

UNIVERSITY OF MUMBAI

No.UG / 219 of 2009

CIRCULAR :-

A reference is invited to the Ordinances, Regulations and syllabi relating to the Master of Arts (M.A.) degree course vide this office Circular No.UG/352 of 2006, dated 11th September, 2006 and the Head, University Department of Education, the Principals of the affiliated colleges in Arts and Professor-cum-Director, Institute of Distance Education are hereby informed that the recommendation made by the Board of Studies in Education at its meeting held on 31st March, 2009 has been accepted by the Academic Council at its meeting held on 21st April, 2009 vide Item No.4.18 and that, in accordance therewith, the syllabus relating to M.A Part-I & II in Education is revised as per Appendix and that the same has been brought into force with effect from the academic year 2009-2010.

MUMBAI-400 32

12th June, 2009

PRIN K VENKATARAMANI

REGISTRAR

To,

The Head, University Department of Education, the Principals of the affiliated colleges in Arts, Professor-cum-Director, Institute of Distance Education.

A.C./4.18/21.04.2009

No.UG/219- A of 2009,

MUMBAI-400 032

12th June, 2009

Copy forwarded with compliments for information to: -

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

(D.H. KATIE)

DEPUTY REGISTRAR
(U.G./P.G SECTION)

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 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), Vidyanagari (2 copies), the Deputy Registrar, Affiliation Section (2 copies), the Director, Institute of Distance Education, (10 copies) the Director University Computerization Centre, (10 copies) the Deputy Registrar (Special Call) (10 copies).



UNIVERSITY OF MUMBAI



REVISED SYLLABUS

FOR

M.A. PART I & II

IN THE SUBJECT OF

EDUCATION

(M.A. in Education)

(with effect from the academic year 2009-2010.)

COMPULSORY PAPERS

- 1) Advanced Philosophy and Sociology of Education
- 2) Advanced Educational Psychology
- 3) Research Methodology in Education
- 4) Teacher Education.

M.A. Education Course Objectives:

To enable students to

1. Understand education as an academic discipline.
2. Understand the theoretical basis of education.
3. Understand the interdisciplinary nature of education as an academic discipline.
4. Apply theories in education to the practice of education.

PAPER I: ADVANCED PHILOSOPHY AND SOCIOLOGY OF EDUCATION

SECTION 1: ADVANCED PHILOSOPHY OF EDUCATION

Course Objectives:

To enable the students to understand

- The significance of the ultimate human concerns and the contribution of Philosophy in this regard.
- To understand different modes of philosophical enquiry as a basis of all educational endeavours.
- To understand about the contributions of Eastern and Western philosophies.
- To understand the contemporary developments and issues in philosophy of education.

MODULE-1. PHILOSOPHICAL PERSPECTIVE TO EDUCATION

1. Philosophy of Education

- a. Nature, scope and functions of philosophy of education.
- b. Structure and modes of philosophical inquiry (Metaphysical, Epistemological and Axiological) in Education
- c. Philosophy of Teaching and Its Implications on Teaching Styles

2. Eastern Philosophies of Education

- a. Educational Implications of the following Conventional Schools of Indian Philosophy
i. Vedanta ii. Yoga
- b. Educational Implications of the following Heterodox Schools of Indian Philosophy:
i. Buddhism ii. Jainism
- c. Educational Implications of Islamic Thought

3. Western Philosophies of Education

- a. An introduction to the Conventional Philosophies in Education and the Educational Implications of Essentialism.
- b. An introduction to the liberal philosophies of education and the educational Implications of Pragmatism.
- c. An introduction to the Radical Philosophies of Education and the Educational Implications of Marxism and Existentialism.

MODULE II: THINKERS

4. Educational Implications from the Contributions of the Following Eastern and Western Thinkers

- a. Eastern Thinkers: i. Dr Zakir Hussain ii. Sri Aurobindo Ghosh iii. Jiddu Krishna Murthy.
- b. Western Thinkers: i Plato ii. Karl Jaspers iii. Paulo Freire

MODULE- 3. ISSUES AND TRENDS

5. Issues and Innovations in Education

- a. Autonomy in Higher Education:- Meaning, Purpose
- b. Quality in Education:- assessment and Enhancement
- c. Multicultural Education: Meaning, Purpose:- Need and Principles of teaching and learning in multicultural society.
- d. Human Rights and Education:- Human Rights Education, Concept, Types and Need, Governments' Legislation to ensure Human Rights Education
- e. Emerging perceptions in Value Education, nurturing values as an instrument to counter terrorism.

6. Emerging Trends in Alternative Education Systems

1. Open systems of learning: Open Schools and Open universities.
2. Information technology and On-line learning.
3. Philosophical Foundations of Teaching Styles: (a)Expert (b)Formal Authority (c)Personal Model (d)Delegator (e)Facilitator

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Compare and contrast the thoughts of Dr Zakir Hussain and Jiddu Krishna Murthy and state the implications of their thoughts on Indian education.
2. Critically evaluate Essentialist, Pragmatist, Marxist and Existentialist general and educational philosophy.

REFERENCES:

1. Aggrawal, J.C.(1996), 10th rev. ed. Theory and principles of Education New Delhi, Vikas Publications.
2. Aggrawal, J. C (2001): Basic idea's in Education Delhi, Shipra Publications
3. Aggrwal, J.C. (2005) Education for Values, Environment and Human Rights Delhi, Shipra Publications.
4. Aggarwal, Somnath Philosophical Foundations of Education
5. Anand, CL (1993) Teacher and Education in the Emerging Indian Society, New Delhi: NCERT.
6. Bhattacharya and Srinivas (1977), Society and Education Calcutta :Academic Publishers.
7. Brubacher, John S Philosophy Of Higher Education San Francisco, Jossey-Bass1978
8. Brubacher, John S. (1962) Modern Philosophies of Education New York, McGraw-Hill Book Company Inc.
9. Brubacher, John S (1962).Eclectic Philosophy of Education, New Jersey, Prentice Hall, Engellwood Cliffs.
10. Coombs. Philips H., (1985), The World Crisis in Education New York: Oxford University Press
11. Chandra S.S & Sharma R.K. 2004: Philosophy of Education.
12. Kar, N. K.: (1996) Value Education – A Philosophical Study Ambala, TheAssociated Publication.
13. Delors, Jacques (1996) *Learning the Treasure Within*, UNESCO, Report of the International Commission on Education for Twenty first Century.
14. Dhavan,M. L. (2005): Philosophy of Education Delhi, Editor, Isha Books
15. Durkhiem, Emile (1956), Education and Sociology, New York: Free Press.

16. Govt. of India (1993), Education for All: The Indian Scene New Delhi: MHRD Widentry Horizons.
17. Kilpatrick, WH (1934) Source Book in the Philosophy of Education New York, McMillan and Company.
18. Kashyap, Subhash (1993), Perspectives on the constitution Delhi, Shipra publ.
19. Mayer, F (1963). Foundations of Education Ohio, Charles E Merrill Books Inc.
20. Mohanti, J. (1987), Democracy and Education in India, New Delhi: Deep and Deep Publishers.
21. Naik, J.P. and Syed. N. (1974) A Student's History of Education in India, New Delhi: Macmillan Co.
22. Nayar, P. R., Dave, P.N., and Arora, K. (1982) Teacher and Education in Emerging Indian Society, New Delhi
23. Panday, R.S. :An Introduction to Major Philosophers of Education Agra, Vinod Pusatak Mandir.
24. Panday, V. C (2005): Value Education and Education for Human Rights Editor Delhi, Isha Books.
25. Passi, B. K. (2004):Value Education Agra, National Psychological Corporation
26. Raheja, S.P. Human values and Education.
27. Rajput J.C. (2006) Human values and Education Pragun Publisher.
28. Ross, James (1962), Groundwork of Educational Theory, London: George Harre and Sons.
29. Ram Murti Acharya (1990), Towards an Enlightened and Humane Society – A Committee Report, New Delhi MHRD.
30. Ruhela, S. P. (1969), Social Determinants of Educability in India New Delhi, Jain Publishers
31. Ruhela, S.P. and Vyas, K.C. (1970), Sociological Foundations of Education in Contemporary India, Delhi: Dhanpat Raj and Sons.
32. Saiyidain, K. G. (1970) Facts of Indian Education New Delhi, NCERT.

4



33. Seshadri C.M.A. Khader and G.L. Adhya (1992) Education in Values: A Source Book NCERT
34. Sharma, Ramnath (2000), Textbook of Educational philosophy New Delhi: Kanishka Publications.
35. Singh, Karan; Perspectives on the constitution.
36. Singh, M.S.: (2007) Value Education, Delhi, Adhyayan, Publication and Distribution.
37. Somnath Agrawal (2007), Philosophical foundation of Education Authors Press.
38. Srimali, K. L. (1970), The Prospects for Democracy in India Southern Illinois: University Press.
39. Shankar Mukharji(2007) Contemporary issues in Modern Indian Education Authors Press.
40. Tyagi, P. N. (1991), Education for All: A graphic Presentation, New Delhi: NIEPA.
41. Venkateshwaran; Principles of Education .
42. Yadulal, Kusum; Perspectives of Educational CHANGES.

SECTION 2: ADVANCED SOCIOLOGY OF EDUCATION

Course Objectives

To enable the students

- To understand the sociological perspective in education.
- To understand the process of professional socialisation of teachers.
- To understand the relationship of education with social stratification and national development.
- To understand the sociological perspective to effects of schooling and teacher expectations.

MODULE I: SOCIOLOGICAL PERSPECTIVE TO EDUCATION

1. Sociology of Education

Meaning and scope of Sociology of Education. Difference between Sociology of Education and Educational Sociology. Need to study Sociology of Education. Functions of Education in Society. Theoretical Approaches to the Sociology of Education:

- (a) Functionalism
- (b) Conflict Theory
- (c) Interactionism
- (d) Open Systems Approach.

5

2. Professional Socialisation of Teachers

Meaning, Phases and Stages of Professional Socialisation of Teachers. Professionals as an interest group. Occupational and organisational issues. Relationship with Administrators, colleagues, students and parents. Student Control Ideology.

MODULE II: EDUCATION, SOCIAL STRATIFICATION AND DEVELOPMENT.

3. Education and Social Stratification.

Meaning, Types and Causes of Social Stratification. The Process of Stratification. Major Explanations of Stratification: (a) Functionalist, Conflict, Neo-Marxist and Reproduction Theories. (b) Determinants of Social Class. (c) Equality Objectives: Access, Participation and Outcome. Types of Equality: Basic, Liberal and Radical. Liberal and Distributive Models of Social Justice. (d) Stratification and Equality of Educational Opportunity. Positive Discrimination in The Indian Context. Compensatory Education Programmes.

4. Effects of Schooling and Teacher Expectations on Students:

Major Approaches to Viewing the Effects of Schooling on Individual Lives: (a) Knowledge and Cognitive Development, (b) Socio-economic Outcomes, (c) Workplace Conditions, (d) Social Participation, (e) Psychological Well-being, (f) Family Effects, (g) Values, (h) Leisure Time and (i) Political Participation. Self-Fulfilling Prophecy. Sources of Teacher Expectations and Its Impact on Student Achievement, Motivation and Self-Concept.

5. Education and Development :

Effects of education on economic, political and cultural development. Effects of development on educational outcomes (specifically mass schooling and higher education) as a function of development variables. Educating to meet developmental needs. Educating world citizens, Curriculum for Citizenship Education.

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Write a critical essay on the relationship between education and cultural development in the present Indian context.
2. Write a critical essay on the effects of schooling on individuals in the present Indian context.

REFERENCES

1. Ballantine, J.H. (1997) The Sociology of Education A Systematic Analysis. New Jersey: Prentice-Hall Inc.
2. Brookover, W.B. and Erickson, E.L. (1973) Sociology of Education. Illinois: The Dorsey Press.
3. Chesler, M.A. and cave, W.M. (1981) Sociology of Education. New York: Macmillan Publishing Co, Inc.

4. Coffey, A. (2001) Education and Social Change. Buckingham: Open University Press.
5. Hallinan, M.T.(ed) (1987) Social Organisation of Schools. New York: Plenum Press.
6. Hallinan, M.T.(ed) (2000) Handbook of The Sociology of Education . USA: Springer.
7. Hunt, M.P. (1973) Foundations of Education Social and Cultural Perspectives. New York: Halt, Rinehart and Winston.
8. Lucas, C. J. (1984) Foundations of Education . New Jersey: Prentice-Hall Inc.
9. Meighan, R.A. (1986) Sociology of Education. London: Cassell Educational Ltd.
10. Miller, H.L. (1978) Social Foundations of Education. New York: Halt, Rinehart and Winston.
11. Parelius, A.P. and Parelius, R.J. (1978) The Sociology of Education. New Jersey: Prentice-Hall Inc.
12. Ravikumar, S.R. (2001) Educational Sociology . Jaipur: Mangaldeep Publications.
13. Wexler, P. (1990) Social Analysis of Education. London: Routledge.

PAPER II: ADVANCED EDUCATIONAL PSYCHOLOGY

Course Objectives

To develop an understanding of

- Role and application of psychology in education
- Understanding learner diversity
- Managing classroom behaviour

MODULE I: ROLE AND APPLICATION OF PSYCHOLOGY IN EDUCATION

1. Psychology and Education

- a. Concept of Psychology and Educational Psychology--Meaning and Definitions
- b. Contribution of Various Schools of Psychology-1) Psychodynamic 2) Humanistic, 3) Behavioristic 4) Cognitive 5) Neurobiological
- c. Contribution of Educational Psychology to the Teaching Process
- d. Scope of Educational Psychology—1)The Teacher 2)The Learner 3) The Learning Environment 4) Learning Resources

2. Critical Analysis and Educational Implications of Learning, Cognition and Constructivism

- a. Behaviourist Theories: Classical Conditioning (I. Pavlov, J. Watson) Operant Conditioning (B.F. Skinner) Reinforcement Theories (B.F. Skinner, W. Guthrie)
- b. Cognitivist/ Constructivist Theories: Cognition, Information Processing, Meta Cognition, Constructivism and Active Learning (David Ausubel, Jerome Bruner, Gagne)
- c. Social Learning (Albert Bandura) and Social Constructivism (L Vygotsky)
- d. Theories of Teaching: 1) Behaviouristic 2) Cognitive 3) Humanistic

MODULE II: UNDERSTANDING LEARNER DIVERSITY

3. Learner Diversity

- a. Personality--Theories of Personality-- Western (Cognitive-Ellis, Humanistic-Berne) and Indian Perspective (Vedic, Buddhist and Aurobindo)
- b. Intelligence—Cognitive (J.P. Guilford, Emotional (D. Goleman) and Multiple (H.Gardner)
- c. Aptitude, Interest, Creativity

4. Implications for Learning and Thinking Styles in Classroom Teaching

- a. Learning Styles: Concept and Application of Kolb's Model
- b. Thinking Styles: Concept, Application and Contribution of R. Sternberg
- c. Creative Thinking: Concept, Application and Contribution of E. De'Bono
- d. Teaching Thinking: Feuerstein's Approach

5. Educational Needs of Differently Abled Children

- a. Catering to Individual Differences
 - i) Cognitively Exceptional Children ii) Physically Exceptional Children
 - iii) Socio-Culturally Exceptional Children
- b. Concept and Types of Learning Disabilities
 - i) Dyslexia ii) Dysgraphia iii) Dyscalculia
- c. Emotional and Behavioural Disorders
 - i) Attention Deficit Disorder (ADD) and Attention Deficit Hyperactivity Disorder (ADHD) ii) Disruptive Behaviour Disorder
- d. Inclusive Education
 - i) Concept of Mainstreaming, Integration and Inclusion ii) Need and Importance of Inclusive Education in the Indian Context

MODULE III: MANAGING CLASSROOM BEHAVIOR

6. Theories of Motivation

- a. Cognitive Approach: Attribution Theory
- b. Behaviouristic Approach: Extrinsic-B.F. Skinner and C. Hull
- c. Humanistic Approach: Intrinsic-Carl Rogers, Abraham Maslow
- d. D. McGregor's Theory X, Y.

7. Problems and Approaches to Managing Classroom Behavior

- a. Identifying Behavior Problem: i) Distraction ii) Aggression
iii) Interpersonal Problems
- b. Analyzing Behavior Problems: i) Defining Behavior ii) Identifying Antecedents and Consequences, Chain of Events Leading to Behavior Problems
- c. Changing Behavior: Behavioristic vs. Humanistic Approach
- d. Group Dynamics: Leadership, Team Building and Techniques of Managing the Group

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Describe some of the recent trends in Inclusion.
2. Conduct a survey to study teachers' perception of common classroom problems and write a report.

REFERENCES:

1. Baron, R.A (2002) Psychology (5th Ed.) Singapore, Pearson Education Asia.
2. Baron, J. and Sternberg, R. (eds.) (1987) Teaching Thinking Skills: Theory and Practice New York, W.H. Freeman.
3. Costa, A. (2001) The Vision; Developing Minds (3rd ed.) Alexandria, VA.

4. Covey, S. R (1999) Living the 7 Habits: Stories of Courage and Inspiration New York, USA, Franklin Covey Co.
5. Covey, S.R (2004) The 8th Habit From Effectiveness to Greatness New York, USA Franklin Covey Co.
6. De Bono, E. (1991) Teaching Thinking London, Pergamon Press.
7. Diagnostic and Statistical Manual of Mental Disorders (1995) American Psychiatric Association, DSM-IV, New Delhi, Jaypee Brothers Medical Publishers Private Limited.
8. Feuerstein, R. (1980) Instrumental Enrichment Baltimore, University Park Press.
9. Gardner, H (2006) The Unschooled Mind: How Children Think and How Schools Should Teach New York, Basic Books Inc.
10. Gardner, H (1991) Changing Minds USA, Howard Business School Press.
11. Goleman, D (1995) Emotional Intelligence Why it Can Matter More Than I.Q. New York, Bantam Books.
12. Goleman, D (1998) Working with Emotional Intelligence New York, Bantam Books
13. Parmeshwaran, E.G and Beena, C (2002) An Invitation to Psychology Hyderabad, India, Neel Kamal Publications Private Limited.
14. Pervin, L.A and John, O. P (2006) Handbook of Personality: Theory and Research 2nd Edition, New York, USA, Guilford Publications.
15. Riso. R. D and Hudson, R (1999) The Wisdom of Enneagram New York, USA, Bantam Books.
16. Senge, P. M (1990) The Fifth Discipline. The Art and Practice of Learning Organization New York USA, Currency and Doubleday.
17. Senge, P., Scharmer, C.O., Jaworski, J and Flowers, B.S (2005) Presence: Exploring Profound Change in People, Organizations and Society London, Nicholas Brealey Publishing.
18. Singh, D (2001) Emotional Intelligence at Work New Delhi, Response Books.

19. Smith, E.E., Hoeksema, S.N., Fredrickson, B.L., Loftus, G. R., Bem D.J Maren, S (2003) Atkinson and Hilgard Introduction To Psychology United States of America, Thomson & Wadsworth.
20. Stein, S.J and Book, H.E. (2000) The EQ Edge – Emotional Intelligence and Your Success New Delhi, Macmillan India Limited.
21. Sternberg, R.J (1999) Thinking Styles. London, Cambridge University Press.
22. Woolfolk, A (2004) Educational Psychology Ninth Edition Singapore, Pearson Education Inc.
23. Zohar, D and Marshall, I (2001) Spiritual Intelligence the Ultimate Intelligence London, Bloomsbury Publishing.

PAPER-III : RESEARCH METHODOLOGY IN EDUCATION

Course Objectives

- To develop an understanding about the meaning of research and its application in the field of education.
- To enable students to prepare a research proposal.
- To enable students to understand different types of variables, meaning and types of hypothesis, sampling techniques and tools and techniques of educational research.
- To develop an understanding about the different types of research methodology of educational research.
- To enable students to understand quantitative and qualitative data analysis techniques.

MODULE I: EDUCATIONAL RESEARCH AND ITS DESIGN

1 Educational Research

- (a) Sources of Acquiring Knowledge: Learned authority, tradition, experience, scientific method.
- (b) Meaning, steps and scope of educational research.
- (c) Meaning, steps and assumptions of scientific method. Aims and characteristics of research as a scientific activity.
- (d) Ethical Considerations in Educational Research
- (e) Paradigms of educational research: Quantitative and Qualitative.
- (f) Types of research: Fundamental, Applied and Action.

2. Research Design

- (a) Meaning, definition, purposes and components of research design.
- (b) Difference between the terms research method and research methodology.
- (c) Research Proposal: Its Meaning and Need.
 - (i) Identification of a research topic: Sources and Need.
 - (ii) Review of related literature.
 - (iii) Rationale and need of the study.
 - (iv) Definition of the terms: Real, Nominal and Operational.
 - (v) Variables.
 - (vi) Research questions, aims, objectives and hypotheses.
 - (vii) Assumptions, if any.
 - (viii) Methodology, sample and tools.
 - (ix) Scope, limitations and delimitations.
 - (x) Significance of the study.
 - (xi) Techniques of data analysis and unit of data analysis.
 - (xii) Bibliography.
 - (xiii) Time Frame.
 - (xiv) Budget, if any.
 - (xv) Chapterisation.

MODULE II: RESEARCH HYPOTHESES AND SAMPLING

3. Variables And Hypotheses

- (a) Variables:
 - i. Meaning of Variables
 - ii. Types of Variables (Independent, Dependent, Extraneous, Intervening and Moderator)
- (b) Hypotheses: i. Concept of Hypothesis ii. Sources of Hypothesis iii. Types of Hypothesis (Research, Directional, Non-directional, Null, Statistical and Question-form)
 - iv. Formulating Hypothesis v. Characteristics of a good hypothesis. vi. Hypothesis Testing and Theory vii. Errors in Testing of Hypothesis

4. Sampling:

- (a) Concepts of Universe and Sample
- (b) Need for Sampling
- (c) Characteristics of a good Sample
- (d) Techniques of Sampling
 - i. Probability Sampling ii. Non- Probability Sampling

MODULE III: RESEARCH METHODOLOGY, TOOLS AND TECHNIQUES

5. Research Methodology

- (a) Descriptive Research: i. Causal-Comparative ii. Correlational iii. Case Study
 - iv. Ethnography v. Document Analysis iv. Analytical Method.
- (b) Historical Research: Meaning, Scope of historical research, Uses of history, Steps of doing historical research (Defining the research problem and types of historical inquiry, searching for historical sources, Summarizing and evaluating historical sources and Presenting pertinent facts within an interpretive framework.) Types of historical sources, External and internal criticism of historical sources.
- (c) Experimental Research:
 - i. Pre-Experimental Design, Quasi- Experimental Design and True-Experimental Designs.
 - ii. Factorial Design. / Independent groups and repeated measures.
 - iii. Nesting Design.
 - iv. Single-subject Design.
 - v. Internal and External Experimental Validity.
 - vi. Controlling extraneous and intervening variables.

6. Tools And Techniques Of Research

- (a) Classical Test Theory and Item Response Theory of Test Construction.
- (b) Steps of preparing a research tool.
 - i. Validity (Meaning, types, indices and factors affecting validity)
 - ii. Reliability (Meaning, types, indices and factors affecting reliability)
 - iii. Item Analysis (Discrimination Index, Difficulty Index)
 - iv. Index of Measurement Efficiency.
 - v. Standardisation of a tool.
 - vi.

- (c) Tools of Research
 - i. Rating Scale,
 - ii. Attitude Scale
 - iii. Opinionnaire
 - iv. Questionnaire
 - v. Aptitude Test
 - vi. Check List
 - vii. Inventory
 - viii. Semantic Differential Scale

- (d) Techniques of Research
 - i. Observation
 - ii. Interview

(Tools to be used for collecting data using these techniques to be discussed in detail.)

MODULE IV: DATA ANALYSIS AND REPORT WRITING

7. Data Analysis

- (a) Types of Measurement Scale (Nominal, Ordinal, Interval and Ratio)

- (b) Quantitative Data Analysis

- i. Parametric Techniques
- ii. Non- Parametric Techniques
- iii. Conditions to be satisfied for using parametric techniques
- iv. Descriptive data analysis (Measures of central tendency, variability, fiduciary limits and graphical presentation of data)
- v. Inferential data analysis
- vi. Use of Excel in Data Analysis
- vii. Concepts, use and interpretation of following statistical techniques: Correlation, t-test, z-test, ANOVA, Critical ratio for comparison of percentages and chi-square (Equal Probability and Normal Probability Hypothesis).
- viii. Testing of Hypothesis

- (c) Qualitative Data Analysis

- i. Data Reduction and Classification
- ii. Analytical Induction
- iii. Constant Comparison

8. Research Reporting

- (a) Format, Style and Mechanics of Report Writing with Reference to

- (i) Dissertation and Thesis and (ii) Paper.

- (b) Bibliography

- (c) Evaluation of Research Report.

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Prepare a research proposal on a current topic of relevance to education.
2. Develop a tool for measuring a variable which has relevance to education.

REFERENCES

1. Best, J. W. and Kahn, J. (1997) Research in Education. (7th Ed.) New Delhi: Prentice – Hall of India Ltd.
2. Borg, B.L.(2004) Qualitative Research Methods. Boston: Pearson.
3. Bogdan, R.C. and Biklen, S. K.(1998) Qualitative Research for Education : An Introduction to Theory and Methods. Boston MA: Allyn and Bacon.
4. Bryman, A. (1988) Quantity and Quality in Social Science Research. London: Routledge.
5. Charles, C.M. and Merton, C.A.(2002) Introduction to Educational Research. Boston: Allyn and Bacon.
6. Cohen, L and Manion, L. (1994) Research Methods in Education. London: Routledge.
7. Creswell, J.W. (2002) Educational Research. New Jersey: Upper Saddle River.
8. Creswell, J.W (1994) Research Design. London: Sage Publications.
9. Denzin, N.K. and Lincoln, Y.S. (Eds) (1994) Handbook of Qualitative Research London, Sage Publications.
10. Diener, E. and Crandall, R. (1978) Ethics in Social and Behavioural Research. Chicago: University of Chicago Press.
11. Dillon, W.R. and Goldstein, M. (1984) Multivariate Analysis Methods and Applications. New York, John Wiley and Sons.
12. Gay, L.R. and Airasian. P. (2003) Educational Research. New Jersey: Upper Saddle River.
13. Husen, T. and Postlethwaite, T.N. (eds.) (1994) The International Encyclopaedia of Education. New York: Elsevier Science Ltd.
14. Keeves J.P. (ed.) (1988) Educational Research, Methodology and Measurement: An International Handbook Oxford, Pergamon.
15. McMillan, J.H. and Schumacher, S. (2001) Research in Education. New York: Longman.

PAPER-IV TEACHER EDUCATION

Course Objectives

To develop an understanding of

- Concept, development and agencies of Teacher Education
- Teacher Education programmes at Different Levels—Their Objectives, Structure, Curriculum, and Role and Competencies of the Teacher
- Need for Teacher Education at Tertiary Level
- Issues, Problems and Innovative Practices in Teacher Education
- Research and professionalism in Teacher Education

MODULE I: TEACHER EDUCATION: CONCEPT DEVELOPMENT AND AGENCIES

1. Concept of Teacher Education

- a. Meaning and Nature of Teacher Education
- b. Need, Scope and Objectives of Teacher Education
- c. Changing Context of Teacher Education in the Indian Scenario
- d. Changing Context of Teacher Education in the Global Scenario

2. Development of Teacher Education in India

- a. Teacher Education in Pre Independence India
- b. Teacher Education in Post Independence India
- c. Teacher Education in U.K. and U.S.A.
- d. Teacher Education in China and South Africa

3. Agencies of Teacher Education

- a. Agencies of Teacher Education at the State Level and Their Role and Functions- State Institute of Education (SIE), SCERT, State Board of Teacher Education (SBTE), University Departments of Education
- b. Agencies of Teacher Education at the National Level and Their Role and Functions-UGC, NUEPA, NCTE, NCERT
- c. Agencies of Teacher Education at the International Level and Their Role and Functions -UNESCO

MODULE II: TEACHER EDUCATION AT DIFFERENT LEVELS: OBJECTIVES, STRUCTURE, CURRICULUM AND ROLE AND FUNCTIONS

4. Teacher Education at Pre Primary and Primary Levels

- a. Objectives of Teacher Education Programme at Pre Primary and Primary Levels as Recommended by the NCTE
- b. Structure of Teacher Education Programme at Pre Primary and Primary Levels as Recommended by the NCTE
- c. National Curriculum Framework for Teacher Education Programme at Pre Primary and Primary Levels as Recommended by the NCTE

- d. Role and Competencies Required of the Teacher at the Pre-Primary and Primary Levels

5. Teacher Education at Secondary and Higher Secondary Levels

- a. Objectives of Teacher Education Programme at Secondary and Higher Secondary Levels as Recommended by the NCTE
- b. Structure of Teacher Education Programme at Secondary and Higher Secondary Levels as Recommended by the NCTE
- c. National Curriculum Framework for Teacher Education Programme at Secondary and Higher Secondary Levels as Recommended by the NCTE
- d. Role and Competencies Required of the Teacher at the Secondary and Higher Secondary Levels

6. Teacher Education at Tertiary Level

- a. Need for Teacher Education for Preparation of Teachers in Higher Education
- b. Objectives of Teacher Education Programme at Tertiary Level
- c. Structure of Teacher Education Programme and Institutions at Tertiary Level
- d. Curriculum for Teacher Education Programme at Tertiary Level
- e. Role and Competencies Required of the Teacher at the Tertiary Level

MODULE III: ISSUES, PROBLEMS AND INNOVATIONS IN TEACHER EDUCATION

7. Major Issues and Problems of Teacher Education

- a. Maintaining Standards in Teacher Education- Admission Policies and Procedures, Recruitment of Teacher Educators
- b. Service Conditions of Teacher Educators
- c. Quality Management of Teacher Education
- d. Privatization, Globalization and Autonomy in Teacher Education

8. Innovative Practices in Teacher Education

- a. Cooperative and Collaborative Teacher Education
- b. Constructivist and Reflective Teacher Education
- c. e-Teacher Education
- d. Methods of Value-oriented Teacher Education-Value Clarifying Discussions, Contrived Incidents

MODULE IV: RESEARCH AND PROFESSIONALISM TEACHER EDUCATION

9. Research in Teacher Education

- a. Nature and Scope of Research in Teacher Education
- b. Areas of Research in Teacher Education (Teaching, Teacher Characteristics, Teacher Performance, Teacher Education, Teacher Educators and Teacher Education Institutions)
- c. Trends in Research in Teacher Education
- d. Implications of Research for Teacher Education

10. Teacher Education as a Profession

- a. Concept of Profession and Professionalism
- b. Developing Professionalism, Professional Ethics and Professional Code of Ethics for Teacher Educators
- c. Meaning and Components of Teacher Effectiveness
- d. Enhancing and Evaluating Teacher Effectiveness through Performance Appraisal of Teachers and Teacher Educators

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Compare Teacher Education programmes in India with any one of the following countries—China, South Africa
2. Preparation of performance appraisal format for Teacher Educators

REFERENCES

1. Arora, G.L. (2002) Teachers and Their Teaching Delhi, Ravi Books.
2. Chaurasia Gulab (2000) Teacher Education and Professional Organizations Delhi, Authorspress.
3. Dillon Justin and Maguire Meg (1997) Becoming A Teacher: Issues in Secondary Teaching Buckingham, Open University Press.
4. Dunkin, Michael, J. (1987) The International Encyclopaedia of Teaching and Teacher Education Oxford, Pergamon Press.
5. Elahi, Nizam (1997) Teacher's Education in India New Delhi, APH Publishing Corporation.
6. Kundu, C.L. (1998) Indian Year Book on Teacher Education New Delhi, Sterling Publishers Privatization. Ltd.
7. McNergney, Robert F. and Herbert, Joanne M. (2001) Foundations of Education: The Challenge of Professional Practice Boston Allyn and Bacon.
8. Misra, K.S. (1993) Teachers and Their Education Ambala Cantt., The Associated Publishers.
9. Mohanty Jagannath (2000) Teacher Education in India
10. Murray, Frank B. (Ed.) (1996) Teacher Educators' Handbook; Building A Base for Preparation of Teachers, San Francisco, Jossey-Bass Publishers.
11. National Council for Teacher Education (NCTE) (1998) NCTE Document New Delhi, Published by Member Secretary, NCTE.

12. NCTE Website www.ncte.org
13. Rao, Digmurti Bhaskar (1998) Teacher Education in India New Delhi, Discovery Publishing House.
14. Sharma, B.M. (Ed.) (1997) Teachers' Training and Educational Research, Delhi, Commonwealth Publishers.
15. Sharma, Shashi Prabha ((2003) Teacher Education: Principles, Theories and Practices New Delhi, Kanishka Publishers.
16. Singh, L.C., Sharma, P.C. (1995) Teacher Education and the Teacher, New Delhi, Vikas Publishing House Pvt. Ltd.
17. Singh, R.P. (Ed.) (2002) Teacher Education in Turmoil: Quest for a Solution, New Delhi, Sterling Publishers Privatization. Ltd.
18. Singh, R.P. (2006) Training Teachers: Problems and Issues New Delhi, Gyan Publishing House.
- 19 Singh, U.K. and Sudarshan, K.N. (1996) Teacher Education New Delhi, Discovery Publishing House.
21. Vashisht, S.R. (1997) Professional Education of Teachers, Jaipur, Mangal Deep Publishers.
22. Veeraiah, B., (2000) Education in Emerging India Mumbai/New Delhi Himalaya Publishing House.

SPECIAL PAPERS

GROUP A

1. Comparative Education
2. Economics of Education
3. Environmental Education
4. History of Education
5. Politics of Education

GROUP A PAPER 1 COMPARATIVE EDUCATION

Course Objectives

To develop an understanding of

- Concept of Comparative Education as a discipline, its aims, need, scope, and use.
- Importance of and differences in area studies, comparative studies and national case studies
- Approaches, methods, areas, difficulties and status of research in Comparative Education.
- Contemporary educational system of five countries in terms of their national context, organization, administration and current trends and problems

MODULE I: CONCEPT OF COMPARATIVE EDUCATION

1. Comparative Education as a Discipline

- a. Meaning and Scope of Comparative Education
- b. Historical Development of Comparative Education
- c. Types of Comparative Studies in Education

2. Need and Importance of Comparative Education

- a. Aims of Comparative Education
- b. Comparative Education as a Pure and Applied Science
- c. Use of Comparative Education in (i) Theory Building and (ii) Policy Making

3. Area Studies in Comparative Education

- a. Distinction between Area Studies, and Comparative Studies
- b. Role of Area Studies in Comparative Education
- c. National Case Studies
- d. International Comparisons and Issues of Policy Borrowing

MODULE II: RESEARCH IN COMPARATIVE EDUCATION

1. Methods and Approaches in Comparative Education

- a. Descriptive and Statistical Methods
- b. Interpretive and Explanatory Methods- (i) Historical Approach, (ii) Sociological Approach, (iii) Philosophical Approach

- c. Scientific Methods- (i) Inductive Method, (ii) Hypothetico-Inductive Method, (iii) Hypothetico-Deductive Method and the Problem Approach in Comparative Education

5. Comparative Education Research

- a. Current Status of Research in Comparative Education
- b. Developing the Field in the Future Through Research
- c. Literature in Comparative Education
- d. Difficulties in Conducting Comparative and International Research

MODULE III: COMPARATIVE STUDY OF EDUCATIONAL SYSTEMS, TRENDS AND PROBLEMS

6. Comparative Study of Educational Systems

The contemporary educational systems of the following five countries

1. England and Wales, 2. United States of America, 3. Russia, 4. Japan
5. China

To be studied in a comparative perspective in relation to India in terms of their

a) National Context b) Organization and c) Administration of the Education System.

a) National Context:

- i) Historical Background
- ii) Geography of the Country
- iii) Ideological Framework
- iv) The Political System

b) Organization of the Education System with reference to

- a. Pre-primary Education
- b. Primary Education
- c. Secondary Education
- d. Tertiary Education
- e. Professional Education Including Teacher Education
- f. Vocational and Technical Education
- g. Special Education
- h. Adult and Continuing Education

c) Administration of the Education System

- a. The Constitutional and the Legal Basis
- b. Role of the Government in Education
- c. Role of Private Agencies in Education
- d. Planning and Finance of Education

7. Current Trends and Problems

- a. Current Trends in Education – National and Global Trends
- b. Problems in Education –Social, Political and Economic
- c. Education in Transitional Societies (Brazil, China, Pakistan, Russia, South Africa)

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Collect information, statistics and data of any one country with respect to Teacher Education and compare it with the Indian Teacher Education System.
2. Write on the importance of the Problem Approach in Comparative Education.

REFERENCES

1. Altback, Philip.G., Arnov, Robert F. & Kelly, Gail P. (1982) Comparative Education New York, Memillan Publishing Co., Inc.(370.195 K50448)
2. Holms Brian (1981) Comparative Education: Some Considerations of Method London, Unwin Education Books, George, Allen and Unwin (370.1 338368)
3. Holms Brian (1980) Diversity and Unity in Education: A Comparative Analysis London, George, Allen and Unwin (370.8 338368)
4. Holms Brian (1970) Problem In Education: A Comparative Approach London. Routledge and Kegan and Paul (370 329491)
5. Holms Brian (1989) The Curriculum: A Comparative Perspective London. Unwin (370.58 K93504)
6. Holms Brian (1985) Comparative Education (370.195)
8. Kubow, Patricia K. & Fossun, Paul R. (2003) Comparative Education: Exploring Issues in the International Context New Jersey, Merrill, Prentice Hall (370.9 K145888)
9. Mallinson Vernon (1975) An Introduction to the Study of Comparative Education (4th ed.) London, Heinemann (370.9 296484)
10. Mukherjee, L.(1975) Comparative Education Bombay, Allied Publishers (370.9 K297442)
11. Sodhi, I.S. (1983) A Text Book of Comparative Education: Philosophical, Patterns and Problems of National Systems (U.K., U.S.A., U.S.S.R., India), Delhi, Vikas Publishing (370.9 K155075)
12. Sharma, Y.K. (2004) A Comparative Study of Educational Systems. New Delhi, Kanishka Publications, Distributors (370.9 K301835)

52



GROUP A PAPER 2 ECONOMICS OF EDUCATION

Course Objectives:

To enable the learners to

- a) Develop an understanding of planning, financing and cost of education.
- b) Develop an understanding of the link between the educational system and economic development.
- c) Develop an understanding of educational problems in the context of economic concepts, theories and techniques.

MODULE I : CONCEPTUAL BACKGROUND AND COST OF EDUCATION

1. Conceptual Issues in Economics of Education

- a. Meaning, definition, scope and importance of Economics of Education.
- b. The relationship between education and the economic system. The role of the economic system in (i) financing of education, and (ii) absorbing the educated manpower.
- c. Education as an industry
- d. Education as consumption and Education as individual, social and national investment.
- e. Spill-over and inter-generational effects of education.

2. Cost of Education

- a. Concept of Cost of Education. Types of Educational Costs: Direct cost, Indirect cost, Private cost, Social cost and Opportunity cost.
- b. Unit cost of Education: Its estimation. Its applications to different levels, modes and types of education. (Levels: Primary, Secondary and Tertiary, Modes: Formal and Distance. Types: i) General i.e. Arts, Science and Commerce, and ii) Professional and Technical)
- c. External and Internal Efficiency of Education.

3. Cost-Benefit Analysis in Education:

- a. Meaning of cost-benefit-analysis. Its purpose and problems.
- b. Profiles of age-education-earnings. Calculation, private, marginal and benefit cost ratio.
- c. Interpretations and evaluation of rates of return on investment in education.
- d. Cost Effectiveness Analysis in Education. Difference between Cost-Benefit and Cost-Effectiveness Analysis.
- e. Concept of Cost Consciousness in Education.

MODULE II: FINANCING OF EDUCATION

4. Pricing of Education

- a. Micro and Macro aspects of pricing of education (Theoretical Study)
- b. Practical solution to the pricing of education especially at the tertiary level.
- c. Problem of capitation fees.

5. Financing of Education

- a. Sources of finance for education: private, public, fees, donations,
- b. Endowments and grants. Grant-in-aid principles and practices with special reference to higher education.
- c. Government's role in financing education at different levels with special reference to higher education.

6. Allocation of funds to Education in the 5-year Plans

- a. The concepts of five year planning.
- b. Actual and estimated allocation of funds at different levels of education in the Five-year plans (I- IX Plans), Priority for education in the various five year plans.
- c. Priorities within education in the various five year plans.
- d. Educational expenditure and national economy.
- e. Expenditure of education, public education at different levels (central state level) in India.
- f. Types of plans-Central, State and Institutional.

MODULE III: ECONOMIC DEVELOPMENT AND EDUCATION

7. Human Resource Development.

- a. The concept of human resource development. Meaning, definition, significance and Development of human resources through education,
- b. Need for manpower planning and Estimation of manpower requirements.
- c. Human capital and its relation to other form of resources and need for retraining.
- d. The problems of educated unemployment, underemployment and disguised unemployment.
- e. Meaning and purpose of Economics of Teacher Provision
- f. Estimating the demand for and supply of teachers and the problems associated with the estimation.
- g. Policy implications of economics of teacher provision.

8. Education and Economic Development

- a. The concepts of economic development and economic growth.
- b. The interrelationship between education and economic development.
- c. Education as a prerequisite, as an accelerator and a major determinant of economic development.

- d. Suggestions for improvement in the educational system for enhancing and sustaining economic development.
- e. Resource constraints and Resource mobilization.
- f. Education and economic development in urban and rural areas.

MODULE IV: MEASUREMENT OF CONTRIBUTION OF EDUCATION TO ECONOMIC GROWTH

9. Measuring the Contribution of Education to Economic Growth.

- a. Approaches other than Cost Benefit Analysis.
- b. Correlation Approach,
- c. Residual approach
- d. Manpower Forecasting Approach.
- e. Wage-Differential Approach.

10. Productivity and Wastage in Education

- a. Productivity of the educational system and Learning for productivity objectives.
- b. Internal and external efficiency of the Educational system.
- c. Dual approach, Process approach, Product approach.
- d. Meaning, definition and significance of wastage in education
- e. Estimation of the drop-out rates at different levels of education
- f. Types of wastage: Money, Time Material resources, human capital and ideological.

11. Education, Equity and Income Distribution

- a. Educational equity measures-(a) the equal opportunity criterion, (b) the cost- benefit criterion, and (c) the ability to pay criterion.
- b. Education as a determinant of income variance, and the relevant contribution of different levels of education.
- c. Tools to assess the equity and income distribution.
- d. The Gini coefficient, the Lorenz curve.

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Suggest measures of improvement in education so as to enhance and sustain economic development in India.
2. Study the unit cost of education (any level.)

REFERENCES

1. Balsara, M. (1996) New Education policy and Development Challenge New Delhi, Kanishka Publishers.
2. Baxter, C. And O'Leary, P.J. and westoby, A. (Eds.) (1977) Economics and Education Policy a Reader London Longman Group Ltd

25



3. Becker, G. S. (1964) Human Capital New York: University Press,
4. Blaug, M. (1972) an Introduction to the Economics of Education London: Penguin
5. Blaug, M. (ed.) (1968) Economics of Education selected Readings. Vol. 1 and 2
London: Penguin Books
6. Cohn, E. and Geske(1990) T.G. The Economics of Education Oxford: Pergamon Press.
7. Creedy J. The Economics of Higher Education: Analysis of Taxes Versus Fees Aldershot: Edward Elgar Publishing limited
8. Enaohwo, J. O(1990)Economics of Education and the Planning Challenge. New Delhi. Anmol Publications
9. Garg V. P. (1985)The Cost Analysis in Higher Education New Delhi, Metropolitan Book Co.Pvt.Ltd.
10. Goel S.C. (1975) Education and Economic Growth in India Delhi. Macmillan.
11. Hallak J. (1990) Investing in the Future UNESCO: Pergamon Press
12. Heggade, O. D. (1992) Economics of Education Bombay: Himalaya Publishing House,
13. Johns R. L. & Morphet, E.L. (1975) The Economics and Financing of Education A System Approach New Jersey: Prentice-Hall Inc.
14. Knight, J.B. And Sanot R.H (1990) Education. Productivity and Inequality. The World Bank.
15. Laxmidevi (ed.) (1996) Encyclopaedia of Educational Development and Planning. Economics of Education Vol. V New Delhi: Anmol Publications Pvt.Ltd.
16. Levin, M.R. & Shank A. (eds.) (1970) Educational Investment in an Urban Society: Costs, Benefits and Public Policy. New York, Teachers College Press
17. Majumdar, T. (1983) Investment in Education and social Choice. Cambridge, Cambridge University press.
18. Mingat A. & Tan Hee-peng (1988) Analytical Tools for sectoral work in Education Baltimore: the Johns Hopkins University Press.
19. Murray T.R. (1990) The Encyclopaedia of Human Development and Education Oxford, Pergamon

20. Muzammil, M. (1989) Financing of Education New Delhi: Ashish Publishing House.
21. Naik J. P. (1965) Educational Planning in India Bombay: Allied Publishers
22. Natarajan S. (1990) Introduction to Economics of Education New Delhi: Sterling
23. O'Donohue, M (1971) Economics Dimensions in Education Chicago: Aldine, Alterton
24. Padmanabhan, C.B. (1971) Economics of Educational Planning in India New Delhi, Arya Book Depot.
25. Panchamukhi P. R. (ed.) (1989) Economics of Educational Finance Bombay, Himalaya Publishing House.
26. Pascharopoulos, G. (ed.) 1987. Economics of Education Research and Studies Oxford, Pergamon Press.
27. Psacharopoulos, G. and Woodhall (1986) Education for Development Washington: The World Bank.
28. Ritzen J. M. M. (1977). Education, Economic Growth and Income Distribution New York: North-Holland Publishing Co.
29. Saxena, S. (1979). Educational Planning in India New Delhi Sterling Publishers Pvt. Ltd., Sheehan J. Economics of Education London: George Allen and Unwin Ltd.
30. Shriprakash, Cost of Education (1996.) New Delhi: Anamika Publishers and Distributors
31. Shriprakash and Chowdhury S. Expenditure on Education. Theory, Models and Growth New Delhi: NIEPA
32. Singh R. P. (ed.) (1993) Private Initiative and Public Policy in Education New Delhi: Federation of Managements of Educational Institutions.
33. Tilak J. B. G. (1989) Education and its Relation to Economic Growth Poverty and income Distribution: Past Evioen and Further Analysis Washington D. C.: The World Bank.
34. Tilak, J. B. G. (1994.) Education for Development in Asia New Delhi: Sage Publications

35. Tilak, J. B. G. (1992) Educational Planning at Grassroots New Delhi: Ashish Publishing House.
36. Tilak, J. B. G. (1987). The Economics of Inequality in Education New Delhi: Sage Publications.
37. Unesco(1972.) Educational cost Analysis in Action: Case Studies for Planners Paris
38. Vaisey, J.(1958) The Costs of Education London: George and Allen & Unwin Ltd..
39. Vaisey, J. (1972) Economics of Education London: G Duckworth and Co.
40. Vaizey, J. et al (1972). The Political Economy of Education London Gerald Duckworth & Co. Ltd.
41. Veena, D. R. (1987) Education and Economic Growth New Delhi: Ashish Publishing House.
42. Ward, F. C. (ed) (1974) Education and Development Reconsidered New York: Praeger Publishers
43. Wykstra R. A. (ed) (1971) Education and the Economics of Human Capital New York: The Free Press.

GROUP A PAPER 3 ENVIRONMENTAL EDUCATION

Course Objectives

To develop an understanding of

- Foundations in environment in terms of the concept and principles of environment
- Concept of environmental education
- Environmental management
- Environmental health and ethics
- Environmental impact assessment and audit

MODULE 1: FOUNDATIONS IN ENVIRONMENT

1. Basics of Environment

- a. Meaning of Environment, Biosphere: Lithosphere, Hydrosphere and Atmosphere and its Interdependence.
- b. Community ecology: (Territorialism, dominance hierarchies, Commensalisms, Mutualism, Symbiosis, Parasitism, and Competition.
- c. Ecosystem: Components (Biological and Physical), Types of Ecosystem and Functions of Ecosystem, Energy Flow in the Ecosystem

2. Pollution and Its Control Measures

- a. Concept of Pollution in the Context of Energy Loss.
- b. Major Global Pollution related Problems: (Nature, causal factors, consequences and control measures)
 1. Global Warming
 2. Radioactive Pollution
 3. Marine Pollution.
 4. Noise Pollution
- c. Important Provisions of Indian Constitution regarding Environmental Protection.
- d. Environmental Acts: Water (Prevention and Control of Pollution) Act- 1974, Air (Prevention and Control of Pollution) Act -1981, Environmental Protection Act (1986), Wild Life Protection act (1972), and The National Environment Tribunal Act 1995.
- e. Five Year Plans with regard to Environment.

3. Man and Environment

- a. Ecological balance; Meaning, Causes of Imbalance, Approaches towards Eco-balance
- b. Population Growth and Environment.
- c. Resource Exploitation and use of Technology: Impact on Land, Water and Climate.

MODULE II: CONCEPT OF ENVIRONMENTAL EDUCATION

4. Environmental Education

- a. Meaning of Environmental Education,
- b. Goals and Objectives of Environmental Education.
- c. Principles of Environmental Education.
- d. International Conferences on Environmental Education: Stockholm Conference (1972), UNESCO-UNEP (1975), Inter-governmental Conference (1977).
- e. National Educational Policy and Environmental Education (1992),
- f. Objectives of Environmental Education in School Boards: SSC, ICSE, CBSE, IGCSE, IB
- g. Environmental Education Objectives Framed by UGC

5. Role of Teacher and School

- a. Environmental Education and Course Content: Lower Primary, Upper Primary, Secondary, Higher Secondary and University Education
- b. Role of the Teacher in Environmental Education
- c. Approaches to Teaching: Interdisciplinary, Multidisciplinary and Problem Solving Approaches to Teaching of Environmental Education.
- d. Environmental Education Club.

MODULE III: ENVIRONMENTAL MANAGEMENT

6. Sustainable Development

- a. Sustainable Development: Meaning, Principles and Need.
- b. Sustainable Practices (Reduce, recycle, reuse, redistribute, revalue and restructure)
- c. Conservation of Medicinal Herbs, Crop Genetic Resources, Animal Genetic Resources and Useful Micro-organism
- d. Land: Importance of Land Types of Soil and Soil Profile, Land Degradation (desertification, deforestation, erosion, garbage dumping), Land Conservation

7. Forest Management:

- a. Role of the Forest in Environmental Equilibrium
- b. Guiding Principles of Forest Policy,
- c. Interdependence between Tribals and Forest,
- d. Concept of Three Dimensional Forest Farming,

8. Water Shed Management

- a. Meaning and Characteristics of Water Shed Management
- b. Importance of Maintaining the Aquifer
- c. Process of Water Shed Management

MODULE IV: ENVIRONMENTAL HEALTH AND ETHICS

9. Environmental Health

- a. Meaning of Environmental Health.
- b. Environmental Hazards: (Biological, Physical, Chemical, Psychological)
- c. Environmental Health Problems in India.
- d. Principles of Environmental Control to Prevent Diseases.

10. Environmental Ethics and Participation

- a. Concept of Environmental Ethics
- b. Concern for Vanishing Nature: Approaches -Anthropocentric Ethics, Eco-centric Ethics, Deep ecology.
- c. Public Participation: Meaning, Features, Objectives and Suggestions for Public Participation.
- d. Role of the Women in Conservation of Environment (Household, workplace, community)

MODULE V: ENVIRONMENTAL IMPACT ASSESSMENT AND AUDIT

11. Environmental Impact Assessment:

- a. Environmental Impact Assessment (EIA): Meaning, Goals,
- b. Environmental Inventory,
- c. Environmental Assessment and Environmental Impact Statement
- d. Environmental Impact Assessment Process.

12. Environmental Audit

- a. Meaning of Environmental Audit
- b. Significance of Environmental Audit.
- c. Environmental Audit procedure

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Critically analyze and compare the various approaches towards the concern for the vanishing wilderness.
2. Prepare a plan of action for teaching environmental education at the higher secondary level using the problem solving approach.

REFERENCES

1. Cunningham, W.P. Cooper, T.H. Gorhani, E & Hepworth, M.T. (2001) Environmental Encyclopedia, Mumbai, Jaico Publications House.
2. Murray B (1996) the Philosophy of Social Ecology: Essays on Dialectical Naturalism New Delhi, Rawat Publications.
3. Odum E.P Fundamentals of Ecology USA, W.B. Saunders Co.

4. Enger E.D, Bradley F.S Environmental Science- A Study of Interrelationship
5. Dhyani S.N. Wildlife Management New Delhi Rawat Publications
6. Rai R.K, Environmental Management: New Delhi, Rawat Publications.
7. Gupta N.L and Gurjar R.K (Eds.) Sustainable Development (2 Vols) :) New Delhi Rawat Publications.
8. Deb S.C Environmental Management, Jaico Publishing House, Mumbai
9. Singh P; Sharma S Environmental and Pollution Education, New Delhi Deep and Deep Publications.
10. Suneetha G; Rao D B Environmental Awareness of School Studies, Sonali Publication.
11. Singh M S Environmental Education Delhi Adhyayan Publishers.
12. Ranjan R. Environmental Education, New Delhi.Mohit Publication.
13. Krishnamacharyulu V, Reddy Environmental Education Hyderabad Neelkamal Publications.
14. Sharma R A Environmental Education Meerut R Lal Book Depot.
15. Ghanta R & Rao D B Environmental Education Delhi, Discovery Publication House.
16. Devi U, Reddy A, Environmental Education for Rural Population, Delhi Discovery Publication House.
17. Dutt, N H, Gopal, Environmental Pollution and Control, Hyderabad, Neelkamal Publication.
18. Saxena, A. B Education for the Environmental Concern New Delhi Radha Publication.
19. Paneerselvam & Ramkrishnan, Environmental Science Education Delhi, Sterling Publications.
20. Reddy P, Reddy N Environmental Education, Hyderabad Neelkamal Publication.
21. Nanda, V. K, Environmental Education New Delhi Anmol Publication.
22. Marilee G, Jeri M, Chakraborty C Environmental Studies Mannan Prakashan

23. Agarwal, K.C, (2001) Environmental Biology Bikaner, Nigi Publications Ltd.
24. Bharucha, E the Biodiversity of India Ahmedabad, Mapin Publishing Pvt. Ltd.
25. "Survey of the Environment" The Hindu
26. Townsend C., Harper J, and Michael Begon, Essentials of Ecology Blackwell Science.
27. Wanger K.D., (1998) Environmental Management. Philadelphia, W.B. Saunders Co.
28. Trivedi R.K. Handbook of Environmental Laws, Rules Guidelines, Compliances and Standards, Vols. I and II, Enviro Media (R)
29. Agarwal, K.M, Sikdar P.K, Deb, S.C A Textbook of Environment Kolkotta, Macmillan India Limited.

GROUP A PAPER 4 HISTORY OF EDUCATION

Course Objectives

To develop an understanding of

- Progress of education in ancient India- Vedic, Post Vedic and Buddhist Education
- Progress of education in medieval India- Islamic education
- Education during pre and post independent India
- The various committees and commission formed for the progress of education during pre and post independent India
- The various issues and trends in education in India

MODULE I: PROGRESS OF EDUCATION IN ANCIENT INDIAN EDUCATION- REVIEW

1. Vedic and Post Vedic Education

- a. Fundamentals of ancient Indian education
- b. Purpose of studying Vedas- Rig-Veda, Yajurveda, Atharvaveda, Samveda
- c. Educational system –main characteristics
- d. Female education
- e. Swadhaya or self learning
- f. Teacher – importance and duties
- g. Duties of a student
- h. Forms of educational Institutions:- Gurukulas, Parishads and Sammel

2. Buddhist Education System

- a. Characteristics of Buddhist Education
- b. Pupil:- Meals ,residence and curriculum
- c. Methods of teaching
- d. Female Education
- e. Comparison of Buddhist and Brahmanical Education

MODULE II: PROGRESS OF EDUCATION DURING MEDIEVAL TIMES

3. Islamic Education

- a. Introduction to Islamic Education
- b. State patronage and Growth of education during this time
- c. Primary Education (Maktabas)
- d. Higher Education (Madarsas)
- e. Female Education
- f. Student and Teacher relationship

MODULE III: EDUCATION DURING PRE INDEPENDENT INDIA

4. Anglicization of Education 1836-1855

- a. Exponents of Oriental Education
- b. The Anglicists
- c. Macaulay's Minutes and Its effect
- d. Female Education
- e. Woods' Despatch-1854 :- Recommendations

5. Indian Education and Educational Progress

- a. Indian Education Commission- Recommendations regarding Primary, Secondary and University Education
- b. The University Commission (1902)
- c. The Hartog Committee (1928-29)
- d. The Filtration Theory of Education

6. Important Development in Education During 1921--- 1937

- a. Inter University Board
- b. Establishment of new Universities
- c. Teachers Training
- d. Technical Education

MODULE IV: EDUCATION DURING POST INDEPENDENT INDIA

7. Various commission and policies on Education

- a. Secondary Education Commission 1953
- b. Education Commission 1964-66
- c. National Policy on Education 1986
- d. Rammurthy Review Committee 1990
- e. National Commission on Teachers 1999
- f. National Focus Committee 2004

8. Some Problems of Indian Education

- a. Problems of wastage and stagnation
- b. Examination Reform
- c. Inclusive Education
- d. Education for Marginalized Group

9. Trends and Issues in Education

- a. National Knowledge Commission
- b. Impact of Globalization on Higher Education
- c. Millennium Development Goal given by UNESCO Highlighting Education
- d. Privatization of Higher Education

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Critical and comparative analysis of any two commissions on education in post independent India
2. Analyze any two problems in education having a historical bearing and suggest measures to overcome them.

REFERENCES

1. Dash M. (2000). Education in India: Problems and Perspectives, Eastern Book Corporation
2. Ghosh S.C. (2007). History of Education in India, Eastern Book Corporation
3. Jain M. (2003) History in the New NCERT Textbooks Fallacies in the IHC Report, Delhi NCERT.
4. Lall M. (2005) The Challenges for India's Education System, Chatham House: London
5. Mookerji R. K.(1990) Ancient Indian Education: Brahmanical and Buddhist Delhi, Motilal Banarsidas, Publishers.
6. Ramchandra P. and Ramkumar V. (2005). Education in India, Eastern Book Corporation
7. Rawat, P. L.(1956) History of Indian Education: Ancient to Modern, Delhi, Bharat Publications
8. Reyhner J. (2004) History of Indian Education, Vohra Publishers
9. Sharma R (2006) History of Indian Education, Shubhi Publishers
10. Vashist R. (2005). History of Education in India, Eastern Book Corporation

GROUP A PAPER 5 POLITICS OF EDUCATION

Course Objectives:

To enable students to

- Understand the concepts of politics and political system
- Understand the inter-relationship between politics and education.
- Acquire knowledge of policy making process with special reference to education.
- Understand the educational issues in India relating to politics.

MODULE I: CONCEPTUAL BACKGROUND

1. Theoretical Framework

- (a) Concept of Politics and Political System
- (b) Properties and Characteristics of Political System
- (c) Approaches to the study of Political Systems: (i) Structural- Functional Approach, Gabriel Almond Model), (ii) Input and Output Approach (David Easton's model).

2. The Political System

- (a) Structures of Political System
- (b) Functions of Political System
- (c) The Indian Political System
 - (i) Philosophy and Salient Features of Indian Constitution
 - (ii) Political Institutions (Executive, Legislative and Judicial.)
 - (iii) Political Culture in India.

3. Politics of Education

- (a) Role of the Government
- (b) Role of Interest Groups: Industry, Management, Teachers, Students.
- (c) Political Dimensions of Decentralisation of Education
- (d) Politics of Budget Allocation.

MODULE II: INTERRELATIONSHIP BETWEEN POLITICAL SYSTEM AND EDUCATIONAL SYSTEM

4. The Influence of the Political System on Education

- (a) Role of the State
- (b) Influence of Political Ideology on the Educational Aims, Policies and Programmes
- (c) Relationship between Political Culture and Educational Values.

5. The Influence of the Educational System on Politics

- (a) Role of Education in Transmitting Political Ideology
- (b) Role of Education in Political Socialisation
- (c) Role of Education in Political Stability and Development.

6. Political Change and Education

- (a) Concept of Political Change
- (b) Causes of Political Change
- (c) Influence of Political Changes in Twentieth Century in India on Educational Policy and Practice.

MODULE III POLICY MAKING IN EDUCATION

7. Framework of Educational Policy Analysis

- (a) Policy: Definition and Scope
- (b) Stages of Policy Making in Education
- (c) Conceptual framework of Policy Making
- (d) Elements of Educational Policy Analysis
- (e) Process of Generating Policy Options
- (f) Evaluating Policy Options and Making Policy Decision
- (g) Planning for Policy Implementation
- (h) Policy Implementation and Policy Impact Assessment
- (i) Sources of Educational Policies: (i) Constitution, (ii) Legislation, (iii) Judicial decisions, (iv) Recommendations of Committees and Commissions and (v) Political Party Manifestoes.

8. Educational Policy and Values

- (a) Influence of Educational Policy on Social, Economic and Institutional Values in the Indian Context.
- (b) Education and the Economy: Changing Circumstances.
- (c) Education for Socio-Economic Transformation.

MODULE IV: POLITICO-EDUCATIONAL ISSUES IN INDIA

9. Educational Movements in India

- (a) Students' Movements and Unrest
- (b) Teachers' Movements
- (c) Movement for Women's Education
- (d) Movement for Education of the Disadvantaged
- (e) Literacy Movement

10. Globalisation and Higher Education in India

- (a) Impact of Globalisation on: (i) Educational goals, (ii) Educational Structure, (iii) Teaching and Teachers, (iv) Assessment of Outcomes, (v) Role of Government.
- (b) Challenges of Globalisation with reference to (i) Equity and Equality Issues and (ii) Learning for Sustainable Development.
- (c) The Market as a Mechanism for Co-ordination, State Control and State Supervision in Higher Education. Innovations Necessary in Higher Education on Account of Globalisation.

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Critically analyse the role of education in political socialisation of students in the Indian context.
2. Elucidate the impact of globalisation on the system of higher education in India.

REFERENCES

1. Almond, G. A. & Coleman, J. S (1960) The Politics of Developing Areas, Princeton, N. J. Princeton University Press
2. Almond, G. & Powell, G. (1966) Comparative Politics: A Developmental Approach, Boston, And Little Brown & Co.
3. Almond, G. & Verba, S. (1963) Civic Culture: Political Attitudes and Democracy in Five Nations, New Jersey, Princeton University Press.
4. Apter, D. E. (1965) Politics of Modernization, Chicago, University of Chicago Press.
5. Bigala, J. C. B. (1978) A Framework of Political Socialization, Nairobi, Kenya Literature, Bureau.
6. Boyle, E. (1971) Politics of Education. Harmondsworth, Penguin.
7. Coleman, H. S. (1965) Education and Political Development, Princeton, N. J., Princeton University Press.
8. Easton, D. (1965) A Framework for Political Analysis, Englewood Cliffs, Prentice Hall,.
9. Easton, D. (1971) The Political System, Calcutta, Scientific Book Agency.
10. Frey, F. W. (1970) "Political Science, Education and Development," Fischer, J. (Ed) The Social sciences and the Comparative study of Educational Systems, Pennsylvania, International Textbook Co.
11. Halpin, A W. (Ed) (1958): Administrative Theory in Education, Chicago, University Mid- West Administer Center.

12. Haq, E. (1981) Education and Political Culture in India, New Delhi, Sterling Publishers Pvt. Ltd.
13. Johari J.C (1982) Comparative Politics, New Delhi, Sterling Publishers (3rd Edition).
14. Kogan, M. (1975) Educational Policy Making- A Study of Interest Groups and Parliament, London, George Allen and Unwin.
15. Kothari, R. (1972) Politics in India, New Delhi, Orient Longman.
16. Lindblom, C. E. (1968) Policy –Making Process, Englewood Cliffs, Prentice Hall.
17. Maheswari, S, (1984) Political Development in India, New Delhi, Concept Publishing Co.
18. McNay, I and ozga, J. (1985) Policy-Making in Education, oxford, Pergamon Press.
19. Morphet, E. L. Jones & Reller (1969) Educational Administration: Concepts Practices and Issues, Englewood Cliffs, Prentice Hall.
20. Morris-jones, W. H. (1971) The Government and Politics of India, London, Hutchinson (3rd Revised Edition).
21. Palmer, N. D. (1961) The Indian Political System, London, George Allen & Unwin,
22. Parson, T. (1958) "Some Ingredients of a General Theory of Formal Organisations" in Halpin, A. W. (Ed) : Administrative Theory in Education, Chicago, University Mid-West Administer Centre.
23. Pratte, R. (1977) Ideology and Education, New York, David McKay Co.
24. Pye, L. W. & Verba, S. (1969) Political Culture and Political Development, Princeton, N.J. Princeton University Press.
25. Rosenbaum (19750) Political Culture, London, Thomas Nelson.

26. Rudolph, S. h. & Rudolph, L. L. (Eds) (1972) Education and Politics in India, Delhi, Oxford University Press.
27. Seymour, C. (1968) The Press, Politics and the Public, London Methuen
28. Simmons, J. (1983) The Education Dilemma- Policy Issues for Developing Countries in the 1980s, Oxford, Pergamon Press.
29. Thomas, R. M. (1983) Politics and Education : Cases from Eleven Nations, Oxford, Pergamon Press.
30. Varsheny, U. (1983) Education for Political Socialization, Meerut, Meenakshi Prakashan.
31. Winter, H. R. & Bellows, T. J. (1977). People of Politics, New York, John Wiley & Sons.
32. Wringe, C. (1984) Democracy, Schooling and Political Education Introductory Studies in Philosophy of Education, London, George Allen and Unwin.

SPECIAL PAPERS

GROUP B

6. Curriculum Development.
7. Information and Communication Technology
8. Guidance and Counselling
9. Management of Education
10. Open and Distance Learning

GROUP B PAPER 6 CURRICULUM DEVELOPMENT

Course Objectives

To develop an understanding of

- Concept and foundations of curriculum
- Models of curriculum design
- Stages, inputs and agencies of curriculum development
- Trends and issues in curriculum development
- Curriculum transaction and evaluation

MODULE I. CONCEPT AND FOUNDATIONS OF CURRICULUM

1. **Concept, Scope and Goals of Curriculum**
 - a. Meaning, Definitions, and Characteristics of Curriculum
 - b. Scope of Curriculum
 - c. Goals and Functions of Curriculum
2. **Bases of Curriculum Planning**
 - a. Ideological Bases (National, democratic objectives)
 - b. Socio Cultural Bases (socio cultural reproduction and reconstruction
 - c. Psychological Bases(learner's needs and interests)
 - d. Historical Bases
 - e. International Norms (bench marking)

MODULE II: MODELS OF CURRICULUM DESIGN

3. **Traditional Models of Curriculum Design**
 - a. Academic/ Discipline Based Model
 - b. Competency Based Model
 - c. Social Functions / Activities Model (social reproduction and social reconstruction)
 - d. Individual Needs & Interests Model

4. **Contemporary Models of Curriculum Design**
- a. Outcomes Based Integrative Model.
 - b. Linear Objective – Based Model
 - c. Intervention Model
 - d. C I P P Model

MODULE III. STAGES, INPUTS AND AGENCIES OF CURRICULUM DEVELOPMENT

5. a. **Stages in Curriculum Development**

- i) Goal Specification
- ii) Planning for the Curriculum
- iii) Validation and Field Testing
- iv) Quality Control

b. **Curricular Inputs**

- i) Selection of Content
- ii) Scope – Breadth, depth, variety & types of education experiences
- iii) Balance –Between subjects, learner centered and subject centered, individual and societal needs, tradition and innovation)
- iv) Sequence – Ordering of the content, activities and time factor (in which year, semester, etc.)
- v) Continuity - Spiralling of content upwards through the semesters/years.

6. **Curriculum Development**

- a. Teacher and University Departments / Colleges
- b. Board of Studies / Academic Council / Management council
- c. State Council of Higher Education
- d. National Level Statutory Bodies -- UGC, NCTE, ICAR, ICMR, AICTE

MODULE IV: TRENDS AND ISSUES IN CURRICULUM DEVELOPMENT

7. **Current Trends in Curriculum Development**

- a. Autonomy and Curriculum Development
- b. Institutionalization of Curriculum Development
- c. Curriculum for Inclusion
- d. e –learning and Curriculum Development

8. **Current Issues in Curriculum Development**

- a. Curriculum for International and Multicultural Education
- b. Curricular Provisions for Children with Special Needs
- c. Curriculum for new Socio Economic Order

MODULE V. CURRICULUM TRANSACTION AND EVALUATION

9. Curriculum Transaction

- a. Content Analysis – Facts, Concepts & Generalizations
- b. Specification of Objectives
- c. Selection of Methods & Media
- d. Selection of Evaluation Methods and Techniques

10. Curriculum Evaluation

- a. Need for Course Evaluation
- b. Sources of Evaluation - Stake holders
- c. Criteria for Curriculum Evaluation
 - i) Scientific Criteria –Internal Validity, External validity, Reliability, Objectivity;
 - ii) Practical Criteria – Relevance, Importance, Scope, Credibility, Timeliness, Pervasiveness
- d. Methods of obtaining evaluative information
- c. Using evaluative information.

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Critically analyze a curriculum at any level of education with respect to its relevance, scope and credibility.
2. Upgrade your curriculum so as to make it responsive to the new socio economic order.

REFERENCES

1. Association of Indian Universities, (1984) Monograph on Syllabus Analysis and Restructuring. New Delhi: Association of Indian Universities.
2. Beane, James, A., Conrad F. Toepfer, Jr. and Samuel J. Alessi, Jr. (1986) Curriculum Planning and Development. Boston: Allyn and Bacon Inc.
3. Brady, Laurie (1992) Curriculum Development. New York, Prentice Hall
4. Diamond, Robert M. (1989) Designing and Improving Courses and Curricula in Higher Education: A Systematic Approach, California: Jossey-Bass Inc.
5. Doll, Ronald C. (1986) Curriculum Improvement: Decision Making and Process (Sixth edition). London: Allyn and Bacon, Inc.
6. Goodson, I. F. (1994) Studying Curriculum. Buckingham Open University Press.
7. Gunter, Mary Alice; Thomas H. Estes and Jan Hasbrouck Schwab, (1990) Instruction: A Models Approach. Boston: Allyn and Bacon.

8. Khan, M.I. & Nigam, B.K. (1993) Evaluation and Research in Curriculum Construction. Delhi: Kanishka
9. Mamidi, Malla Reddy and S. Ravishankar (eds.), Curriculum Development and Educational Technology. New Delhi: Sterling Publishing Pvt. Ltd.
10. National Council of Educational Research and Training (1999). Special Issue on Curriculum Development. [Special issue]. Journal of Indian Education. 25(3).
11. Oliva, Peter F. (1988) Developing the Curriculum (2nd edition). Scotland: Foresman and Company.
12. Reddy, R. (2007) Principles of Curriculum Planning and Development. Delhi, Arise
13. Pratt, David (1980) Curriculum Design and Development. New York, Harcourt Brace Jovanovich Inc.
14. Saylor, J. Galen; William M. Alexander and Arthur J. Lewis (1980) Curriculum Planning for Better Teaching and Learning (4th edition). New York: Holt, Rinehart and Winston.
15. Taba, Hilda (1962) Curriculum Development: Theory and Practice. New York, Harcourt Brace Jovanovich.
16. Tyler, Ralph W. (1974) Basic Principles of Curriculum and Instruction. Chicago, The University of Chicago Press.

Some Useful Links:

17. <http://www.paisley.ac.uk/schoolsdepts/CAPD/signposts/curriculum-signpost.asp>
18. <http://www.ssdd.bcu.ac.uk/crumpton/curriculum-design/key-concept-map/obj-based-proc-model.htm>
19. <http://www.ncrel.org/sdrs/areas/issues/content/curriculum/cu3lk12.htm>
20. <http://www.infed.org/biblio/b-curric.htm>

GROUP B PAPER 7 INFORMATION AND COMMUNICATION TECHNOLOGY

Course Objectives

To develop an understanding of

- Overview of Educational Technology as a discipline
- Psychological Principles of ICT
- Instructional Design (ID)
- Computer, Internet and its application

MODULE I: OVERVIEW OF EDUCATIONAL TECHNOLOGY AS A DISCIPLINE

- 1. Concept of Information, Communication and Educational Technology**
 - a. Concept of Information Technology, Communication Technology and Instructional Technology
 - b. Concept of Educational technology
 - c. Need and Significance of ICT in Education
 - d. Historical Perspective of Educational Technology (with reference to the above mentioned concepts)
 - e. Emerging trends in Educational technology (with reference to the above mentioned concepts)

MODULE II: PSYCHOLOGICAL PRINCIPLES OF ICT

- 2. Learning and ICT**
 - a. Learner Characteristics (Learner Analysis)
 - b. Learning Environment
 - c. Processes Associated with ICT Learning,
 - d. Factors Affecting and Facilitating ICT Learning
 - e. Application of Theories of Learning to ICT
 - i. Behaviourism
 - ii. Cognitivism
 - iii. Constructivism
 - f. Adult Learning and Learning Styles

MODULE III: INSTRUCTIONAL DESIGN (ID)

- 3. Concept of Instructional Design (ID)**
 - a. Concept of ID
 - b. Levels of ID
 - c. Overview of Theories and Models of ID
 - d. ADDIE Model
 - e. Dick and Carey Model
 - f. Stages of Development of ID

MODULE IV: COMPUTER, INTERNET AND ITS APPLICATION

4. Computers in Education

- a. Computer Hardware
- b. Computer Software
- c. Application of Computers in Education
 - i. CAI,CAL,CBT,CML [Characteristics and uses]
 - ii. Preparation of CAI Package
 - iii. Evaluation of CAI Package

5. Internet in Education

- a. Internet Tools, Search Engines and Browsers
- b. Application of Internet Resources to Education
- c. Synchronous and Asynchronous Mode of Internet Communication
- d. Educational Portals
- e. Online Learning and Online Evaluation

MODULE V: DEVELOPMENT OF SELF LEARNING MATERIAL AND RESEARCH IN ICT

6. Concept and Preparation of Self Learning Material (SLM)

- a. Concept of SLM
- b. Concept of programmed Learning Material (PLM)
- c. Historical overview of SLM and PLM
- d. Types of PLM (Linear, Branching, Mathetics)
- e. Preparation of SLM
- f. Evaluation of SLM

7. Research in ICT

- a. Overview of researches conducted in ICT
- b. Emerging research trends in ICT

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Identify websites using search engines for any educational topic.
2. Preparation of Self Learning Material in any one subject.

REFERENCES:

1. Clarkson, P. D, A. and Toomey, R. (1999) Whole School Reform and the Use of ICT: An Evaluation of the Navigator Schools Project. Melbourne: Department of Education, Employment and Training.

2. Dowling C., Kwok-Wing Lai (2003) Information and Communication Technology and the Teacher of the Future, International Federation for Information Processing Published by Springer
3. Eric E. B., Eric Braun (1994) The Internet Directory: A Guide to Internet, Usenet, and Bitnet, Fawcett Columbine, Original from the University of Michigan
4. Ghosh, P.P. ((2005) Modern Educational Technologies, Aavishkar Publishers, Distributers. Jaipur, Rajasthan.
5. Johnson, D. (1996). Evaluating the Impact of Technology: The Less Simple Answer, the Educational Technology Journal, Vol. 5, No. 5, January
6. Laurence, J C. (2006) Impact of Digital Technology on Education, Rajat Publication, New Delhi.
7. Marilyn Leask, (2001) Issues in Teaching Using ICT, Published by Routledge
8. Sagar K. (2005) Digital Technology in Education, Author press publication, New Delhi.

GROUP B PAPER 8 GUIDANCE AND COUNSELLING

Course Objectives

To develop an understanding of

- Concept, need of guidance
- Career guidance
- Concept, approaches and testing in counselling
- Counselling and intervention strategies in contemporary times

MODULE I: GUIDANCE: CONCEPT AND NEED

1. Concept of Guidance

- a. Meaning, Principles, Need and Scope of Guidance
- b. Meaning and Implications of Areas of Guidance in Global Context: Personal, Educational, Vocational, a-Vocational, Social, Moral, Health and Leisure-time
- c. Types of Guidance: Individual Guidance and Group Guidance.
- d. Agencies of Guidance: International, National, State and Local Levels.

2. Guidance for Population with Special Needs

- a. Mentally Challenged Learners: Slow Learners, Mentally Retarded and Gifted.
- b. Learning Disabilities: Dyslexia, Dysgraphia and Dyscalculia
- c. Disadvantaged Groups: Social, Economical and Educational (Over Achievers and Under Achievers)
- d. Women: Exploitation at Home and Work
- e. Senior Citizens: Emotional, Social and Physical Problems

MODULE II: CAREER GUIDANCE

3. Work and Mental Health

- a. Meaning of Work, Compensation and Incentives
- b. Relation between Work and Leisure and Work and Incentives
- c. Meaning, Characteristics and Need for Mental Health
- d. Role of Guidance Personnel in Promoting and Preserving Mental Health

4. Vocational Guidance

- a. Nature and Scope of Vocational Guidance
- b. Factors affecting Vocational Choice
- c. Approaches to Career Guidance, Employment Trends
- d. Holland's Theory of Career Development
- e. Burnout and Career Guidance

5. Occupational Information & Job Satisfaction

- a. Need and Sources of Occupational Information
- b. Methods of Collection, Filing, Classification, and Dissemination of Occupational Information
- c. Meaning and Factors of Job Satisfaction
- d. Relationship between Job Analysis, Job Specification and Job Profile

6. Psychometric Methods and Techniques for Guidance and Counselling

- a. Psychological Tests: Intelligence Tests, Interest Inventories, Aptitude Tests, Achievement Tests, Attitude Scales, Personality Tests.
- b. Other Testing Tools and Techniques: Sociometric Technique, Case Study, Cumulative Record Card, Autobiography, Observation, Interviews, Home visits.
- c. Ethical Basis in the Use of Psychological Tests and Tools

MODULE III: CONCEPT, APPROACHES AND TESTING IN COUNSELLING

7. Concept of Counselling

- a. Concept: Meaning, Principles, Goals, and Types of Counselling.
- b. Counselling Processes: Stages and Skills
- c. Characteristics and skills of a Counsellor
- d. Counsellor's Role and Functions
- e. Types of Counselling: Directive, Non-directive, Eclectic and Online

8. Counselling Approaches

- a. Cognitively Oriented Counselling Approaches: Trait and Factor
- b. Affectively Oriented Counselling Approaches: Psycho analytic.
- c. Conditions Influencing Counselling: Physical Setting, Privacy, Recording
- d. Legal and Ethical Considerations in Counselling

MODULE IV: COUNSELLING AND INTERVENTION STRATEGIES IN CONTEMPORARY TIMES

9. Counselling in Current Areas

- a. Conflict Resolution
- b. Training for Assertiveness
- c. Stress Management
- d. Life Style Planning
- e. HIV /AIDS: Pre, Post Counselling and Stigma.

10. Intervention Strategies

- a. Rational Emotive Therapy
- b. Crisis Intervention Techniques
- c. Grief and Bereavement Intervention Strategies
- d. Disaster Management

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Conducting and Reporting a Case Study of any Individual with Special Needs.
2. Preparation of a Job profile of any one Career.

REFERENCES

1. Agarwal J.C. (1985) Educational Vocational Guidance and Counselling, Doaba House New Delhi.
2. Bernard Harold W. (1969) Principles of Guidance Allied-Publishers Pvt. Ltd, New Delhi.
3. Bernard and Fullmer (1972) The School Counsellor Consultant Boston, Houghton Mifflin Company.
4. Bhati S.S. (1979) Jobs Careers and Personality New Delhi, Indian-Institute of International Understanding.
5. Borrow Harold W. (1973) Career Guidance for a New Age Boston, Houghton Mifflin Company.
6. Chibber S.K. (1999) Guidance and Counselling Common Wealth Publishers, New Delhi
7. Drummond, R. J. and Ryan, C. W. Career Counselling And Development Approach Prentice hall of India, New Delhi.
8. Gothard, W.P.: (1985) Vocational Guidance Theory and Practice, Croom Helm London.
9. Hoppak R. (1976) Occupational Information: Where to Get and How to Use in Counselling and Teaching, Mc Graw Hills Publications New York.
10. Jaffrey A. Kotler and Elien Kothar, (1993) Teacher as a Counsellor, Sage Publication London.
11. Jones, J.A., (1979) Principles of Guidance, Mc Graw Hill New York.
12. Kemp Gratton (1978) Foundations of Group Counselling Prentice Hall of India Pvt.Ltd New Delhi.
13. Kochhar, S.K., (1980) Guidance and Counselling, Sterling Publishers, New Delhi.
14. Kevin, Anglo (1987) Vocationalizing Education an International Perspective Pergamon Press, Oxford London.
15. Mosher, Carle, Kehas (Ed) (1972) Guidance on Examinations, Harcourt, Brace & Wond.
16. Mc Daniel. Henry (1956) Guidance in Modern School. Holt, Rinehart and Winston New York.
17. Nanda, S.K. and Sharma S., (1992) Fundamentals of Guidance, Chandigarh.

18. Nelson Richard (1972) Guidance and Counselling in the Elementary Schools. United States of America, Library of Congress.
19. Norris, Zeran, Hatch and Engeljes (1972) The Formation Service in Guidance, United States of America Rand McNally College Publishing Company.
20. Pedersen, (1996) Counselling Across Cultures Sage Publications London.
21. Sharma .Ram Nath (1999) Guidance and Counselling, Surjeet Publication, Delhi.
22. Sharma S.R. (1984) Research in Educational and Vocational Guidance, Anmol publications Pvt.Ltd New Delhi.
23. S.K. Gupta (1985) Guidance and Counselling in Indian Education, Delhi Mittal publication,
24. Shattle C.L. (1989) Occupational Information, its Development and Application (3rd Ed). Englewood Cliff New Delhi, Prentice Hall of India.
25. Shaw Merville (1973) School Guidance System, Boston Houghton Mifflin Company.
26. Shertzer B. and Stone,(1973) Fundamentals of Guidance Bogotá Mifflin Company , New York
27. Willey and Strong, .(1970) Group Procedures in Guidance, Harper and Brothers, New York
28. Winni Cott. D.W., (1995) Counselling and Therapy, Sage Publications London.
29. Wrenn C.Gilbert(Ed) (1968) History of Elementary School Counselling. Boston, Houghton Mifflin Company.

GROUP B PAPER 9 MANAGEMENT OF EDUCATION

Course Objectives

To develop an understanding of

- Concept and evolution of Management of Education
- Functions, roles and skills of Educational Manager
- Essentials of education management in terms of planning, organizing, staffing, leading, and controlling.
- Organizational Behaviour
- Trends and future perspectives in education management in terms of Change management and Quality Improvement Methodologies

MODULE I CONCEPT AND EVOLUTION OF MANAGEMENT OF EDUCATION

1. Management and Education

- a. Meaning and Concept of Management
- b. Difference Between Administration and Management
- c. Evolution of Management of Education
- d. Need and Objectives of Management of Education
- e. Approaches to Education Management with Special Reference to Human Relations Approach, Systems Approach and Contingency Approach

2. Role of an Education Manager

- a. Managerial roles and skills
- b. Competencies of an Education Manager: Personal, Interpersonal, Academic and Professional
- c. Functions of an Education Manager : Planning, Organizing, Staffing, Leading, Decision Making, Supervising and Controlling
- d. Relationships with Stakeholders : Internal and External Stakeholders
- e. Code of Conduct for Educational Manager

MODULE II ESSENTIALS OF EDUCATION MANAGEMENT

3. Planning and Education Management

- a. Nature, Purpose and Objectives of Planning
- b. The Hierarchy of and Steps in Planning
- c. Management by Objectives (MBO)
- d. Strategic Planning for Educational Management

4. Organizing and Education Management

- a. Nature , Purpose and Principles of Organizing
- b. Process of Organizing: Departmentalization, Decentralization, Delegation
- c. Designing Effective Organizations: Virtual or Network Organizations, Collateral Organizations

5. Staffing and Human Resource Management

- a. Nature, Purpose and Objectives of Human Resource Planning
- b. Recruitment, Selection and Orientation
- c. Training and Development of Human Resources
- d. Mechanisms for Human Resource Development: Potential Appraisal and Development, Performance Appraisal, Performance Counselling, Job Rotation, Job Enrichment

6. Leading and Education Management

- a. Leader: Characteristics of Effective Leader
Difference between a Leader and Manager
- b. Functions of a Leader: Decision Making, Problem Solving, Team Building, Coaching and Mentoring
- c. Approaches and theories to Leadership
 - i. Trait Approach
 - ii. Behavioural Approach: Iowa Study (Autocratic, Democratic, Laissez-Faire) Likert's 4 styles and Blake & Mouton's Managerial Grid
 - iii. Contingency Approach : Fielder Contingency Approach, House and Evan's Path Goal Theory
- d. Contemporary Issues in Leadership: Transformational Leadership, Woman as a Leader, Charismatic Leadership and Entrepreneur Leadership

7. Controlling and Education Management

- a. Nature and purpose of Controlling
- b. Process of Controlling
- c. Techniques of Controlling:
 - i. Budgetary
 - ii. Non-Budgetary
 - iii. Time and Event Network: PERT and CPM
 - iv. Management Information System (MIS)

MODULE III: ORGANIZATIONAL BEHAVIOUR

8. Understanding People in Organization

- a. Attitudes: Nature, dimensions and components of attitude. Function of an attitude (adjustment, value expression, ego-defensive, knowledge). Changing attitudes, Types of attitude(Job satisfaction and Organizational Commitment)
- b. Organizational Commitment: Meaning and outcomes of Organizational Commitment, Organizational Citizenship Behaviour

9. Behaviour Management

- a. Stress Management: Meaning, Causes, Symptoms, Types of stress. Relationship between stress and performance, Stress handling strategies
- b. Conflict Management: Meaning, Causes, Symptoms, Types of stress. Relationship between stress and performance, Stress handling strategies
- c. Time Management: Meaning, Approaches for managing time, Obstacles to Time management, Strategies of Time Management

MODULE IV: TRENDS AND FUTURE PERSPECTIVES IN EDUCATION MANAGEMENT

10. Change Management and Education

- a. Definition of Change, Nature of Change, Stages of Change, Lewin's 3 Step Model
- b. Individual Factors Affecting Change
- c. Force-Field Analysis
- d. Organizational Factors and Change

11. Future Perspectives: A Quality Improvement Methodology

- a. International Standardization Organizations (ISO) in Education
- b. Quality Assessment and Accreditation with Special Reference to NAAC, IQAC, IQAR
- c. Total Quality Management (TQM) in Education
- d. Six Sigma in Education (DMAIC Methodology)
- e. Tools for Improving Quality: Control Chart, Pareto Diagram and Cause and Effect diagram
- f. Techniques for Improving Quality: Benchmarking, SWOT Analysis and Failure Mode and Effect Analysis

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Discuss how Change arise Conflicts arise in Educational institutions and as an Education Manager how will you handle them for the Organizational Development
2. Discuss various strategies for improving Quality in Education.

REFERENCES

1. Aswathappa,K. (2005) Organizational Behavior (Sixth edition), Himalaya Publishing House, Mumbai
2. Bhote, K.(2003) *The Power of Ultimate Six Sigma*, in American Management Association, USA
3. Koontz, H. & Weilhrich, H. : Essentials of Management (5th Edition) , McGraw-Hill Publishing Company Ltd., New Delhi
4. Lewis,R & Smith D. Total Quality in Higher Education, New Delhi Vanity Books International.
5. Luthans, F (2003) Organizational Behavior (9th ed.), New Delhi The McGraw Hill International Edition,

6. McShane, S., Glinow, M., Sharma, R. (2003) Organizational Behaviour (3rd edition), The McGraw Hill Company.
7. Mohanty J. (1990) Educational Administration: Supervision and School Management, New Delhi Deep and Deep Publications.
8. Morrison, K. (1998) Management theories for Educational Change, Paul Chapman Publishing Limited.
9. Publishing Limited.
10. Mukhopadhyaya, M. (2000) Total Quality in Education, New Delhi NIEPA.
11. Kimble, J.A. Education Management: Theory & Practice, Nairobi University, Nairobi
12. Preedy, M Glatter, R. & Levacic, R. (1998) Educational Management: Strategy, Quality and Resources, Buckingham Open Univ Press.
13. Rao, VSP. (2006) Human Resource Management: Text and Cases, (2nd Edition)
14. Scheerens, J. et.al (2003) Educational Evaluation, Assessment and Monitoring: A Systemic Approach, Swets & Zentlinger Publications.
15. Stella, A. and Gnanam, A. (2003) Making the Most of Accreditation, Concept Publishing Company, New Delhi.
16. Stella, A. & Gnanam, A. (2003) Foundations of External Quality Assurance in Indian higher Education, New Delhi Concept Publishing Company.
17. Stella, A. (2001) Quality Assessment in Indian higher Education: Issues of Impact and Future Perspectives, New Delhi Allied Publishers Limited.
18. Stoner, J., Freeman, R and Gilbert (1984) Management, New Delhi Prentice Hall of India.
19. Tripathi, P.C. and Reddy, P.N. (2006) Principles of Management, New Delhi Tata McGraw-Hill Publishing Company Ltd.

GROUP B PAPER 10 OPEN AND DISTANCE LEARNING

Course Objectives

To develop an understanding of

- Open and Distance Learning (ODL)
- Curricular issues and trends of open and distance learning (ODL)
- Curriculum planning and transaction in open and distance learning (ODL)
- Planning and management of open and distance learning (ODL)

MODULE I: OVERVIEW AND CURRICULAR ISSUES AND TRENDS OF OPEN AND DISTANCE LEARNING (ODL)

1. Overview of Open and Distance Learning (ODL)

- a. Concept, nature and Scope of ODL
- b. Historical Perspective of ODL
- c. Significance of ODL in the Indian Context

2. Bases of Curriculum for ODL

1. Philosophical Foundations of ODL
2. Sociological Foundations of ODL
3. Psychological Foundations of ODL

3. Curricular Issues Related to ODL

1. Instructional Issues
2. Discipline Based Issues
3. Individual Based Curriculum
4. Relevance Based Issues
5. Curriculum and Ideology at Andragogic Level

4. Curricular Trends in ODL

1. Mass/Community Education
2. National Development
3. Rural Development.

MODULE II: CURRICULUM PLANNING AND TRANSACTION IN OPEN AND DISTANCE LEARNING (ODL)

5. Curriculum Planning for ODL

- a. Theories of Learning and ODL
- b. Theories of Communication and ODL
- c. Designing Instruction for ODL
 - i. Setting Educational Goals
 - ii. Deciding Learning Experiences
 - iii. Organizing the Content
 - iv. Deciding Evaluation Schemes

6. Curriculum Transaction in ODL

a. Instructional Design for ODL

- i. Analyzing system Requirements
- ii. Designing the System
- iii. Evaluating the System Effectiveness
 - a. Learner Characteristics in ODL
 - b. Instructional Media in ODL
 - c. Evaluation: Continuous and Terminal Evaluation

b. Instructional Techniques and Materials in ODL

- a. Concept and Characteristics of Self Learning Materials (SLM)
- b. Importance of SLM in ODL
- c. Development of SLM in ODL
- d. Criteria for Evaluation of SLM

c. Learner Support Systems

- a. Need for Learner Supports System in Distance Education
- b. Characteristics of Distance Learners
- c. Characteristics of Distance Learning
- d. Characteristics of Distance Education Institutions
- f. Characteristics of Distance Learning Materials

d. Enhancing Curricular Transactions

- a) Embedding Study Skills in SLM
- b) Counselling and Tutoring
- c) Feedback Mechanisms-Assignments and Term End Exam
- d) Role of ICT in ODL (Audio, Video, TV, Computers, Satellite Technology, Teleconferencing)
- e) Innovative Practices- Lab Based Learning, Net Based Learning, Project Based Learning, Summer Residential Schools

MODULE III: PLANNING AND MANAGEMENT OF OPEN AND DISTANCE LEARNING (ODL)

7. Planning & Management of O D L

- a) Institutional Mechanisms for O D L
- b) Role of Distance Teacher in DL
- c) Emerging Profile of a Distance Teacher
 - i. Academic Staff:
Curriculum designers, Course Coordinators, Course Writers, Editors, Assessors and Evaluators, Academic counsellors, Media Specialists.
 - ii. Non Academic Staff:
 - c. Planners & Decision Making Officers: Planning, Publishing, Printing, Material Distribution, Students Admission, Evaluation, Computer & Communications
 - b. Support Staff: Technical Assistant, Computer Operators, Typists, others.

c. **Technical Staff:**

- i. Printing Staff
- ii. A V Production Staff
- iii. Computer Staff
- iv. Library Staff

8. **Process and Types of Evaluation in ODC**

- a. Purpose & functions of Course Evaluation
- b. Techniques & Tools of Evaluation
- c. Types of Evaluation
- d. Students' Evaluation
- e. Institutional Evaluation
- g. Program Evaluation
- h. Personnel Evaluation

ASSIGNMENTS FOR INTERNAL ASSESSMENT

1. Distinguish between the curriculum transaction in traditional learning and Open and Distance Learning (ODL) with reference to learner characteristics and instructional media
2. Discuss curricular issues and trends related to Open and Distance Learning (ODL)

REFERENCES

1. Alvarado B.J. Agostino, S.G.D., and Balajios, M. G. (1991) "Orientation and Conceptualization of The Academic Quality Control Centre", in R. Schuemer(Ed) Evaluation Concepts and Practice in selected Distance Education Institutins, (pp 37-51), Hagen: Fern Universitat- Gesamthoebschule.
2. Arends, R. et al (1980) Continuous Strategies for Promoting Effective Staff Development ERIC Clearing House, Washington.
3. Arthenayake, N. R. (1998) "Profile of a distance teacher in the 21st century- A Developing World Paradigm' Prof G. Ram Reddy Third Memorial Lecture, Indira Gandhi National Open University, New Delhi.
4. Calder, J. (1994) Programme Evaluation and Quality: A Comprehensive Guide to Setting up an Evaluation System, London: Kogan Page Limited.
5. Daniel, John S. et al (eds) (19820) Learning at a Distance: A World perspective, Athabasca, Athabasca University Press.
6. Deshpande, P. M. and Mugridg I. (1994) Perspectives on Distance Education Quality Assurance in Higher Education, Vancouver: The Commonwealth of Learning.

59



7. Goad, L. H. (1984) Preparing Teachers for Lifelong Education, New York: Pergamon Press.
8. Griffin, C. (1983) Curriculum Theory in Adult and Lifelong Education: London: Croom Helm.
9. Hausa, H. (1997) Global Learning : the Paradigm Shift of Open and Distance Learning.
10. Holmberge, B. (1989) Theory and Practice of Distance Education, London, Routledge.
11. Knowles, M. S. (1970) The Modern Practice of Adult Education: Andragogy versus Pedagogy, Chicago: Association Press and Follett Pub. Co.
12. Koul, B. N. and Murugan, K. (1989) : A Report on the Workshop: Training the Trainers, Indira Gandhi National Open University, New Delhi.
13. Lawson, K. H. (1979) Philosophical Concepts and Values in Adult Education, Milton Keynes: The Open university Press.
14. Lovell, R. B. (1986) Adult Learning, London: Croom Helm.
15. Macdonald, J. B. (1965) "Educational Models for Instruction," in Macdonald, J.B. and Leeper, Robert, R. (eds), Theories of Instruction, Washington, D. C.
16. Mezirow, j. (1977) Perspective Transformation, Studies in Adult Education (1992), NIAE, Leicesier.
17. Mezirow, J. (1981) A Critical Theory of Adult learning and Education, Adult Education, 32(10), Washington.
18. Miller, J. K. (1989) Indira Gandhi National Open University, Open Learning i. 53-55.
19. Moore, M. G. (1985) : Some Observations on Current Research in Distance Education, Epistolodidaktika, 1, 35-62.
20. Mullick, S. p. (1995) Staff Development in Distance Education, IGNOU, New Delhi.
21. Open University (1985) Making Self-Instructional Material for Adults, Milton Keynes: Open University Press.
22. Ornstein, A. C. (1988) Curriculum Foundations: Principles and Issues, New Jersey: Prentice Hall.
23. Piaget, J. (1950) The Psychology of Intelligence, New York: Hart Court Brace.

24. Rogers, W. S. (1987) "Adapting Materials for Alternative Use," in Thorpe, M. and Grugeon. D. (eds), Open Learning for Adults, Harlow: Longmans.
25. Rowntree, D. 91992) Exploring Open and Distance Learning , London : Kogan Page.
26. Shinur, B. F. (1977): "Distance Education in Changing Technological Environment," Abstracts of the 18th ICDE World Conference on The New Learning Environment: Global Perspectives, June2-6, 1997, Pennsylvania State University, USA.
27. Rudolf, S. (Ed) (1991) Third Ed. Evaluation Concepts and Practice in Selected Distance Education Institutions, Hagen: ZIFF.
28. Sumalee, S. (1997) "Distance Education for Elderly People in Thailand," Eighteenth World Conference of the ICDE.
29. Tetemjai, T. J. and Mulkeen, T.A.(1986) "Designing Teacher Education for the Twenty-first
30. Century" The Journal of Higher Education,57(6)
31. Tetenbaum, T. J. and Mulkeen, T.A. (1986) Designing teacher Education for the Twenty-first Century, The Journal of Higer Education, 57,(6).
32. Youngman, Frank (1986) Adult Education and Socialist Pedagogy, London:Croom Helm.