social Inquiry

k) Cooperative Learning (think-pair share, brainstorming, three-step interview, roundtable etc.)

a) Co-curricular Activities

(Concept, Importance and Organization)

- i. History Club
- ii. Field Trips
- iii. Celebrations of Local and National Festivals
- iv. Observation of National and International Days

UNIT IV: LEARNING RESOURCES (6 Lectures)

a) (Importance, uses and limitations)

- i. Print Media – Newspaper, Books, Magazines
- ii. Visual – Maps, Models, Time- line, Graphs & Artifacts
- iii. Auditory – Radio and Recorder
- iv. Audio- Visual- Television and Films
- v. Multi- Media – Computers (online and offline)
- vi. Museum

b) History Room – Concept, Need, Equipment & Maintenance

UNIT V: THE HISTORY TEACHER (10 Lectures)

- a) Qualities and Professional Growth of the History Teacher
- b) Challenges faced by the Teacher in present day context
- c) Developing Global perspectives through History Teaching (Concept, Need, Ways and Teacher Skills)
- d) Diagnostic Testing and Remedial Teaching

PRACTICAL WORK

a) Critical Analysis of a History Textbook of different Boards (Std V to XII)

b) Pedagogical Analysis of any unit in the History Syllabus (Std. V to XII)

c) Preparation of Instructional Material for Teaching of History

d) Group Project (any format of presentation) on the Local History (History, Culture) of any place.

Note: Only for Practical Not to be Evaluated in Examinations

REFERENCES

1. Parik, Mathureshwar, Itihas Shikshan, Jaipur Research publ. 1988.
2. Arora, K.L., Itihas Shikshan, Ludhiana Prakash 1982.
3. Chaddha, P.C. Itihas Shikshan Ton
4. Rao Ragunath Learn and teach history
5. R.P. Singh Teaching of history
6. Tyagi and Nigam Teaching of history
7. Bhatia R.L. Contemporary teaching of history
8. wadhwa Shalini Modern methods of teaching history
9. Srivastava H.S. Curriculum and methods of teaching

10. Reddy R.S teaching methods in secondary schools
11. Harry Dhand Teaching human rights

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. चितळे / मांडके : इतिहास कसा शिकवावा ?
२. पत्की श्री . मा . : इतिहास अध्यापन पद्धती व तंत्र
३. थारूरकर / पारसनीस : इतिहासाचे अध्यापन
४. वेधकर : इतिहास अध्यापनाच्या दिशा
५. तिवारी सी . ग . : इतिहास अध्यापन पद्धती
६. हजरनिस ब . ग . : इतिहास अध्यापन पद्धती एक दृष्टीकोन
७. दुनाखे अरविन्द : इतिहासाचे अध्यापन
८. आठवले सदाशिव : इतिहासाचे तत्वज्ञान
९. निरंतर ग . भा . : इतिहासाचे तत्वज्ञान

GEOGRAPHY

OBJECTIVES:

1. To develop an understanding of the importance of Geography in the school curriculum and life.
2. To develop the skills of pedagogical and textbook analysis.
3. To acquire knowledge of principles and approaches of arranging the subject content.
4. To familiarize the student-teachers with different methods of teaching Geography and its application in the classroom.
5. To develop skills in the use of technology and learning resources
6. To develop an understanding of the importance of organization of co-curricular activities in the teaching of geography.
7. To develop an understanding of the multifarious role of the Geography teacher in the present context.

UNIT I: PLACE AND IMPORTANCE OF GEOGRAPHY IN CURRICULUM AND LIFE (7-Lectures)

- a) Nature and Scope (Physiography, Economic Geography, Human Geography, Political Geography, Cartography, Urban Geography, Anthropogeography and Agricultural Geography) of Geography.

- b) Aims of Teaching Geography – Practical, Social and Cultural, Economic, National Integration and International Understanding.
- c) Place of Geography in the present School Curriculum (NPE 1986 onwards).

Unit II: METHODS OF TEACHING (9 Lectures)

(Concept, Procedure, Advantages and Limitations of the following methods)

- a) Journey
- b) Regional
- c) Comparative
- d) Project
- e) Lecture cum Demonstration
- f) Story telling
- g) Cooperative Learning – think-pair-share, three step interview, simple jigsaw and numbered heads together
- h) Problem based Approach

UNIT III: ESSENTIALS OF TEACHING THE SUBJECT (7 Lectures)

- a) Maxims of Teaching – Known to Unknown, Simple to Complex, Concrete to Abstract, Particular to General. Analysis to Synthesis, Empirical to Rational.
- b) Correlation with other School Subjects – Economics, History, Literature, Science, Mathematics, Craft.
- c) Scientific Approach to Teaching of Geography.
- d) Understanding Maps – Map reading and Map filling.
- e) Importance and Organization of Co-curricular Activities – Club, Field Trips, Current Events, Museums.

UNIT IV: CURRICULUM ORGANIZATION AND ANALYSIS (10 Lectures)

a) CURRICULUM AND TEXTBOOKS

- iv. Organization of Content – Concentric Approach, Topical Approach (Advantages and Limitations)
- v. Essential Characteristics of a Geography Textbook
- vi. Importance of Handbook for Teachers
- vii. Critical Analysis of a Textbook (Std V-XII) (only for practical work and not for examination)

b) PEDAGOGICAL ANALYSIS IN RELATION TO CORE ELEMENTS, NPE 1986 & VALUES

- i. Unit Analysis
- ii. Instructional Objectives and Specifications
- iii. Activities and Procedures
- iv. Evaluation Techniques

Note: Only for Practical Not to be Evaluated in Examinations

UNIT V: LEARNING RESOURCES & THE GEOGRAPHY TEACHER
(12 Lectures)

a) EQUIPMENTS AND RESOURCES

- i. Instructional Materials and Teaching Aids:
 - o Visual – Chalkboard, Charts, Pictures, Graphs, Maps, Globes, Models, Specimens and Atlas.
 - o Auditory – Radio, Recorders.
 - o Audio-Visual – Television, Filmstrips,
 - o Multimedia - Computers (Online and Offline).
 - o Books on Travel (Travelogues).
- ii. Geographical Information System.
- iii. Planetarium, Nature Park
- iv. Geography Room – Need, Equipments, Maintenance.

b) THE GEOGRAPHY TEACHER

- i. Qualities and Qualifications
- ii. Professional Growth
- iii. Challenges faced by a Geography Teacher
- iv. Developing Global Perspectives through Geography Teaching (Concept, Need, Importance and Ways)
- v. Diagnostic Testing and Remedial Teaching

REFERENCES:

1. Arora, K.L., Bhugol Shikshan : The Teaching of Geography, Ludhiana; Parkash broth.1983
2. Sinh, H., Bhugol Shikshan :The Teaching of Geography, 11th ed.Agra, 1979
3. 1979
4. Varma, J.P: Bhugol Adhyapan , 2nd ed. Agra Vinod Pustak Mandir 1975
5. UNESCO: Unesco Bhugol Shikshan Ki Adhar Pustak, New Delhi Thomson Press 1965.
6. Jaiswal, Seetaram : Bhugol shikshan ,6th ed. Varanasi Nandkishor 1963.
7. Sharma, Sukhdeo : Bhoogol Shikshan Vidhi ;Varanasi, Nand Kishore 1969

8. Mehta D.D : Teaching of Geography, Ludhiana, Tandon Publications
9. Singh R.: Teaching of Geography, Meerut, R. Lal Book Depot
10. Shaida and Sharma : Teaching of Geography, New Delhi, Dhanpat Rai Publishing Co. Pvt. Ltd
11. Rao, M.S : Teaching of Geography, New Delhi, Anmol Publications Pvt. Ltd.

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. पाटणकर ना. वि. : भूगोलाचे अध्यापन
२. पेक्षे द. वा. : भूगोलाचे अध्यापन
३. वापट भा. गो. : भूगोलाचे अध्यापन आणि अध्ययन
४. पोक्षे : भूगोलातील पाठयांश पद्धती एकात्मता
५. सांगळे शैलजा : स्पेशल मेथड भूगोल .

ECONOMICS

OBJECTIVES

1. To develop an understanding of the importance of economics in curriculum and life.
2. To develop an understanding of the aims and objectives of teaching Economics at secondary and higher secondary level.
3. To develop the skill of establishing correlation of Economics with other subjects of the curriculum.
4. To develop an understanding of methods and approaches of teaching Economics.
5. To develop the skill of pedagogical and critical analysis of text book of Economics.
6. To develop the skill of preparing and using instructional material in teaching of Economics.
7. To develop skill in organization of co-curricular activities in teaching of Economics.
8. To develop an understanding of multifarious role of an Economics teacher in the present context.
9. To develop the skills of organising discussions on the current affairs/events in teaching Economics.

UNIT I: PLACE IN THE CURRICULUM AND LIFE

(10 Lectures)

- a) Meaning and Scope of Economics
- b) Importance of Economics in School Curriculum and life
- c) Aims and objectives of teaching Economics at Secondary and Higher Secondary level
- d) Correlation of Economics with Commerce, Mathematics, History, Geography, Science, Languages.
- e) Maxims of Teaching
 - i. Known to Unknown
 - ii. Simple to Complex
 - iii. Whole to Part
 - iv. Concrete to Abstract
 - v. Particular to General

Unit II: METHODS AND TECHNIQUES OF TEACHING ECONOMICS

(12 Lectures)

- a) Methods of Teaching (Importance, Procedure, Advantages and Limitations)
 - i. Lecture cum Discussion
 - ii. Project
 - iii. Workshop
 - iv. Seminar
 - v. Problem Solving
 - vi. Survey Method
- b) Techniques
 - i. Role Play, Dramatization
 - ii. Self Learning: Self study , Supervised Study

UNIT III: CURRICULUM

(10 Lectures)

- a) Characteristics of a Text Book
- b) Critical Analysis of Prescribed Text Book (IX-XII)
- c) Pedagogical analysis (In relation to core elements as given in NEP1986)
 - i. Unit analysis
 - ii. Instructional Objectives and Specification
 - iii. Activities and Procedures
 - iv. Evaluation Techniques

Note: Only for Practical Not to be Evaluated in Examinations

- d) Co -Curricular activities-
 - i. Objectives and Importance
 - ii. Structure, Organization and Activities of Economics Club
 - iii. Competitions (Quiz, Debate, Games & Essay Writing)
 - iv. Visits: (Stock Exchange, Banks, Consumer Forum, Small Scale Industries.)

UNIT IV: TEACHER AND CONTEMPORARY ISSUES

(8 Lectures)

- a) Qualities and Responsibilities
- b) Role of teacher in inculcation of values of Economics (Consumer awareness, conservation of resources, prioritizing and decision making, investments and risk taking, entrepreneurship.)
- c) Contemporary Issues: Privatisation and Globalisation (meaning and implication with respect to Economics)
- d) Professional growth of Teacher (attainment)
- e) Diagnostic Testing and Remedial Teaching

UNIT V: LEARNING RESOURCES

(5 Lectures)

- a) Sources of Information : Research report, journals, mass media
- b) Instructional Materials: Charts, pictures, graphs, maps, globes, models and flannel board.
- c) Electronic Media: Teleconferencing, Web Conferencing.

REFERENCES

1. Aggarwal J C: Teaching Of economics, A Practical Approach", Vinod Pustak mandir, Agra-2.
2. Dhillon S ; Chopra K.: Teaching Of Economics
3. Mustafa M, 2005, "Teaching of Economics, New Trends and Challenges" Deep & Deep Publications Pvt. Ltd F-159, Rajouri Garden, New Delhi-110027.
4. N R Saxena: Teaching Of Economics ,R Lall Book Depot, Meerut
5. Natarajan S, 1993, " Introduction to Economics of education", sterling publications Private Limited.
6. Sharma Kadambari: Teaching of Economics
7. Siddiqui M H: Teaching Of economics, APH Publications Corporation.
8. Sidhu H S: Teaching Of economics, Tandon Publications, Books Market, Ludhiana 141008.
9. Yadav Amita, 1999, "Teaching of Economics" Anmol Publications Pvt Ltd, New Delhi.

WEBSITE

<http://ecedweb.unomaha.edu/>

<http://www.indiana.edu/econed/index.html>

<http://www.nuff.ox.ac.uk/Economics/Growth/>

COMMERCE METHOD

OBJECTIVES:

1. To develop an understanding of the significance of commerce in the curriculum and life.
2. To develop an understanding of the aims and objectives of teaching Commerce at secondary and higher secondary level.
3. To develop the skill of establishing correlation of commerce with other subjects.
4. To develop an understanding of methods and approaches of teaching Commerce.
5. To develop the skill of pedagogical and critical analysis of text book of Commerce.
6. To develop the skill of preparing and using instructional material in teaching of Commerce.
7. To develop skill in organization of co-curricular activities in teaching of Commerce.
8. To develop an understanding of multifarious role of an Commerce teacher in the present context.
9. To develop the skills of organising discussions on the current affairs/events in teaching Commerce.

UNIT I: IMPORTANCE OF TEACHING COMMERCE

(7 Lectures)

a) Values of Teaching Commerce

- i. Cultural
- ii. Disciplinary
- iii. Practical and
- iv. Social.

b) Aims of Commerce Education.

c) Objectives of teaching Commerce at Higher Secondary Level.

UNIT II: APPROACHES TO TEACHING COMMERCE

(10 Lectures)

a) Correlation

- i. Meaning , Importance
- ii. Correlation of Commerce with Economics, Maths, Geography, EVS and Language

b) Maxims of Teaching

- i. Known to Unknown
- ii. Simple to Complex
- iii. Concrete to Abstract

d) Methods of Teaching (Meaning, Procedure, Advantages and Limitations)

- i. Lecturer-cum-Discussion
- ii. Project,

- iii. Seminar
- iv. Problem solving
- v. Assignment.
- vi. Survey

UNIT III: CURRICULUM

(12 Lectures)

- a) Syllabus and Text Book
 - i. Characteristics of a Text Book
 - ii. Critical analysis of prescribed Text Book (XI-XII)
- b) Co-curricular activities-
 - i. Importance, Organization and Types (Commerce Club, Market studies, Debates, Discussions, School Co-operative Stores, Visits to places of Commercial importance)
- c) Pedagogical Analysis

Pedagogical Analysis in relation to the core elements as given in NEP 1986.

 - i. Unit Analysis
 - ii. Instructional objectives and specifications
 - iii. Teacher activities and procedures
 - iv. Evaluation techniques

Note: Only for Practical Not to be Evaluated in Examinations

UNIT IV- TEACHER & CONTEMPORARY ISSUES

(6 Lectures)

- a) Qualities
- b) Professional Growth
- c) Current affairs / events in Commerce.-
 - i. Importance , Objectives, Scope, Nature, Criteria, Methods, Role of Teacher
 - ii. Bulls and Bears in Stock Exchange.
 - iii. Role of Multinational Companies
 - iv. Role of Exim Bank
 - v. Role of Indigenous bankers
 - vi. Role of Public Sector Enterprise

UNIT V - INSTRUCTIONAL MATERIAL (10 Lectures)

- a) Meaning, Importance, Characteristics, Principles, Advantages, and limitations of Instructional Material
- b) Use of Black Board, Charts, Display Boards- Meaning, Types, Advantages and limitations.

References:

1. Commerce Education Mohammed Sharif Khan Sterling Publishers Pvt Ltd-New Delhi
2. Teaching of Commerce-A Practical Approach J.C Aggarwal Vikas Publishing House Pvt Ltd- New Delhi
3. Teaching of Commerce in Our School Lulla B.P (BTTC-BIE Publication, Bombay
4. Method and Techniques of Teaching Commerce Singh M.N Young Man & Co. New Delhi.
5. Teaching of Commerce Seema Rao Anmol Publication, New Delhi.

SCIENCE

OBJECTIVES:-

1. To develop an understanding of the place of Science in the national curriculum.
2. To develop an understanding of pedagogical analysis of various concepts in Science.
3. To develop an understanding of global perspectives in Science teaching.
4. To develop an understanding of the approaches and methods of teaching Science.
5. To develop an understanding of the importance and use of learning resources in Science.
6. To critically analyze the text book of Science.
7. To prepare and use different types of instructional materials in the teaching of Science.
8. To develop an understanding of the qualities, responsibilities and professional growth of the Science teacher.
9. To develop an understanding of the various issues in Science education.
10. To develop an understanding of diagnostic testing and remedial teaching in Science.

UNIT I: PLACE OF SCIENCE IN THE CURRICULUM

(6 Lectures)

- a) Meaning and Nature of Science.
- b) Values of teaching Science.
- c) Science as a core subject (with reference to N.E.P)
- d) General objectives of teaching Science at Secondary and Higher Secondary level.
- e) Co-relation of Science in the Curriculum: Internal & External.

UNIT II: PEDAGOGICAL ANALYSIS

(6 Lectures)

a) In relation to Core Elements as given in NEP 1986: -

- i. Unit Analysis
- ii. Instructional Objectives and Specifications
- iii. Activities and Procedures
- iv. Evaluation Techniques.

(Only Practical Work. No Theory Questions to be asked in the Examination on Part 'A'.)

b) Developing Global Perspectives in Science teaching: -

- i. Meaning and Concept of Global Perspectives.
- ii. Need of Global Perspectives.
- iii. Infusing Global Perspectives in the Curriculum.

UNIT III. METHODS AND APPROACHES TO TEACHING OF SCIENCE

(16 Lectures)

a) Maxims of Teaching: -

- i. Simple of Complex
- ii. Whole to Part
- iii. Empirical to Rational
- iv. Concrete to Abstract
- v. Known to Unknown
- vi. Particular to General

b) Approaches -

- i. Disciplinary Approach
- ii. Integrated Approach

c) Methods of Teaching -

- i. Lecture cum Demonstration
- ii. Laboratory
- iii. Project
- iv. Problem solving
- v. Inductive, Deductive, Inducto-deductive
- vi. Heuristic

(Each Method should also highlight Processes of Science viz. –
Heurism, Analysis, Synthesis, and Scientific Inquiry.)

Unit IV: LEARNING RESOURCES

(10 Lectures)

- a) Importance and Organization of Science Clubs.
- b) Visits, Excursions, Science Exhibitions and Science Fairs.
- c) Importance and Setting up of Science Laboratories.
- d) Importance of Mobile Laboratories and Improvised Apparatus.
- e) Importance of Support Material: -
 - i. Criteria of a good Textbook of Science.
 - ii. Reference Material: - Encyclopedias, Newsletters & Magazines.
 - iii. Online and Offline Resources.

UNIT V: THE SCIENCE TEACHER

(6 Lectures)

- a) Need & Types of Professional Growth
- b) Issues in Science Education: -
 - i. Incidental Science Education –
Concept and Role of the Science Teacher,
Opportunities for Incidental Learning.
 - ii. Non Formal Science Education –
Concept, Role and Activities to be organized for Non
Formal Learning.
 - iii. Globalization and Science Education –
Concept of Globalization, Contribution of Science
Education to Globalization.
 - iv. Environmental Degradation and Science Teaching –
Concept of Environmental Degradation, Activities to
be organized to promote Environmental Up-gradation.
- c) Diagnostic Testing & Remedial Teaching.

ACTIVITIES: -

A Minimum of **Two** of the following Activities to be performed and
a File of Activities conducted to be maintained and certified.

- i. Critically analyze any **One** Textbook of Science.
- ii. Attend an Orientation Program on the preparation of Instructional
Material and prepare an Instructional Material for teaching **One**
Topic in Science.
- iii. Conduct at least **One** Experiment from the Science Syllabus. (This
can be combined with Simulated Lessons.)

REFERENCES: -

1. Bhandula, Chadha and Sharma: Teaching of Science, Parkash Brothers
Educational Publishers, 1985.
2. Bhandula. N: Teaching of Science, Prakash brothers(Ludhiana).
3. Bhatia & Bhatia: The Principles and Methods of Teaching, Doaba
house Booksellers and Publishers, 1994.

4. Bhatnagar, A.B, Teaching of Science (2004), Surya publications, Meerut.
5. Frost Jenny & Turner Tony, Learning to teach Science in the Secondary School (2nd Edition). Routledge Falmer, N.York. (2005).
6. J.C. Aggarwal: Principles, Methods and Techniques of Teaching, Vikas Publishing House Pvt. Ltd., 2000.
7. Kohli, V.K.: How to teach Science.
8. Korde and Sawant: Science and Scientific Method, Himalaya Publishing house, 1980.
9. Mangal, S. K., Teaching of Science.
10. Narendra Vaidya: Science Teaching in Schools for the 21st century, Deep and Deep Publications Pvt. Ltd., 1999.
11. New Trends in Integrated Science Teaching, Vol. 1, UNESCO, 1969-70.
12. Prasad Janardhan, Practical Aspects in Teaching of Science, Kanishka Publication, N. Delhi 1999.
13. R.C. Sharma : Modern Science teaching, Dhanpat Rai Publishing Company, 2003
14. Ravikumar S. K, Teaching of Science, Mangaldeep Publications. 2000.
15. S. Venkataih (Ed): Science Education, Anmol publications Pvt. Ltd., 2000.
16. S.K. Kochhar: Methods and Techniques of teaching, Sterling Publishers Pvt. Ltd., 2003.
17. Sharma and Sharma : Teaching of Science, Dhanpat Rai and Sons, 1972
18. Sharma Jagdish , Model of Science Teaching , Raj Publishing House , Jaipur. (2006)
19. Sharwan Kumar Gupta: Teaching Physical Science in Secondary schools, Sterling Publishers pvt. ltd., 1981
20. Vaidya and Rajput (Eds.) : Reshaping our School Science Education, Oxford & IBH Publishing Co. 1977
21. Veena Pani Pandey : Major issues in Science teaching, Summit Enterprises, 2004
22. Washton Nathan S, Teaching Science: In Elementary & Middle School, David Mc Kenny Co., N.York (1974).
23. Yadav M S, Teaching of Science, Mangaldeep Publication, N. Delhi 1992

WEBSITES: -

1. <http://www.pbs.org/teachers/earlychildhood/articles/integratedunits.htm>
2. <http://www.nwrel.org/scpd/sirs/8/co16.html>
3. <http://education.masfield.ohio-state.edu/>

4. <http://www.stanford.edu/~marcelo/Teaching/Papers/teachint.pdf>
5. <http://www.cc.cityu.edu.hk/~rtbrad/mmee1996-2.pdf>
6. http://www.angelfire.com/stars5/integrated_teaching/integration.html
7. <http://www.stanford.edu/dept/CTL/Tomprof/postings/230.html>
8. <http://ltsnpsy.york.ac.uk/LTSNPsych/Webdocs/notes/r2p.pdf>
9. <http://www.carnegiefoundation.org/publications/sub.asp?key=452&subkey=610>

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. हकीम, प्रभाकर : विज्ञानाचे अध्यापन
२. कदम / बोदार्डे : शास्त्र अध्यापन पद्धती
३. गद्रे रामचंद्र : शास्त्राचे अध्यापन
४. सोहानी गो. प्र. : शास्त्र कसे शिकवारवे
५. अनारसे / दिवे / पाटणकर : शास्त्राचे अध्यापन
६. लागू र. गो. : विज्ञान अध्यापन संयोजन
७. कदम / बोदार्डे : शास्त्र : आशयुक्त अध्यापनपद्धती

MATHEMATICS

OBJECTIVES:

1. To develop an understanding of the nature and values of mathematics.
2. To appreciate the contribution of various mathematicians.
3. To acquire knowledge of pedagogical analysis of various concepts in mathematics.
4. To practise the various methods and techniques of teaching mathematics.
5. To develop an understanding of various approaches of organizing the curriculum.
6. To develop required competencies in teaching of mathematics.
7. To develop an understanding of preparation and use of diagnostic test and organize remedial teaching catering to the individual differences.
8. To develop the skill of conducting recreational activities of mathematics.

4. <http://www.stanford.edu/~marcelo/Teaching/Papers/teachint.pdf>
5. <http://www.cc.cityu.edu.hk/~rtbrad/mmee1996-2.pdf>
6. http://www.angelfire.com/stars5/integrated_teaching/integration.html
7. <http://www.stanford.edu/dept/CTL/Tomprof/postings/230.html>
8. <http://ltsnpsy.york.ac.uk/LTSNPsych/Webdocs/notes/r2p.pdf>
9. <http://www.carnegiefoundation.org/publications/sub.asp?key=452&subkey=610>

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४. सोहानी गो. प्र. : शास्त्र कसे शिकवारवे
५. अनारसे / दिवे / पाटणकर : शास्त्राचे अध्यापन
६. लागू र. गो. : विज्ञान अध्यापन संयोजन
७. कदम / बोदार्डे : शास्त्र : आशयुक्त अध्यापनपद्धती

MATHEMATICS

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6. To develop required competencies in teaching of mathematics.
7. To develop an understanding of preparation and use of diagnostic test and organize remedial teaching catering to the individual differences.
8. To develop the skill of conducting recreational activities of mathematics.

d) Support Technology

- i. 2 D: Charts, Boards (all types), Cutouts, Pictures, Graphs.
- ii. 3D: Models, Objects, Abacus.
- iii. Electronic mode :
 - o Calculators – When and How to Use Calculators in Mathematics.
 - o Internet – Teaching and Learning of Mathematics.

UNIT 4: CURRICULUM AND TEXTBOOK OF MATHEMATICS (4 Lectures)

- a) Approaches to Curriculum Construction- Topical and Concentric.
- b) Qualities of a good Mathematics Text Book.
- c) Critical Evaluation of Mathematics Textbook (V to XII)[For any syllabus[i.e. Maharashtra State Board, ICSE, CBSE, IB, IGSE]
[Compulsory Practical Work .No theory questions to be asked in the examination]

UNIT 5: STRATEGIES FOR INDIVIDUAL DIFFERENCES AND CO-CURRICULAR ACTIVITIES IN MATHEMATICS (8 Lectures)

- a) Diagnostic Testing and Remedial Teaching for:
 - i. Gifted Learners
 - ii. Slow Learners
 - iii. Learners with Dyscalculia
- b) Difficulties Faced by the Teacher in Teaching of Mathematics and Suggestive Measures to overcome them.
- c) Importance and Organization of Mathematics Club. (Objectives and Structure)
- d) Recreational Activities of Mathematics Club:
 - (i) Mathematics Fairs;
 - (ii) Games
 - (iii) Quiz
 - (iv) Puzzles
 - (v) Visits
 - (vi) Talks

REFERENCES:

1. Aggarwal S M: The teaching of Mathematics
2. Mangal S K: Teaching of Mathematics
3. Sidhu Kulbir Singh: The Teaching of Mathematics
4. Kumar Sudhir;Ratnalikar D N: Teaching Of mathematics

5. Sahu Binod K: Teaching of Mathematics
6. James Anice: Teaching Of Mathematics
7. Kulshreshtha Arun Kumar: Teaching Of Mathematics
8. Wadhwa Shalini: Modern Methods of Teaching mathematics

मराठी माध्यमाकरिता संदर्भ ग्रंथ

१. ओक / राऊळ : गणित अध्यापन
२. जगताप ह. ना. : गणित अध्यापन
३. वापट / कुलकर्णी : गणित अध्यापन आणि अध्यापन
४. देशमुख व. पा. : गणित अध्यापन
५. इकीम, प्रभाकर : गणित अध्यापन व अध्यापन
६. पोंक्षे, द. वा. : गणिताचे अध्यापन

SOCIAL SCIENCES

(Political Science, Sociology, Psychology, Philosophy)

OBJECTIVES:

1. To develop an understanding of the importance of social sciences as a subject in curriculum and life.
2. To develop an understanding of the maxims and methods of teaching of social sciences.
3. To acquire knowledge of the pedagogical analysis of the topics of social sciences.
4. To develop an understanding of the importance of planning and measurement of social sciences.
5. To develop the skill of using instructional materials effectively in the teaching of social sciences.
6. To develop an understanding the role of teacher , text book and co-curricular activities in the teaching of social sciences.

Unit I: IMPORTANCE OF SOCIAL SCIENCES(4 Lectures)

- a) As a subject in higher secondary syllabus
- b) In daily life
- c) Objectives of teaching at higher secondary level
- d) Correlation with other subjects

Unit II: TEACHING OF SOCIAL SCIENCES (3 Lectures)

- a) Maxims of teaching:-
 - i. Simple to Complex
 - ii. Known to Unknown
 - iii. Particular to General

UNIT III: METHODS OF TEACHING OF SOCIAL SCIENCES (Importance, Procedure, Advantages and Limitations) (10 Lectures)

- a) Lecture- Discussion
- b) Project
- c) Paper Reading
- d) Programmed Learning
- e) Workshop
- f) Seminar
- g) Symposium
- h) Self study and Group study
- i) Case Study, Survey & Experimental (Psychology only)

UNIT IV PLANNING AND MEASUREMENT (6 Lectures)

- a) Principles of planning—Cooperative and team- teaching,
- b) Data collection techniques-- Questionnaire, Interview Schedules, Observation,
- c) Inventories, Opinionnaires, Psychological test, Devices and Rating Scales

UNIT V CURRICULUM AND TEACHER (12 Lectures)

TEXT- BOOK

- a) Characteristics of a text- book
- b) Critical analysis of prescribed text- book (std. xi & xii)

IMPORTANCE & ORGANISATION OF CO-CURRICULAR ACTIVITIES

- a) Action research
- b) Case study
- c) Debates
- d) Simulation
- e) Visits

PEDAGOGICAL ANALYSIS IN RELATION TO CORE ELEMENTS AS GIVEN IN 1986

Note: Only for Practical Not to be Evaluated in Examinations

- a) Unit analysis
- b) Instructional objectives and specifications

- c) Activities and Procedures
- d) Evaluation techniques

TEACHER OF SOCIAL SCIENCES

- a) Qualities and Qualification
- b) Roles and responsibilities
- c) Professional growth
- d) Diagnostic testing & Remedial teaching

UNIT VI MATERIALS OF INSTRUCTION (6 Lectures)

- a) Contribution of journal, research projects, reports and abstracts
- b) Use of multimedia and Computer assisted instruction
- c) Importance and Organisation of psychological laboratory
(Psychology only)