

University of Poona

MASTER OF EDUCATION (M. Ed.) COURSE

(From June 1991)

R.5.1 Any person who has taken the degree of Bachelor of Teaching or Bachelor of Education of this University or a degree of another University recognised as equivalent thereto may be admitted to the examination for the Degree of Master of Education after having fulfilled the requirements as mentioned in R.5.2.

Students passing the B.Ed. (Physical Education) of any statutory University will be held eligible for the admission to the M.Ed. Course.

The medium of instruction of this course is either English or Marathi. The candidate appearing for M.Ed. Examination will have the option of answering all papers either in English or in Marathi provided that the option is exercised paper-wise only; and not section-wise or question-wise.

R.5.2 (a) The Examination for the degree of M.Ed. shall be by papers only.

(b) A candidate desiring to appear for the M.Ed. Examination must either :

(i) attend a college or any other Institution recognised for the purpose and shall keep two terms (one year's) to the satisfaction of the Head of the College or Institution.

OR

(ii) Complete the course under guidance of a recognised teacher to the satisfaction of the Head of the College or Institution during two academic years.

R.5.3 The general objectives of the M.Ed. Course are :

- (i) To prepare professional personnel required for staffing of colleges of Education;
- (ii) To prepare administrators and supervisors for positions of responsibilities in the Education Department and Education Planning.
- (iii) To prepare personnel for various Educational Services such as Psychological and Achievement Testing, Guidance and Counselling Curriculum construction and Production of Instructional Material.
- (iv) To prepare personnel with research and outlook for various fields.

R.5.4 The Scheme of papers for M.Ed. Examination is as under :

There will be two parts of this course :

Part I : Theory

Part II : Practical.

Part I : Theory Course

The theory course will consist of two groups :

Group A : Compulsory Papers : Four.

Group B : Optional Papers : Any two.

GRATIS

Group A : Compulsory Papers

1. Advanced Educational Philosophy and Sociology :
Duration 3 hrs.—Marks 100.
2. Advanced Educational Psychology :
Duration 3 hrs.—Marks 100.
3. Elements of Educational Research and Statistics :
Duration 3 hrs.—Marks 100.
4. History of Indian Education after Independence and Economics of Education :
Duration 3 hrs.—Marks 100.

Group B : 5 and 6 Optional Papers

Any two courses from the following :

- (i) Educational Administration and Planning :
Duration 3 hrs.—Marks 100.
- (ii) History of Western Education :
Duration 3 hrs.—Marks 100.
- (iii) Comparative Education: Study of Education Systems in U.S.A. & U.S.S.R. :
Duration 3 hrs.—Marks 100.
- (iv) Teacher Education :
Duration 3 hrs.—Marks 100.
- (v) Nonformal Education and Population Education :
Duration 3 hrs.—Marks 100.
- (vi) Education of Exceptional Children :
Duration 3 hrs.—Marks 100.
- (vii) Educational and Vocational Guidance :
Duration 3 hrs.—Marks 100.
- (viii) Experimental Psychology :
Duration 3 hrs.—Marks 100.
- (ix) Educational Statistics :
Duration 3 hrs.—Marks 100.
- (x) Testing and Measurement in Education :
Duration 3 hrs.—Marks 100.
- (xi) Principles of Curriculum and Textbook Development :
Duration 3 hrs.—Marks 100.
- (xii) Instructional Technology :
Duration 3 hrs.—Marks 100.

Part II : Practical

The Practical will carry 200 marks :

- | | |
|--------------------------|-------------|
| 7. Internal Examination | .. 50 Marks |
| 8. Seminars | .. 50 Marks |
| 9. Tutorials | .. 50 Marks |
| 10. Short Research Paper | .. 50 Marks |

R.5.5 The following are the syllabi for various papers :

Part I : Theory Courses : Group A—Compulsory Papers (Four)

Theory Courses : Group B—Optional Papers (Any Two)

Part II : Practical

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7. Internal Examination : 50 Marks.
There will be two Internal Examinations for all the six theory courses.
8. Seminars : 50 Marks.
There will be two term papers and there will be two seminars on this two term papers.
9. Tutorials : 50 Marks.
There will be twelve tutorials—two on each theory course.
10. Short Research Paper : 50 Marks.
The candidate will select a suitable topic for this short Research Paper and will complete the same under the guidance of a P.G. Teacher appointed by the Principal of the College. The short Research Report will be submitted to the College for appraisal by the committee appointed by the Principal. The guide of the candidate will also be one of the members of the Committee. The Committee will conduct Viva-Voce of the candidate and evaluate the report.

R.5.6 Standard of Passing :

- (a) To pass the M.Ed. Examination the candidate must secure at least 50% marks in aggregate and also 50% marks in each of the ten Heads of passing.

The Heads of Passing are :

Theory Courses 1 to 6 and Practicals 7 to 10.

Such successful candidates will be declared to have passed in Second Class.

- (b) Such of the successful candidates who appear for Part I and Part II at one and the same time and have secured at least 55% marks in each part and 60% marks or above in aggregate will be declared to have passed in First Class; and those who have secured 65% in each part, 70% marks in aggregate will be declared to have passed in First Class with Distinction.

- (c) The candidates who have obtained minimum 50% Marks or more in any of the Heads of passing but failed in the examination shall be eligible to claim exemption in such Head's of passing. Candidate's claiming examination will not be eligible for First Class, First class with Distinction or Merit. He/she will be declared to have passed in Second Class.

PART I : COMPULSORY PAPERS (GROUP A)

PAPER I : ADVANCED EDUCATIONAL PHILOSOPHY AND SOCIOLOGY

Objectives :

To develop understanding and appreciation of :

- (1) The interrelationship between Philosophy and Education.
- (2) The basic tenets principles and major developments of the major schools of Philosophy—Western and Indian.
- (3) The interrelationship between Sociology and Education.
- (4) Current problems arising in the field of Education.
- (5) To cultivate the habits of independent thinking, of changing concept and understanding in educational discipline.

Unit 1 : Philosophy of Education

Meaning and scope of Philosophy.

Need of Philosophy in life, Interrelationship between *Philosophy and Education*

Scope and functions of Educational Philosophy.

Unit 2 : Indian Schools of Philosophy

Vedic and Buddhist.

Their implications with special reference to the basic tenets, aims and ideals, curriculum, Methodology, teacher-Public relationship, freedom and discipline.

Unit 3 : Western Schools of Philosophy

(i) Idealism, (ii) Naturalism, (iii) Pragmatism, (iv) Realism, (v) Existentialism. (vi) Logical-positivism.

Their educational implications, with special reference to the basic tenets, aims and ideals, Curriculum Methodology, teacher-pupil relationship, freedom and discipline.

Unit 4 : Values and Education

Meaning of values. Types of values—Spiritual, Moral, Social and aesthetic, Need of Education for inculcation of human values.

Unit 5 : Sociology and Education

Meaning and Nature of sociology. Interrelationship between sociology and Education. Scope and functions of Educational sociology.

Unit 6 : Society and Education

Meaning and Need of Equality of educational opportunity and social justice with special reference to Indian society. Views of Paulo Freire regarding education of the underdeveloped society.

—De Schooling of Education and views of Evan Illich.

Unit 7 : Political Ideologies and Education

Major Political Ideologies—Totalitarian and Democratic

Totalitarian—Meaning, Main features, aims of Education, curriculum, Methods of teaching, school—Administration.

Democracy—Meaning, values, Main features of Democratic education, aims, curriculum, Methods of teaching and school Administration.

Unit 8 : Modern Technology and Education

Scientific, Industrial and Technological Developments and their bearing on education. Views of Marshall Mchuhan on Modern Technology and Education. Impact of Modern Technology and Indian Education.

Books recommended

1. Philosophical Basis of Education—Rusk.
2. Groundwork of the theory of Education—Ross.
3. Modern Philosophies of Education—Brubacher.
4. Education—Its data and first Principles—Sir Percy Nunn.
5. Education and Social orders—Bertrand Russal.
6. Four Philosophies of Education—Butler.
7. Education in New Era—L. L. Kancel.
8. Foundation of Education—V. P. Bokil.
9. Introduction of Philosophy of Education—Sichia Henderson.

10. Educational sociology— Brown.
11. The social purpose of Education— K. C. Collier.
12. A Sociological approach to education— Cook and Cook.
13. Education and Society— Ottaway.
14. School and Society— Dewey.
15. Principles and Methods of Education— J. S. Walia.
16. The teacher and Education in Emerging Indian Society— N.C.E.R.T. Publication.
17. The Philosophical and Sociological Foundation of Education— K. Bhatia and B. Bhatia.
18. Human Values and Education— S. P. Ruhela.
19. Philosophy of Education— A. S. Saatharaman.
20. Pedagogy of the oppressed— Paulo Freire.
21. शिक्षणाची तात्त्विक व समाजशास्त्रीय भूमिका— डॉ. रा. पारसनीस.
22. शैक्षणिक तत्त्वज्ञान व शैक्षणिक समाजशास्त्र— डॉ. न. ना. कुंडळे.
23. De Schooling society— Evan Illich.

PAPER II : ADVANCED EDUCATIONAL PSYCHOLOGY

Objectives :

- (i) To Develop understanding and appreciation of the Psychological basis of education.
- (ii) To develop the ability to analyse and evaluate elements of the teaching-learning process.
- (iii) To develop understanding of the behavioural and educational problems of students and teachers.

SECTION I

Unit 1 :

- (a) Nature and Scope of Educational Psychology.
- (b) Methods of Psychological Studies.
 - (i) Experimental.
 - (ii) Differential.
 - (iii) Clinical.
 - (iv) Case Study.
 - (v) Psycho-analytical.

Unit 2 :

- (a) Growth and Development.
 - (i) Concept of Growth and Development. Theories of development— Maturation theories, Behaviour—Learning theories, Adaptation theories, Psychodynamic theories, Factors influencing development.
 - (ii) Physical, Intellectual, Emotional, Social, Moral and Personality Growth and Development at the following stages— Prenatal, Infancy, Early childhood, Later childhood, Adolescence and Youth.
 - (iii) Normal and Abnormal Growth and Development.
 - (iv) Personality Development of the teacher.
 - (v) Educational Implications.

(b) Heredity and Environment.

- (i) Mechanisms of Heredity, Law of Heredity.
- (ii) Experiments of Modogall, Weisman, Lamark, Natural Selection.
- (iii) Influence of Heredity and Environment on Growth and Development, Nature-nurture Issue, Interaction Principle.

Unit 3 : School of Psychology

- (i) Every School of Psychology started as a revolt against the established order.
- (ii) Main tenets of the schools of Psychology. Functional, Structural, Associationism, Hormic, Behaviourism, Gestalt, Psycho-analytic.
- (iii) Contribution of the above schools of psychology to the field of education.
- (iv) Indian Psychology.

Unit 4 : Social Psychology

- (a) Meaning, Definition and need to study Social Psychology.
- (b) Types of groups.
 - (i) Genesis of groups.
 - (ii) In-groups and Out-groups—Meaning, Examples and characteristics.
 - (iii) Primary and Secondary groups—Meaning, Examples and Characteristics.
- (c) Group Dynamics Concept and Importance.
- (d) Leadership :
 - (i) Characteristics.
 - (ii) Functions.
 - (iii) Types.
 - (iv) Training for Leadership.
- (e) Educative use of group life.
 - (i) Importance of group life in schools.
 - (ii) Associations in schools.
 - (iii) Residential Schools.
 - (iv) Professional Associations.

SECTION II**Unit 5 : Learning and Teaching**

- (a) Historical Review of the Learning Theories. Mental Discipline, Unfoldment, Apperception, Behaviourism, Gestalt Psychology.
- (b) Current Learning Theories.
 - (i) Skinners' Operant Conditioning.
 - (ii) Gagne's Behaviouristic—Electric view.
 - (iii) Bandura's Social Learning Theory.
 - (iv) Lewin's Field Theory.
 - (v) Ausbl's Meaningful Verbal Learning.
 - (vi) Bruner's Cognitive Structure Theory.
 - (vii) Carl Roger's Phenomenological Theory.
 - (viii) Bloom's Mastery Learning.
- (c) Implications of the above theories for Transfer of Learning.
- (d) Relationship between Learning and Teaching (N.L. Gage's views).
- (e) Four Families of Models of Teaching : Information Processing personal, Social Behavioural.

Unit 6 : Individual Differences

- (a) Types of Individual Differences.
 - (i) Physical differences—Age, Sex, Height, Weight etc.
 - (ii) Mental differences—Intelligence. Aptitudes, Interests, Personality traits. Attitudes, Values etc.
- (b) Measurement of Individual Differences.
 - (i) Need of Measuring Individual Differences.
 - (ii) Tools for measuring Mental Differences.
 1. Tests for measuring sensory abilities.
 2. Tests for measuring intelligence.
 3. Aptitude Tests—Tests of mechanical aptitude, Clerical aptitudes. Tests to measure aptitude in music, graphic arts etc. Test to measure multiple aptitude, General Aptitude Test Battery (CATB).
 4. Interest Inventories—Strang's Vocational Interest, Blank Kunder's Preference Record.
 5. Measuring Personality Traits.

Unit 7 : Intelligence

- (a) Theories of Intelligence—Historical review of Spearman's two factor theory. Thorn dike's multi factor theory. Thurstone's group factor theory and Thompson's sampling theory.
- (b) Guilford's structure of Intellect.
- (c) Measurement of Intelligence.
 1. Acquaintance with at least one test from each of the following.
 - (i) Verbal.
 - (ii) Non-verbal.
 - (iii) Individual.
 - (iv) Group.
 - (v) Performance.
 2. Tests of Intelligence prepared in India.
 3. Limitations of Intelligence Tests.
- (d) Creativity—Its nature and relationship with intelligence.

Unit 8 : Personality

- (a) Concept of Personality.
 - (i) Meaning and Definitions.
 - (ii) Influencing factors—Heredity and Environment.
- (b) Theories of Personality.
 - Families—(i) Type.
 - (ii) Trait.
 - (iii) Personality dynamics.
 - (iv) Personality of structure.
- (c) Measurement of Personality.
 - (i) Need for measurement of Personality.
 - (ii) Types of personality measurement—Trait: Projective Wholistic.
 - (iii) Educational Implications of Measurement of Personality.
- (d) Neurotic Personality.
 - Causes and types of Neurotic Personality. Teacher's Role in the detection of Neurotic personality.

Practical Work

Students are expected to administer any one of the following tests to one subject :
 (a) Individual intelligence test, (b) Personality test, (c) Aptitude test.

Books Recommended

1. Introduction to Psychology by Munn Norman L. Oxford and IBH Publishing Co., New Delhi.
2. Contemporary School of Psychology by Woodworth R.S., Methuen and Co. Ltd., London.
3. Advanced Educational Psychology by Kuppaswamy, University Publisher, Delhi.
4. Foundations of Educational Psychology by Jayaswal L.R., Allied Publishers, Bombay.
5. A Text-Book of Educational Psychology by Hansraj Bhatia, Asia Publishing House.
6. Systems and Theories of Psychology by Chaplin and Krawiec Holt Rinehart Winston Publishers.
7. Individual in Society by Kretch and Crutchfield, McGraw Hill Book Co., New York.
8. Seven Psychologies by Heidebreder Publisher Appleton Century Crofts, Educational Division, New York
9. Models of Teaching by Bruce Joyce and Marshal Weil, 2nd Edition, Prentice Hall of India Ltd.
10. Learning Theories for Teachers by M. L. Bigge, 4th Edition, Harper and Tow Publishers.
11. General Psychology by J. P. Guilford 2nd Edition. Affiliated East West Press Pvt. Ltd.
12. Foundation of Educational Psychology by J. S. Walia, Poul Publishers, Jullundhar.
13. Introduction to Psychology by Hilgard & Atkinson, 6th Edition, Oxford & IBH Publisher, Bombay.
14. Advanced Educational Psychology by S. S. Chauhan, Vikas Publishing House, New Delhi.
15. Educational Psychology by K. G. Rastogi, Rastogi Publication, Meerat.
16. Foundations of Psychology by Boring, Lanfheld, Weld. Asia Publishing House.
17. Educational Psychology by Crow & Crow, American Book Company, New York.
18. Educational Psychology by Skinner. Prentice-Hall.
19. Psychology of Education by Sorenson, McGraw-Hill Book Co., Inc., New York, San Francisco, Toronto, London.
20. Contemporary Theories and Systems in Psychology by Benjamin B. Wolwan, Harper & Row Publication, New York.
21. Systems and Theories in Psychology by M. H. Marx and William, A Hillix, McGraw Hill Publication.
22. Theories of Psychology by Aun F. Neel, University of London Press.
23. A Hundred Years of Psychology by J. C. Flugel, University Paper Back Edu., Methuen & Co.
24. Social Psychology by Otto Klineberg, Holt Rinehart, Winston Publication.
25. Social Psychology by Lindgreen.
26. A Learning and Memory by V. K. Kothurkar, K. Wiley Eastern Ltd., Bombay (1985).
27. The Conditions of Learning by R. M. Gange, 1983-3rd Edition Holt Sounder International Editions, Japan.

28. *The Social Psychology of Teaching* by Morrison A. and McIntyre D. 1980, Penguin Books Ltd.
29. *Theories of Learning* by Bower, G.H. & Hilgard E. R., 5th Edition 1986, Prentice Hall of India, New Delhi.
30. *Essentials of Learning* by Travers R.M.W., *The New Cognitive Learning for students of Education*, 1982, 5th Edition, McMillan Publishing Co. Ins. New York.
31. *The Psychology of Learning and Instruction* by John P. Dececco. Prentice Hall of India Pvt. Ltd., 1970.
32. *Theories for Teaching* by J. Stiles, Dodd Mead and Crow, New York, 1974.
33. *The Psychology of Teaching Methods* by Gage N.L., The National Society for the Study of Education, Chicago, 1976.
34. *Handbook of Research on Teaching* by Gage, N. L. Rand McNally, Chicago, 1963.
35. *Cognitive Development* by Flavell, J. H., New Jersey: Prentice Hall, 1977.
36. *The Psychology of Learning* by Hulse, S. H., Eggeth H. and Dese J., 5th Edition, McGraw Hill, 1980, New York.
37. *The Process of Education* by Bruner J. S., Atma Ram & Sons, New Delhi, 1964.
38. *Theory and Practice of Psychological Testing* by Freeman, Oxford & I.B.H. Publishing Co.
39. *Psychological Testing* by Anastasi Anne, 3rd Edition, The McMillan Co., New York.
40. *Foundations of Education Psychology* by Dr. Sitaram Jayawal, Arnold Heinman Publishers, New Delhi.
41. *Creativity Education Today* by Cropley A. D., London. Longman Grees and Co. 1967.
42. *Intelligence and Attainment Tests* by P. E. Vernon.
43. *Creativity, its educational implications* (Ed. Grow and others) New York, Wiley 1967.
44. *Creativity and Education*, Lytton H. London, Routledge & Kegan Paul, 1971.
45. *Creativity and Personality*, Paramesh C. R., Janata Book House, Madras, 1972.
46. *Creativity in Education*, B. K. Passi, N.P.C. Agra, 1982.
47. प्रगत वैश्विक मानसशास्त्र—डा. पां. खरात, श्रीविद्या प्रकाशन, पुणे ३०.

PAPER III : ELEMENTS OF EDUCATIONAL RESEARCH AND STATISTICS

Objectives :

To enable the students to :

1. understand the concept of the scientific method.
2. understand the process of research.
3. differentiate among different types of research.
4. understand the process of educational research.
5. understand different methods of educational research.
6. understand the use of different tools and techniques of educational research.
7. use library for research purposes.
8. conduct an action research in the field of education.
9. use different types of statistics in his research projects.
10. present a research report and
11. criticise simple research articles/reports.

Unit 1 : The Scientific Methods

- (a) Need of generating knowledge.
- (b) Different sources of generating knowledge—Experience Authority, Deductive reasoning, Inductive reasoning.
- (c) Scientific method as a unique source.
 - (i) Characteristics.
 - (ii) Steps involved.

Unit 2 : The Research Method

- (a) Concept of Research and characteristics of Research.
- (b) Relationship between the scientific and the Research Method.
- (c) Functions of research.
- (d) Types of research—fundamental applied, action.

Unit 3 : Educational Research

- (a) Concept of educational research and its characteristics.
- (b) Steps involved in the conduct of educational research.
- (c) Different areas of educational research.
- (d) Sources of problems of educational research.

Unit 4 : Methods of educational Research

- (a) Historical.
- (b) Discriptive-Survey.
- (c) Experimental.

Unit 5 : Sampling and Techniques for sample Selection

- (a) Concept of sampling.
- (b) Rationale of sampling.
- (c) Types of sampling.
- (d) Techniques of sample selection.

Unit 6 : Tools and Techniques of Educational Research

- (a) Content or document analysis.
- (b) Questionnaire, Opinionnaire, Attitude Scale, Rating Scale. Check list, Observation, Interview Schedule. Sociometric Technique.
- (c) Achievement Tests, Intelligence Tests, Aptitude Tests, Personality Tests.

Unit 7 : Conduct and Report of an Action Research in Education

- (a) Location of a problem in the field or work.
- (b) Review of related literature—use of library resources.
- (c) Preparation of the research proposal.
- (d) Collection, analysis and interpretation of data.
- (e) Reporting the research project.

N.B. :—This unit bears a direct relation with the practical work.

(While teaching the following topics i.e. Units 8 and 9 use of published research reports recommended.)

Unit 8 : Use of Descriptive Statistics in Educational Research

- (a) Measures of central tendency and variability.
- (b) Graphic methods, percentiles and application.
- (c) Normal curve—its properties and application.
- (d) Coefficient of correlation by the product moment method.

Unit 9 : Use of Inferential Statistics in Educational Research

- (a) Predictions from regression equation.
- (b) Significance of the measures of central tendencies and variability.
- (c) Significance of the coefficient of correlation.
- (d) Sampling distribution and the use of standard Error Formula.

Books Recommended

1. Best, J. W., Research in Education (4th Ed. Prentice Hall of India, Pvt. Ltd, New Delhi, 1982).
2. Tuckman Bruce W. : Conducting Educational Research (Harcourt Brace Jovanovich, Inc., New York, 1978).
3. Garrett H. E. Statistics in Education and Psychology (Yakills Fisser & Simons Pvt. Ltd., Bombay, 1973).
4. Kuriz Albert J. and Samuel T. Mayo, Statistics in Education and Psychology (Narousa Publishing House, New Delhi, 1981)
5. Buch M. B., A survey of Research in Education (Centre of Advanced Studies in Education, M. S. University Baroda, 1974).
6. Buch M. B. et al' Second Survey of Research in Education.
7. Donald Ary, Lucy Cheser Jacobs, Asghar Razavich "Introduction in Research in Education" (Holt Rinehart and Winston, New York, 1979).
8. Kreppendorff Kians Content Analysis : An Introduction to its Methodology, Sage Publications. Beverly Hills, London, 1985.
9. Action Research- Corery.
10. Fox David J. : Techniques for the Analysis of Quantitative Data, Holt, Rinehart & Winson, Inc. 1969.
11. कृतिसंशोधन, म. राज्य पाठ्यपुस्तक निर्मिती व संशोधन मंडळ "बालभारती" सेनापती बापट मार्ग, पुणे ४.
12. शैक्षणिक संशोधन, डॉ. भा. गो. बापट, नूतन प्रकाशन, टिळक रोड, पुणे.
13. शैक्षणिक संशोधन, मुळे व उमाडे, श्री विद्या प्रकाशन.

**PAPER IV : HISTORY OF INDIAN EDUCATION
AFTER INDEPENDENCE AND ECONOMICS OF EDUCATION**

Objectives :

- (1) To acquaint with the general development and progress of Education after independence.
- (2) To assess and evaluate various plan-efforts put into effect from time to time.
- (3) To promote research and to suggest future schemes of education based on the needs of the nation.
- (4) To understand the concept of economics of education.
- (5) To appreciate its significance in the growth of education.
- (6) To promote research in the field of economics of education to accelerate the progress of education.

SECTION I**Unit 1 :**

- Provision for education in the constitution. Five Year Plans and education.
- Assessment of the development and progress made.

Unit 2 :

Education Commissions—University, Secondary and Indian Education. Their recommendations and fulfilment. Role of organizations like UGC, NCERT.

Unit 3 :

Spread and progress of education—professional, technological, vocational. Women's education. Education for handicapped persons.

Unit 4 :

The state of present day education—Primary, Secondary, University—regarding quality and quantity.

Unit 5 :

Appreciation of the needs of education. Need-based planning of education. Constant research, appraisal and experimentation.

SECTION II

Unit 6 : Concept of economics of education. Its scope. Its utility. Its resources. Its importance in the growth of education.

Unit 7 :

Central and State budgets—provisions for education in them. National income and per capita expenditure on education.

Unit 8 :

Education as a consumable commodity. Demand for education. Its aspects such as expenditure, investment and rate of return etc.

Unit 9 :

Education and economic growth. Manpower Development. Policy, Planning and employment opportunities.

Unit 10 :

Economic provisions for education. Financing agencies both private and government. Co-ordination of efforts. Avoidance of economic wastage in education.

Books Recommended**SECTION-I**

1. A History of Education in India and Pakistan, by F. E. Keay, D. D. Karve, Oxford University Press.
2. A History of Education in India by J.P. Naik and Nurulla, MacMillan & Co.

SECTION-II**(A) Prescribed**

1. The Economic Value of Education, by Schultz T. W. Columbia University Press, London, 1963.
2. An Introduction to Economics of Education, by Blaug M., Penguin, London, 1970.
3. The Economics of Education, by Atkinson G.B., J. Hodder and Stoughton, London, 1983.
4. Economics of Education—a trend report, by Kothari, V. N. and Pancharukhi P. R., in 'A Survey of Research in Economics of Education in India', I. C. S. S. R., New Delhi, 1975.
5. Education and Economic Growth in India, by Goel S. C. Macmillan, Bombay, 1975.
6. शिक्षणाचे अर्थशास्त्र, माटवडेकर भो. वि., मराठी अर्थशास्त्र परिषद, द्वारा—श्रीनय प्रकाशन, पुणे १९७८.

(B) Recommended

1. Economics of Education, Selected Readings Vol. I and II, by Blaug M. (Ed), Penguin, London, 1968.
2. Economic and Social Aspects of Educational Planning, Unesco, Paris, 1964.
3. Education, Manpower and Economic Growth, by Harbison. F. and Myers C. A. MacGrow Hill, London, 1964.
4. Readings in Economics of Education, Unesco, Paris, 1971.
5. Financing of Indian Education, by Mishru, Asia Publishing, Bombay, 1967.
6. Measurement of Cost Productivity and Efficiency of Education by Pandit H. N. N. C. E. R. T., New Delhi, 1969.

PAPERS V & VI : OPTIONAL PAPERS (GROUP B)**B—1. Educational Administration and Planning****Objectives :**

To enable students to :

- (1) acquire knowledge of the machinery and procedure of educational administration in India.
- (2) develop understanding of the problems of educational administration in India.
- (3) develop understanding of the planning of education in India and its socio-economic context.
- (4) develop appreciation of the financial problems of educational administration
- (5) develop skills in planning and implementing conventional administrative procedures.
- (6) get some insight into supervision, inspection and know trends of development.
- (7) get some knowledge about formulation of educational policy and strategy for use of research for policy decisions and qualitative improvement.

- Unit 1 :** (a) The concept of Educational Administration—Administrative functions, management and organizational control and direction;
 (b) Character of Educational Administration and its contrast with that in other fields.
 (c) Trends in modernization of administration.

Unit 2 : Trends in Educational Administration : authoritarian, democratic, delegatory, de-centralised, participatory, Administrator as a democratic leader; qualities as judgement, efficiency and leadership required.

Unit 3 : A comparative study of the structure of administration under Government of India Act of 1919, 1935 and the directives for education and other provisions in the Indian Constitution

Unit 4 : Central machinery/State machinery for educational administration, organization and functions of the Directorate of Education.

Unit 5 : Management and control of education, Distribution of work, extracting timely compliance; Interpersonal relations, humanitarian view, Assessment of the work of assistance

Unit 6 : Supervision and Inspection in Education, its meaning—scope and function; techniques and trends in educational supervision and inspection, Accreditation, improvement through self-reliance and self-help. Comparative study of patterns of supervision in India, UK, USA and France.

Unit 7 : Educational Planning, its meaning and Scope; difference between approaches of economists and educators; economic models of planning for developing countries; cost of education, type of educational costs—direct costs, opportunity costs and Unit costs; Methods determining the costs; decisive factor in costs.

Unit 8 : Perspective planning of education; important educational planning efforts for developing countries viz. The Karachi Plan, Adis Ababa Plan etc., Interrelationship of social indicator and planned educational development; Kothari Commission on Planning; Education in the Five Year Plans; man-power and planning with special reference to society and social needs; decentralization of planning; basis of policy for future educational planning an open system of education.

Unit 9 : Educational finance; Principles of educational finance; Method of financing education; Source of income—Govt., private and community; Patterns of investment in education—past, present, future; grant-in-aid principles, practices, types and procedures in respect of primary to University level.

Unit 10 : Educational policy— review of national and State level; measures for qualitative improvement; reformation of educational administration and planning at two of the following levels :

- (i) Primary Education. (ii) Secondary Education. (iii) Higher Education.
(iv) Teachers Education. (v) Vocational Education.

Books Recommended

1. Mukherji, S. N. . . Administration of Education in India, Acharya Book Depot, New Delhi.
2. Mukherji, S. N. . . Problems of Administration of Education in India Kitab Mahal, Allahabad.
3. Mathur S. S. . . Educational Administration—Principles and Practices, Krishna Brothers, Jallunder, 1967.
4. Campbell, R. F., J. E. . . Introduction to Educational Administration (4th Edn.) Corbally & J.A. Remseyer Beaters, Allen and Becon. 1971.
5. Aggarwal, J. C. . . Educational Administration, Inspection, Planning and Financing in India, Arya Book Depot, New Delhi.
6. Sears, J. B. . . The Nature of Administrative Process, Mcgraw Hill, New York, 1959.
7. Naik, J. P. . . The Role of Government of India in Education, Ministry of Education, Government of India, Delhi, 1963.
8. Glatter, R. . . Management Development for Education Profession, Harpar, London, 1972.
9. Asian Institute of Educa- . . Modern Management Techniques in Educational tional Planning and Administration, New Delhi, 1971.
10. Campbell R. F. and . . Administrative Behaviour in Education, Harper and Row, R. T. Grogg London, 1957.
11. Getzel, J.M., J.M.Lipman . . Educational Administration as a social process—Theory, & R. F. Campbell Research Practice, Harper and Row, New York, 1968.
12. Boardman, C. W. . . Democratic supervision in School, Houghton Milton C
13. Hicks Harne J. . . Educational Supervision and Practice, The Ronald Press Co., New York, 1980.

14. Gadgil, A. V. ..Supervision in Education, Shubhada Sarawsat, Pune, 1982.
15. N.C.E.R.T. ..Report of the Study Group on Supervision and Inspection, New Delhi.
16. UNESCO ..Economics and Social Aspects of Educational Planning, 1963.
17. Naik, J. P. ..Education Commission & After, Allied Publication Delhi, 1982
18. Naik, J. P. ..Planning in Education, Oxford University Press.
19. Naik, J. P. ..Educational Planning in India, Allied Publishers, New Delhi, 1965.
20. Naik, J. P. ..Educational Planning in a District (Asian Institute of Educational Planning and Administration, New Delhi), 1969.
21. Rao, V. K. R. V. ..Education and Human Resource Development, Allied Publishers, New Delhi.
22. Beeby, C. E. (Ed.) ..Qualitative Aspects of Educational Planning (IIEP) UNESCO Publication.
23. Ministry of Education ..Education in India, Education in States, Education in Govt. of India, New Delhi Universities.
24. Govt. of India ..Budget Documents and Five Year Plans.
25. UNESCO ..Financing in Education.
26. Misra Atmanand ..Educational Finance in India, Asia Publishing House, 1962.
27. NCERT, New Delhi ..First, Second and Fourth Year Book of Education.
28. Ministry of Education ..Education Commission, (Kothari) Report (1964-66). Govt. of India, New Delhi
29. Beeby, C. E. ..The quality of Education in Developing Countries, Harward Univ. Press, Cambridge 1973.
30. Harblson F. ..Educational Planning and Human Resource Development, (IIEP) UNESCO, 1967.

B—2. History of Western Education

Objectives :

After studying this paper student will be able

- (i) To explain the characteristics of education during each period.
- (ii) To explain the impact of various thinkers and their Philosophy on education.
- (iii) To explain the contribution of various thinkers to education.
- (iv) To compare education during various periods.
- (v) To explain the impact of Western education in Indian-Education systems.

Unit 1 : Education during Greek and Roman Period

(i) *Origin and Development of Greek Education :*

Spartan and Athenian Education. Sophism and education.

Greek educational Thoughts : Educational Philosophy contribution. Contribution of Socrates, Plato and Aristotle.

(ii) *Roman Education :*

Education in early Rome 800B.C. to 275 B.C. Later Roman education 275B.C. to 300 A.D. Characteristics of Roman education. Educational Philosophy and contribution of Marcus Tullius, Cicero, Marcus Fabius Quintillian.

Unit 2 : Medieval Period and Monastic systems of education

Impact of Christianity on education. Monasticism and Scholasticism.

Universities during the medieval period and their characteristics and special features.

Unit 3 : Development of Modern Education

(a) *Education during Renaissance and Reformation period* : Renaissance and its effect on education, Revolt against Church dominated education, Reformation and education, Humanistic education, Contribution of Martin-Luther.

(b) *Realism in education* :

Meaning and Types of Realism in education. Comenius and his contribution to the movement of Realism. His views on education and their significance.

Contribution and evaluation of educational Principles of Comenius.

(c) *Naturalism in education (18th)* :

Educational Naturalism. Meaning and significances of educational ideals of Naturalisms, Study of educational ideas and practices of the following thinkers.

Rousseau and Pestalozzi—

(d) *Scientific Tendency in Education* :

Meaning and significances; Her ideology and contribution of Herbert Spencer and T. S. Huxley to Education.

Unit 4 : The Growth of Democratic Education in 20th Century. Colonial Education in America. American educational awakening

Popularisation of Democratic education. Equality of Educational opportunity. Educational theory and contribution of John Dewey, White Head and Bertrand Russell.

Books Recommended

1. The main currents in the History of education. Edward J. power, McGraw Hill Book Company. New York
2. History of Educational Thoughts— Robert Ulich-Euresia publishing House(P) Ltd. Rannagar. New Delhi
3. Source Book of the History of Education for the Greek and Roman Period— Paul Monto. The MacMillan Company, London
4. History of Western Education.— Harry G. Good, James D. Teller. The MacMillan Company, Collier. MacMillan Ltd. London.

B-3. Comparative Education**Study of Education systems in U.S.A. and U.S.S.R.***Objectives*

1. To acquaint the Students with the Scope and need of Comparative education.
2. To Study the problems of education in world perspective.
3. To understand the factors and forces influencing theory and practice of education.
4. To comprehend different methods of comparative education.
5. To create awareness and to develop understanding of systems of education of different countries.
6. To develop the sense of international understanding.

SECTION I

Unit 1 : Concept, Scope, Purpose and Need of Comparative Education.

Unit 2 : Methods of Comparative Education.

(a) Area Studies (Description and Interpretation).

(b) Comparative Study (Description of Educational System juxta position, comparision).

- (c) Philosophical approach.
- (d) Sociological approach.
- (e) Historical approach.
- (f) Scientific approach (quantitative)

Unit 3 : Problems of Comparative Education.

- (a) Universal Compulsory Education.
- (b) Higher Education.
- (c) Finance.

Unit 4 : The Study of U.S.S.R. with reference to the following points :

- (a) Historical Background.
- (b) Aims and Objectives of Education.
- (c) Administration of Education.
- (d) Current Problems.

SECTION II

Unit 5 : Problems to be studied in world perspective.

- (a) Language.
- (b) Women Education.
- (c) Teacher Education and Teacher's Status.
- (d) Racial Problems.

Unit 6 : The topics to be studied in world perspective.

- (a) Adult Education.
- (b) Technical and Vocational Education.
- (c) Impact of Religion on Education.

Unit 7 : Study of Education in U.S.A. with reference to the following points :

- (a) Historical background.
- (b) Aims and Objectives of Education.
- (c) Administration of Education.
- (d) Current Problems.

Unit 8 : Comparative Study of Educational Systems of U.S.A. and U.S.S.R. and their bearings on education in developing countries.

Books Recommended

1. Education in New Era : J. L. Kandel.
2. Comparison : Mochteman and Roucek.
3. World Survey of Education : UNESCO.
4. Problems in Education—A Comparative Approach. Brian Holmes.
5. Contemporary Education : J. F. Cramer C. S. Browne.
6. The World Educational Crisis—A systems Analysis, Philip H. Coombs, Oxford University Press.
7. Essay on World Education—The crisis of supply and Demand Edited by G. A. F. Bereday, Oxford University Press.
8. Comparative Method in Education—George Z. F. Bereday Holt Rinehard and Wiston Inc. New York (Available in cheap edition for Rs.8/-only)
9. Towards a Science of Comparative Education : Harold J. Noah and Max A. Eckstein. The MacMillan Company Collier—MacMillan Ltd., London.

10. Scientific Investigations in Comparative Education : Max A. Ecksen and Harold J. Noah. The MacMillan Company. Collier—MacMillan Ltd., London.
11. Introduction of American Public Education : De-Young Mac-Graw Hill.
12. The American School System : Douglas Aubey, Richard, New York.
13. Higher Education in American Republics : Harold R.W., Mac-Graw Hill.
14. The changing soviet school ; Bereday G. Z., F.
15. Communist Education : Emund, J. King.
For Problem (Unit 3 and 4 under Paper I).
Refer to relevant year books of Education by Evans Brothers.

B—4. Teacher Education

Objectives :

1. To develop necessary skills in trainee teachers.
2. To enable to appreciate the problems of Teacher education at different levels.
3. To develop experimental attitude in teacher education.

Unit 1 : Historical development of Teacher Education in India

- (a) Historical development of Teacher Education.
- (b) Teacher education as distinguished from teacher training.
- (c) The need and importance of Teacher Education.

Unit 2 : Structure of Teacher Education

- (a) Aims and objectives of Teacher education at different levels.
- (b) The qualifications and the patterns of teacher education at different level viz. Pre-Primary, Primary, Secondary, Higher Secondary and Higher education.
- (c) Training of special teachers—Teachers of Arts and crafts, Physical education, Home Science, Teachers for vocational and Technical education, work-experience.

Unit 3 : (A) Content of Teacher Education

- (a) Courses and duration.
- (b) Weightage in terms of theory and practicals.
- (c) Evaluation.

(B) Instructional Methods in Teacher Education

- (a) Seminars.
- (b) Workshops.
- (c) Symposium.
- (d) Group discussions.
- (e) Learn Teaching.
- (f) Supervised Study.
- (g) Dynamic Methods of Macro and Micro teaching. Programmed learning. Models of teaching.

Unit 4 : Practice Teaching in Teacher Education

- (a) Demonstration.
- (b) Experimentation.
- (c) Relations of college of Education with the Co-operating Schools.
- (d) Significance and Supervision of Practical work.
- (e) Internship.

Unit 5 : Evaluation procedures in Teacher Education

- (a) External assessment :
 - (i) Final lessons.
 - (ii) Theory Papers.
- (b) Internal assessment :
 - (i) Aspects of internal assessment.
 - (ii) Weightage of internal assessment.
 - (iii) New techniques of evaluation.

Unit 6 : Modern trends in Teacher Education

- (a) Current national policy and state policy of education.
- (b) Teacher education in U.K., U.S.A. & U.S.S.R.

Unit 7 : Teachers' Organisations and Teacher Training

- (a) Types of organisations. Their role and functions.
- (b) Evaluation of present Teacher associations.
- (c) Code of conduct and Ethics of Profession.

Unit 8 : Research and Teacher Education

- (a) Need of research in Teacher Education.
- (b) Action research for betterment of Teacher Education.

Unit 9 : In-service Training of Teachers

- (a) Importance and nature.
- (b) Agencies—N.C.E.R.T., S.C.E.R.T. Open University, U.G.C., Regional College of Education Teacher Training Colleges, Extension service departments, Teachers organisations.

Books Recommended

1. Stratemeyer Lindsey—Working with student Teachers. Eurasia Publishing House (Pvt.) Ltd., New Delhi 55.
2. William Taylor—Society and the Education of Teachers, Faber and Faber.
3. Dr. G. Chaurasia—New Era in Teacher Education, Sterling Publishers Pvt. Ltd.
4. Edited by S. N. Mukerji—Education of Teachers in India, Volume I and II, S. Chand and Co., Delhi.
5. K. L. Shrimali—Better Teacher Education, Ministry of Education, Government of India.
6. Dr. S. S. Dikshit—Teacher Education in Modern Democracies—Sterling Publishers Pvt. Ltd., Delhi 6.
7. Report of the Study Group on the Education of Secondary Teachers in India—All India Association of Training College.
8. Four Year Courses in Teacher Education—All India Association of Teacher Educators, B-1/6 A, Model Town, Delhi 9.
9. Investigation, Studies and Projects Relating to Internship in Teaching—N.C.E.R.T., New Delhi
10. Report of the Committee on Teacher Education in Maharashtra State, Government of Maharashtra.

11. Richardson C. A. and others—Education of Teachers in England, France and U.S.A., Unesco, 1953.
12. Commission on Teacher Education—The Improvement of Teacher Education, Washington
13. Association of Supervision and Curriculum Development N.E.A.—Balance in Curriculum (Year Book 1961).
14. The Process of Education— Bruner S. S., The Process of Education—Harvard University Press, 1961.
15. UNESCO—Psychological Foundation of Curriculum 1962.
16. The future of Teacher Education Edited by—J. W. Tibble Routledge and Kegan Paul, London.
17. Innovation in Teacher Education— J.T. Hayson and C.R.Sutton, McGraw-Hill Book Company (UK) Ltd.
18. Teachers' Role, Status, Service condition and Education in India. A Reference J. C. Agarwal, DOAB House, Delhi.

B—5. Non-Formal Education and Population Education

Objectives :

1. To enable the students to understand meaning scope and special features of Non-formal education.
2. To acquaint the students with the need of non-formal education.
3. To help the students to understand the nature of the demand for non-formal education with special reference in India.
4. To help the students to know the ways and means of non-formal education.
5. To help the students to understand the concept of population science and population educations
6. To help the students to understand the objectives of population education.
7. To acquaint the students the special features of Indian population 2 problems of population growth.
8. To enable the students to understand the structure of Indian population in relation with other countries
9. To make the students aware of the problems created by population growth in India.
10. To acquaint the students with different methods and means to control population growth in India.

SECTION I

Unit 1 : (a) Meaning, Nature, scope and special features of Non-Formal education.

(b) Objective of Non-Formal education.

(c) Importance and need of non-formal education, in the world perspective in general, and India in particular.

Unit 2 : Types and Modes of non-formal education, adult education, Distance education, Continuing education, Open Universities, Correspondence courses and Mass Media.

Unit 3 : Contents and Methods of Non-formal education. Planning programme for Non-formal education; Problems in Non-formal education.

Unit 4 : Evaluation and Research in Non-formal education.

SECTION II

Unit 5 : (A) History of Population Science :

- (i) Origin of population science.
- (ii) Theories of population science.
- (iii) Importance of population Science.

(B) Problems of Population (General) :

- (i) Problems regarding environment.
- (ii) Problems regarding natural resources.
- (iii) Problems regarding economics.

Unit 6 : Concept of population Education. Definition, nature, need, scope and objectives of population education.

Unit 7 : (A) Structure of Indian Population in relation with :

- (i) Developed countries.
- (ii) Developing countries.
- (iii) Under-developed countries

(B) Special features of Indian Population.

Unit 8 : (A) Population problems in India :

- (i) Reasons for the growth of population.
- (ii) Problems created by the growth of population in India.
- (iii) Measures adopted to control the growth of population in India.
 - (a) Clinical approach.
 - (b) Educational approach.

(B) Achievement in checking the growth of population in India.

Books Recommended

1. Non-formal Education for all—Arvind Chandra and Anupama Shah, Sterling Publishers Private Ltd.
2. Some Perspectives on Non-formal education—J. P. Naik. Allied Publishers Pvt. Ltd., Bombay, New Delhi.
3. Population Education—A guide to curriculum and teacher education, D. Gopal Sterling Publishers Pvt. Ltd.
4. Population Education, New Policy Perspective—Saroj Xadco. 10149 Kattrra Chhaju Pandit Model Badi, New Delhi.

B-6 Education of Exceptional Children

Objectives :

1. Knowledge with comprehension :

The Learner

- (i) states the meaning and characteristics of exceptional children.
- (ii) explains the need of special education for exceptional children.
- (iii) gives the types and the special characteristics of each type of exceptional children.
- (iv) explains the different methods to identify the different types of exceptional children.

- (v) gives the causes of exceptions in children.
- (vi) states the agencies of education for exceptional children.
- (vii) explains the importance of different aspects of education for exceptional children.
- (viii) explains the different administrative aspects of education for exceptional children.
- (ix) describes the qualities and qualifications of the teacher for exceptional children.
- (x) explains the methods of selection placement, training for teacher of exceptional children.

2. Application :

The learner :

- (i) prepares the report based on the case study of one exceptional child.
- (ii) prepares the report based on the visit to one special school, for exceptional children

Unit 1 : Exceptional children

- 1.1 Meaning and Concept.
- 1.2 Characteristics.
- 1.3 Need of the special education.

Unit 2 : Types and Characteristics of exceptional children

2.1 Types

- 2.1.1 Intellectually gifted.
- 2.1.2 Mentally retarded.
- 2.1.3 Hearing impaired.
- 2.1.4 Visually handicapped.
- 2.1.5 Crippled and other health impaired.
- 2.1.6 Behaviourally disordered.
- 2.1.7 Learning disordered.
- 2.1.8 Speech handicapped.

- 2.2 Special characteristics of each type with special reference to emotionally disturbed and socially maladjusted children.

Unit 3 : Identification of exceptions in children

- 3.1 Observation.
- 3.2 Psychological testing.
- 3.3 Medical examinations.
- 3.4 Special tests.

Unit 4 : Causes of exceptions in children

- 4.1 Heredity.
- 4.2 Environment
 - 4.2.1 Prenatal and Postnatal.
 - 4.2.2 Family.
 - 4.2.3 Social.
 - 4.2.4 Emotional.
- 4.3 Accidents, diseases and malnutrition.

Unit 5 : Agencies of Education

- 5.1 Family.
- 5.2 Schools : Normal.
- 5.3 Schools : Special.
- 5.4 Vocational guidance institutions and clinics.

Unit 6 : Aspects of Education

- 6.1 Curriculum
- 6.2 Methodology of teaching-Learning
- 6.3 Text Books
- 6.4 Teaching aids
- 6.5 Evaluation.

Unit 7 : Administration

- 7.1 Financing
- 7.2 Selection
- 7.3 Organization
- 7.4 Maintenance of cumulative record
- 7.5 Co-ordination with other agencies.

Unit 8 : Teacher

- 8.1 Qualities and qualifications
- 8.2 Training in teaching and other techniques
- 8.3 Selection, Placement, pay scales
- 8.4 Further training continuing education.

Practicals :

1. Submission of report based on the case study of one exceptional child.
2. Submission of report based on the visit to any one special school.

Books Recommended

1. James R. L. : *New Directions in special Education*, Allyn and Baker 1971.
2. Wilson : *Diagnosis of Learning difficulties*, McGraw Hill, 1971.
3. Dutsch, M. : *Social Class Race and Psychological*, Development Holt, Rinehart and Winston : 1968.
4. Sarson, S. P. : Dorris, J. : *Psychological problems in Mental deficiencies*.
5. Curickshank, W. : *Education of Exceptional Children*, Prentice Hall, 1965.
and Jonson, O.
6. Duna L. M. : *Exceptional Children in the Schools*, Holt, Rinehart and Winston, 1963.
7. डॉ. प्रेमला काळे : अपवादात्मक बालकांचे शिक्षण, मॅजॅस्टिक प्रकाशन.

B-7. Educational and Vocational Guidance**Objectives :**

1. *Knowledge and Comprehension :*

The Learner :

1. explains bases, meaning and need of guidance tells type of guidance.
2. explains the procedure of knowing the pupil interprets the educational and Psychological data of the pupils.
3. explains the seven point plan. tells the sources of occupational information, compares the techniques of individual and group guidance.

4. tells the outlines for job-study
5. explains the importance of placement and follow-up services
6. explains the meaning of Adjustive guidance
7. tells the recent trends and research in guidance.

2. *Application :*

The Learner :

1. uses the 'Seven-Point Plan' to study the pupil. applies his knowledge of job-study for studying the job.
2. administers various tests and collects and interprets the results.

Unit 1. Basic concepts and types of Guidance :

- 1.1 *Bases of Guidance :*
Philosophical, Psychological, Sociological, Pedagogical
- 1.2 *Concept of Guidance :*
Meaning, Basic assumptions and need of Guidance. Influence of family and community on guidance. Functions and purposes of Guidance.
- 1.3 *Types of Guidance :*
Major Guidance Areas. Personal Guidance, Educational and Vocational Guidance.

Unit 2. Appraisal of an individual :

- 2.1 Academic, Physical and Health Record, Anecdotal Record.
- 2.2 Test Results : Achievement, Intelligence, Aptitude, Interest and Personality.
- 2.3 Presenting, Interpreting and Reporting the Data : Profile and Seven point plan.

Unit 3. Occupational Information :

- 3.1 Collection and dissemination of information about various courses and occupations.
- 3.2 Training facilities and job opportunities.
- 3.3 Patterns of employment.
- 3.4 Conferences, exhibition, Visits.

Unit 4. Technique of Guidance :

- 4.1 *Individual Guidance :*
 - 4.1.1. Counselling-meaning, characteristics and theories :
(i) Directive, (ii) non-directive, (iii) Eclectic.
 - 4.1.2 Interview meaning purposes, conditions of interview. Qualities and Responsibilities of an interviewer
- 4.2 *Group Guidance :*
 - 4.2.1 Meaning and importance of group guidance.
 - 4.2.2 Types of group guidance, Regular Subject classes, core-curriculum classes, special groups, school, assemblies, Clubs.
 - 4.2.3 Techniques of group guidance. Informal discussions committee Reports Lectures, Dramatics, Question Bank, The case-conference method

Unit 5. Job Analysis :

- 5.1 Meaning and purposes of Job-analysis.
- 5.2 Outline for the Job-study.
- 5.3 Job-profiles.

Unit 6. Placement and follow-up :**6.1 Placement :**

- 6.1.1 Aims and Types of placement.
- 6.1.2 Functions of the School about placement.
- 6.1.3 Responsibility of the community of placement.

6.2 Follow-up :

The importance and purposes of the follow-up services.

Unit 7. Adjustive Guidance

- 7.1 The adjustment process-its meaning and mechanism.
- 7.2 Identification of mal-adjusted children.
- 7.3 Causes of mal-adjustment.
- 7.4 Principles of dealing with the mal-adjustment children.

Unit 8. Recent trends and Research in guidance :**Practical Work :**

- 1. One case study.
- 2. Job analysis of one occupation

Books Recommended.

1. Agarwal, J. C. : Educational Vocational Guidance and Conselling, Doaba House Nai Sarak, Delhi, 6, 1965.
2. Crow, L. D. and Grow : An Introduction to Guidance, Euresa Publishing House, New Delhi, 1942.
3. Dosah, N. L. : Guidance Services in India, Any Book Depot, New Delhi 5, 1969.
4. Huston, I. W. : The Guidance Function in Education Appleton-Century-Crafts.
5. Jayaswal, S. R. : Guidance and Conselling Prakashan Kendra, New Buildings, Aminabad, Luoknow, 1968.
6. Jones, A. J. : Principles of Guidance—McGraw Hill Book Co., New York, 1963.
7. Kochhar, S. K. : Educational and Vocational Guidance in Secondary Schools, Sterling Publisher (D) Ltd., Delhi 6, 1967.
8. Koshe, G. S. : Vocationalization of Education, Pune Vidyarthi Griha Prakashan, Pune 30, 1989.
9. Myer, G. E. : Principles and Techniques of Vocational Guidance, McGraw Hill Book Co., New York, 1941.
10. Weinbers, Carl. : Social foundations of Educational Guidance. The free Press, New York, 1969.
11. Report of all India conference of State Bureau of Educational and Vocational Guidance, New Delhi, 1976.
12. पत्की, श्री. मा. : व्यवसाय मार्गदर्शन आणि सुल्ला कार्य, मिलीव प्रकाशन, औरंगाबाद, १९८४.
13. पारनेरकर, पु. रा. : शिक्षण व व्यवसाय-विवेक मार्गदर्शन, नीलकंठ प्रकाशन, पुणे, १९६९.
14. पिपळखरे, मो. ह. : शैक्षणिक आणि व्यावसायिक मार्गदर्शन, पुणे विद्यार्थी गृह प्रकाशन, पुणे-४११०३०, १९६६.
15. वझे, ना. ए. : व्यवसाय मार्गदर्शन, पब्लिकेशन्स प्रायव्हेट लिमिटेड, दादर, मुंबई-१४, १९८३.

B-3 Experimental Psychology

Objectives :

1. Knowledge with Comprehension :

The Learner

- (i) gives the brief history of experimental Psychology.
- (ii) states the different steps in experimentation.
- (iii) describes the method of experimentation in Psychophysics.
- (iv) explains the nature of errors introduced in Psychophysical experiments and the measures for minimising them.
- (v) gives the general Physiology of sense organs.
- (vi) describes the experimental procedures for the study of Characteristics of the process of perception with the help of different organs.
- (vii) describes the characteristics of Psychological processes involved in perception with the help of different sense organs.
- (viii) describes the characteristics of Psychological processes involved in the perception of form, space, time and movements.
- (ix) explains the methods to study the development of language in a child.
- (x) describe the nature of learning curve and its characteristics.
- (xi) states the types of learning.
- (xii) explains the methods of experimental study of conditioning.
- (xiii) describe the methods of measuring retention.
- (xiv) describes the methods of experimental study of determinants of retention, interference and forgetting.
- (xv) describes the methods of measuring fatigue.
- (xvi) explains the methods of experimental study of fatigue.
- (xvii) states the types and measures of reaction time.
- (xviii) explains the methods of experimental study of determinants of reaction time.
- (xix) explains the methods of experimental study of association formation.
- (xx) describes the experimental methods to study different types of thinking.
- (xxi) describes the experimental methods to study emotional and social behaviour of human beings.

2. Applications :

The Learner :

- (1) performs the psychological experiments with proper material and apparatus.
- (2) records the procedure, conclusions and interpretations. of the experiment systematically.

Unit 1 : Development of Experimental Psychology

- 1.1 Brief history of experimental Psychology.
- 1.2 Steps in experimentation : statement of the problem designing, performing, interpreting, concluding and reporting.

Unit 2 : Psycho-Physics

- 2.1 Meaning
- 2.2 Problems in Psychophysics.

- 2.3 Methods in Psycho-Physics
 2.3.1 Method of Limits.
 2.3.2 Method of Constant stimuli.
 2.3.3 Method of average error.
 2.4 Types of errors introduced in psychophysical experiments and measures minimising them.

Unit 3 : Sensations

- 3.1 General study of physiology of different sense organs.
 3.2 Psychological study of sense organs.
 3.2.1 Vision : Types : scotopic and photopic
 —Process of light and dark adaptation.
 —Blind spot.
 —Characteristics of chromatic and achromatic vision.
 —Colour theories—Young Helmholtz's and Herring's.
 3.2.2 Audition acuity
 —Theories of hearing—Resonance, frequency and volley.
 3.2.3 Experimental study of chemical sensation, Olfactory and gustatory.
 3.2.4 Cutaneous sensation : heat, cold, pain and pressure spots.

GRATIS

Unit 4 : Perception and Language development

- 4.1 Perception of form, space, time and movement.
 4.2 Illusions.
 4.3 Experimental study of concept formation & language development in a child.

Unit 5 : Learning

- 5.1 Measurement, learning curve and its characteristics.
 5.2 Types—Motor, Verbal, and problem solving.
 5.3 Experimental study of conditioning.
 5.4 Experimental designs for the study of transfer of learning

Unit 6 : Retention and Forgetting

- 6.1 Measurement of retention
 6.2 Experimental study of determinants of retention.
 6.3 Experimental study of Interference and forgetting.

Unit 7 : Work and Fatigue

- 7.1 Measurement of fatigue, work curve and its characteristics.
 7.2 Experimental study of determinants of fatigue, ergography.

Unit 8 : Reaction time and Association

- 8.1 Types and measures of reaction time.
 8.2 Experimental study of determinants of reaction time.
 8.3 Experimental study of speed and variations in association formation.

Unit 9 : Human Behaviour

- 9.1 Experimental study of thinking, reasoning and problem solving.
 9.2 Experimental study of emotional behaviour.
 9.3 Experimental study of Social behaviour.

Practical Work :

Each candidate is expected to perform minimum 20 psychology experiments from the List given. A journal is to be maintained by the candidate, for recording the complete procedure of the experiment.

List of Experiments

<i>Unit</i>	<i>Topic</i>	<i>Object of the Experiment</i>	
1. Psychophysical Methods	Method of limits	(1) To Calculate the threshold using the method of limits	
	Method of Right and wrong cases	(2) To determine the differential threshold by using the method of right and wrong cases.	
	Method of Mean error	(3) To calculate the space error by using the method of mean error.	
2. Sensation	<i>Vision</i> : Mapping the Blind spot	(4) To map the area of the blind spot.	
	Contrast effect	(5) To study the Phenomenon of successive colour contrast. (6) To study the phenomenon of simultaneous colour contrast.	
	Field of vision	(7) To map the retinal fields of vision for different colours.	
	Colour mixing	(8) To verify the laws of colour mixing.	
	Order of colour preference	(9) To determine the subjects order of colour preference.	
	Colour blindness	(10) To detect the presence of colour blindness.	
	<i>Ear</i> : Auditory sensation		(11) To determine the absolute threshold for sound, for sound intensity. (12) To determine the accuracy of localization of sounds at different position in the horizontal, coronal and sagittal planes
	3. Sensations	Cutaneous sensation	(13) To map the hot and cold spots on the limited area of the skin of the subject. (14) To map the pain and touch spots on the limited area of the skin, of the subjects. (15) To determine the spatial threshold or the aesthesiometric index.
		Kinaesthetic Sensation perception of movement	(16) To estimate the successive and simultaneous movements of the individual.
Perception		Perception of form (17) To study the factors affecting Gestal figures.	
Concept formation		Concept formation (18) To study the process of concept formation	
Learning		Bilateral transfer (19) To study the effect of bilateral transfer Interference (20) To study the effect of interference in learning.	
	Maze learning (21) To measure the process of learning in unseen stylus mazes and to discover and compare the method employed.		

<i>Unit</i>	<i>Topic</i>	<i>Object of the Experiment</i>
Retention and forget in	Retention	(22) To compare the efficiency of retention by the measures recall and recognition.
Work and fatigue	Fatigue	(23) To prepare and study the stages of work curve.
Reaction time	Reaction time	(24) To measure the simple reaction time, discriminatory time for visual and auditory stimuli.
Association	Association	(25) To study the individual differences in association formation.
Human behaviour	Thinking	(26) To measure the individuals capacity at the time of the test, for abstract and clear thinking.
	Intelligence	(27) To judge intelligence from photographs. (28) To study a performance test of intelligence.
	Emotional behaviour	(29) To judge emotions from photographs.
	Problem solving in group situation	(30) To compare the problem solving behaviour of subjects working alone and in a group situation.

Books Recommended

1. Mary Collins and James Drever : *Experimental Psychology*, Layall Book Depot : Ludhiyana.
2. Postman Leo and Egan James : *Experimental Psychology*, Kalyani Publishers, New Delhi.
3. Bugelaski, B.R. : *Experimental Psychology*, Holt, Rinehart and Winston, New York.
4. Boring, B. G. : *A History of Experimental Psychology*. The Times of India Press, Bombay.
5. Andrea, B. C. : *Experimental Psychology*, Willey Eastern Private Ltd., New Delhi.
6. Underwood, B. J. : *Experimental Psychology*, The times of India Press, Bombay.
7. Valentine, C. W. : *An Introduction to Experimental Psychology*, University Tutorial Press Ltd., New Oxford.
8. Kothurkar, V. K. and Vanarase, S. J. : *Experimental Psychology—A Systematic Introduction*. Wiley Eastern Ltd., New Delhi.
9. Mohsin, S. M. : *Experiments in Psychology*, Orient Longman Ltd., Bombay.
10. Parameshwaran, E. G. and Rao G. T. : *A Manual of Experimental Psychology*, Lalwani Publishing House, Bombay.
11. Kuppu, Swami, B. : *Elementary Experiments in Psychology*, Geoffrey-Madras
12. Munn, N. L. : *A Laboratory Manual in General Experimental Psychology*, Houghton Mifflin Company Cambridge
13. श्री. बनारसे, सु. ज., श्री. गोगटे, श्री. व., श्रीमती बनारसे, शामला : प्रायोगिक मानसशास्त्र, ज्हीनस प्रकाशन, पुणे.
14. श्री. देशपांडे, सु. वा. : मानसशास्त्रीय प्रयोग, महाराष्ट्र विद्यापीठ संशोधनमित्री मंडळ, कॉलेजिनेट, पुणे

B-9. Educational Statistics

Objectives :

1. *Knowledge with comprehension :*

The learner explains :

- (1) properties of Normal distribution.
- (2) methods of measuring divergence from Normality.
- (3) uses of Normal Probability Curve in Education.
- (4) meaning of regression.
- (5) method of preparing regression equations.
- (6) application of regression equations in prediction.
- (7) significance of the statistical measures and the difference between them.
- (8) hypothesis of chance.
- (9) meaning of Null hypothesis.
- (10) use of Chi-square test.
- (11) different methods of scaling.
- (12) meaning of reliability and validity of test scores.
- (13) process of item analysis.
- (14) meaning and significance of partial and multiple correlation.
- (15) meaning of variance and covariance.
- (16) methods of analysing variance and covariance.
- (17) meaning of factor analysis.
- (18) basic assumptions of factor analysis.

2. *Application :*

- (1) The learner solves the statistical problems in psychology and education based on the different units and subunits in the syllabus.
- (2) The learner interprets the results.

Unit 1 : The normal Distribution

- 1.1 Properties of Normal Probability Distribution.
- 1.2 Measuring divergence from Normality.
 - 1.2.1 Skewness.
 - 1.2.2 Kurtosis.
 - 1.2.3 Comparing a given histogram with normal curve of the same area N and O.
- 1.3 Applications of the Normal Probability curve.

Unit 2 : Regression and Prediction

- 2.1 Meaning of regression.
- 2.2 Regression Equations.
- 2.3 The Accuracy of Predictions from Regression equations.
- 2.4 Application of Regression equations in Prediction.

Unit 3 : Significance of the statistical measures and the difference between them.

- 3.1 The significance of the mean and of the Median
The significance of Measures of variability.
The significance of Percentage and of the co-efficient of correlation.
- 3.2 The significance of the difference between Means, sigmas and percentages and Correlation, co-efficients.

- Unit 4 : Testing Experimental Hypothesis**
 4.1 The Hypothesis of Chance.
 4.2 The CHI-SQUARE TEST and the Null hypothesis.
- Unit 5 : The Scaling of Mental tests**
 5.1 Sigma Scaling.
 5.2 Sigma scores and standard scores.
 5.3 The T. Scale.
 5.4 The Stamina Scale
 5.5 Percentile scaling
- Unit 6 : The Reliability and Validity of Test-Scores**
 6.1 The Reliability of test scores and methods of determining it
 6.2 The Validity of test scores and determining Validity
 6.3 Items Analysis.
- Unit 7 : Partial and Multiple Correlation**
 7.1 The Meaning and significance.
 7.2 Simple applications of partial and multiple correlation
- Unit 8 : Analysis of Variance**
 8.1 Meaning of Variance.
 8.2 Method of analysing variance.
 8.3 Meaning of co-variance.
 8.4 Analysis of co-variance.
- Unit 9 : Factor Analysis :**
 9.1 The Nature of factor Analysis.
 9.2 Basic assumptions of factor analysis.
 9.3 Application of simple principles of factor analysis in psychology and Education.

Books Recommended

1. H. E. Garrett. Statistics in Psychology and Education. Longman Green and Co. London.
2. B. Fruchter Introduction to factor Analysis, D. Van Nostrand and Co. N.Y.
3. G. Thompson. Factorial Analysis of Human Ability. University of London Press

B-10. Testing and Measurement in Education

Objective :

Knowledge and Comprehension :

The Learner :

1. states about the concept of testing measurement and evaluation.
2. states the development of testing with Indian context.
3. explains the terms validity, Reliability, and interpretability.
4. explains general principles of test constructions.
5. interpretes the data i.e. test scores.
6. describes the process of standardisation of a test.
7. describes the process of constructing a test.
8. states the uses of different tests.
9. differentiates the standardised test and classroom test.
10. explains the different factors influencing test and testing.

*Application :***The Learner :**

1. administers different tests in the class.
2. prepares classroom tests.
3. interpretes the data : changes teaching methods accordingly.

Unit 1 : Origin and development of Testing in Education

- 1.1 Origin and development.
- 1.2 Indian contribution.
- 1.3 Meaning and concept.
- 1.4 Need and uses with special reference to social consequences.

Unit 2 : Theory and Practice of Psychological Testing

- 2.1 Planning a test.
- 2.2 Construction and use of a test.
- 2.3 Different types of tests.
- 2.4 Criteria of a good test.

<i>Practical</i>	<i>Technical</i>
Purposiveness	Standardised
Comprehensiveness	Objectives
Economical	Discriminative
Business	Reliable
Acceptability	Valid
Representativeness	Norms

Unit 3 : Statistical concept in test preparation

- 3.1 Test scores and their transformation, Z-scores, T-Scores, Percentage, Stanine scores, percentiles, I.Q., Deviation scores.
- 3.2 Test standardisation—Norms.
- 3.3 Concept of factor analysis.
- 3.4 Interpretation of test scores Qualitative/Quantitative.

Unit 4 : Measurement

- 4.1 Concept of measurement and evaluation with reference to educational process.
- 4.2 Functions of measurement in Education.
- 4.3 Scaling methods : Ordinal scales, Equal Interval and ratio scales, Rating scales.

Unit 5 : Measurement of different aspects of an individual

- 5.1 Attitude.
- 5.2 Intelligence.
- 5.3 Achievements.
- 5.4 Interest.
- 5.5 Aptitude.
- 5.6 Motivation.
- 5.7 Personality.
- 5.8 Values.

Unit 6 : Classroom Test Construction

- 6.1 Types of classroom tests.
- 6.2 Planning, administration and execution.
- 6.3 Assessment, Interpretation and improvement.
- 6.4 Item analysis.

Unit 7 : Factors influencing test-scores

- 7.1 Nature of the test.
- 7.2 Psychological factors
- 7.3 Environmental factors.

Unit 8 : Tests relating to Teacher behaviour and Teaching situations

- 8.1 Testing in Teacher effectiveness (aptitude/attitude).
- 8.2 Testing teaching process.
- 8.3 Testing for Educational environment.

Practical Work :

Preparation, Administration and reporting a classroom test.

Books Recommended

1. Measuring Learning Outcomes—Bruce W. Turkman, Hercourt, Brace, Jovanovich.
2. Educational and Psychological measurement and evaluation. Jullian C Stanley, Kenneth D. Hopkins. Prentice Hall of India.
3. Educational Measurement—Editor—Lindquist, American council on Education, Washington.
4. Theory and Practice of Psychological testing—Frank S. Freeman. Holt Rinehart and Winston, New York.
5. Educational and Psychological measurement—Payne and Mc Morris, Oxford and IBH.
6. Classroom Test construction (1971)—Marshall and Hales. Addison Wesley publishing company, London.
7. A Survey of Research in Psychology (1972), Bombay.
8. A Survey of Research in Education—M. B. Bach.
9. Educational Psychology of the ancient Hindus (1949)—D. C. Dasgupta, Calcutta.
10. Measurement and Evaluation in Psychology and Education—Thorndiko and Hegen. John Wiley and Sons, London, New York.
11. Measurement and Evaluation in Education and Psychology—Meherens, Lehmann. Holt Rinehart and Winston, New York.
12. माध्यमिक मनोवैज्ञानिक परीक्षा एवं मापन (हिंदी)—डॉ. महेशा भार्गव. हरप्रसाद भार्गव ४/२३०, कचहारी घाट, आगरा।
13. An Introduction to Psychological Testing and Statistics—Prof. Dandekar and Prof. Rajguru, Sheth Publishers Bombay.
14. Principles and Techniques of Unit testing—Dr. V. Z. Sali, National Publishing House, 23 Darya-ganj, Ansari Road, New Delhi, 110 005.

B-11. Principles of Curriculum and Text Book Development

Objectives :

1. To develop understanding of the Principles of curriculum construction.
2. To understand and appreciate curriculum as a means of development of the individual.
3. To gain insight into the development of new curriculum.
4. To develop understanding of the process of text book production and evaluation.
5. To develop understanding of the aspects of text book Organization and to gain insight into the form and style of text book writing.

Unit 1 : Terminology of curriculum

Meaning and working definitions of :

- (a) Curriculum syllabus, course of studies and units.
- (b) Fusion Integration, Intersubject correlation and Ultra subject correlation.
- (c) Core and electives.

Unit 2 : Philosophical Foundations of Curriculum Development

- (a) Philosophical theories and their implications.
- (b) Effect of ideal, cultural heritage and national development on curriculum
- (c) Implications of principles accepted in the 'Constitution of India'.
Democracy secularism, socialistic pattern of society, social justice and equality of opportunities.
- (d) Implications of 'National Goals' and 'International Outlook'.
- (e) Notable, Indian traditions and experiments— Gurukuls, Basic Education and Vishwa Bharati'.

Unit 3 : Sociological Foundations

- (a) Changing needs of society Technological, industrial economical and sociological; their effect on emerging curriculum.
- (b) Curriculum as a tool for solving problems of Indian society enlisted as :
 - (i) National Integration
 - (ii) Growing population.
 - (iii) Conservation and utilization of national resources.
 - (iv) Self-sufficiency in food production.
 - (v) Industrial growth and over-urbanization.

Unit 4 : Psychological Foundation

- (a) Social change its nature, human nature and acceptance of the change.
- (b) Maturation and its implications in selection of curricular activities.
- (c) Individual differences and their implications in selection of curricular activities.

Unit 5 : Patterns of Organisation and Agencies of Curriculum Change

- (a) Organizational patterns :
 - (i) Organization by subjects and correlation of different subject.
 - (ii) Organization by units—subjects matter units and experience units.
 - (iii) Organization by core and electives.

(b) Agencies—Role of following agencies :

- (i) Demanding society.
- (ii) Associations of subject-teachers and Parent-teacher-Association.
- (iii) Research organizations : CASE NCERT etc.
- (iv) Government Department of Education.

Unit 6 : Research in Curriculum Development

- (a) Pilot project.
- (b) Fundamental research.
- (c) Action Research.

Unit 7 : Aspects of Text-book Organisation

- (a) External
- (b) Internal.

Unit 8 : Text-book Writing

- (a) Selection of appropriate and objective-based learning situations.
- (b) Style of presentation.
- (c) Visuals.
- (d) Motivational factors.
- (e) Exploration.
- (f) Provision of assignments and activities for fixation and enrichment.
- (g) General organization : Chapterization, paragraph, headings, logical and psychological considerations.

Unit 9 : Text-book Production

Important dimensions of text book production :

- (i) Preparation.
- (ii) Production.
- (iii) Distribution.
- (iv) Use
- (v) Try-out by experts and research workers.
- (vi) Revision
- (vii) Additional instruction at material :

Teacher's handbook, practice book, work book and instructional kit, reading references and activities for enrichment and fixation.

Unit 10 : Evaluation of Text-books

- (a) Use of appraisal tools—Opponaires and rating scales.
- (b) Content Analysis Techniques.
- (c) Experimental procedure.

Practical Work :

Visit to Agencies producing text books; e.g. M.S. Bureau of Text Book Production and Curriculum Research.

Books Recommended

1. Association of Supervision and Curriculum Development, N.E.A. : Balance in Curriculum (Year Book 1961).
2. UNESCO : Psychological Foundation of Curriculum 1962.
3. Ministry of Education : The improvement of Curriculum in Indian Schools—H.E. Harmay.

4. Taba, H : Curriculum Development theory and Practice—By Harcourt, Brace and World, N. Y.
5. Anderson, V. E : Principles and Procedures of Curriculum Improvement—The Ronald Press Company, N. Y.
6. Tyler, R. W. : Principles of curriculum and Instruction—University of Chicago Press.
7. Leese Frasure and Johnson : The Teacher in Curriculum Making—Harper and Row N. Y.
8. Christine, C. T. and Christine, Dorothy : Practical guide to Curriculum and Instruction, Parker Publish Company Inc., N. Y.
9. Saylor and Alexander : Curriculum Planning—Holt Rinehart and Winston, N.Y.
10. Hall Quest Alfred, L. : The Textbook : How to Use it, Judge it? Macmillan and Company.
11. Department of Textbooks NCERT, New Delhi : Preparation and Evaluations of Textbooks in Mother Tongue, Second language, English, History, Geography, Social Studies, General Science, Physics, Biology (at Middle School Stage).
12. M. S. Bureau of Text book Production and Curriculum : Research Publication Nos. 8th onwards (Set of various research Publications).
13. Holsti, Ole R. : Content Analysis for the Social Sciences and Humanities—Addison Wesley Publishing Company.
14. Faunce, R. C. and Bossing, N. L. : Developing the Core Curriculum—Prentice Hall of India Pvt. Ltd., New Delhi.
15. Gwynn, J. Minor : Curriculum Principles and Social Trends—The Macmillan Company, N. Y.

B -12. Instructional Technology

Objectives :

1. To understand the Instructional Technology.
2. To acquire knowledge of various types of instructional material.
3. To develop skills for handling the various instructional material.
4. To appreciate the outcome of the use of instructional material in the teaching learning process.

Unit 1 : The Teacher and the Communication Revolution

(a) Effective teaching some current Dilemas. The changing school population. The changing curriculum. The changing extra school—communication world.

(b) The basic communication process

(c) Psychological barriers to effective teaching :

- | | |
|----------------------------|----------------------------|
| (i) Verbalism, | (ii) Referent Confusion, |
| (iii) Day-dreaming, | (iv) Limited perception, |
| (v) Physical discomfort, | |

Unit 2 : Learning and Teaching with media; six tests of media related learning

- (i) Each learner is unique.
- (ii) Perception is the foundation of learning.
- (iii) The learner must become involved.
- (iv) Learning experience must be suitable.
- (v) Teaching strategies must be appropriate.
- (vi) Creativity is the outcome of learning.

Unit 3 : Teaching with Picture and Graphics

- (a) Visual Literacy :
 - (i) What is visual literacy.
 - (ii) Psychology for visual literacy training.
 - (iii) The scope of visual literacy training.
- (b) Nature and characteristics of flat picture :
 - (i) Definition of Flat pictures.
 - (ii) Advantages of flat pictures.
 - (iii) Limitations of flat pictures.
 - (iv) Picture quality.
- (c) Nature and characteristics of Graphics.
 - (i) Definition of Graphics.
 - (ii) Types of Graphs.
 - (iii) Diagrams.
 - (iv) Charts.
 - (v) Student and teacher made Graphics.
 - (vi) Postures.
 - (vii) Cartoon and comics.
- (d) The Selection and use of pictures and graphics.
- (e) Mounting of Flat material.
 - Temporary, permanent, Sectional.
- (f) Storage of flat material :
 - (i) The filing system.
 - (ii) The visual file as a learning experience.
 - (iii) Storage facilities.

Unit 4 : Three-Dimensional Teaching Materials

- (a) Types of 3-dimensional materials.
 - (i) Models.
 - (ii) Objects and specimens.
 - (iii) Mock-ups.
 - (iv) Dioramas.
 - (v) Outdoor Laboratories.
 - (vi) Museums.
- (b) Teaching with 3-dimensional materials.
 - (i) Selection in terms of learning needs.
 - (ii) Principles of effective use.
- (c) School displays and exhibits.

Unit 5 : Displays for Learning

- (a) Study displays :
 - (i) functions of study displays.
 - (ii) Distinctive characteristics of study displays.
- (b) Provision of display areas.
- (c) Special display surfaces :
 - (i) Pegboards. (ii) felt boards.
 - (iii) Hook and loop boards. (iv) Magnetic boards.
 - (v) Chalk boards.
- (d) Planning and organising the study display.
- (e) Evaluating displays for learning :
 - (i) Achievement of purpose.
 - (ii) Effectiveness of design.
 - (iii) Achievement of students involvement.

Unit 6 : Community Study

- (a) Concept of community Study.
- (b) The Scope of community.
- (c) Planning community study experience.
- (d) Inquiry through community study :
 - (i) Walking trips.
 - (ii) Field study.
 - (iii) Visits by resource persons.
 - (iv) Special learning trips.
 - (v) Research surveys.

Unit 7 : Audio-recording and Playback

- (a) Types of audio-recorders.
 - (i) Classroom recorders and Playback.
 - (ii) Large group recorders.
 - (iii) Card-type audio-recorder.
- (b) Recording : Process :
 - (i) Microphone placement.
 - (ii) Some microphone techniques for teachers and pupils.
 - (iii) Duplicating of dubbing.
 - (iv) Evaluating recording.
- (c) Playback :
 - (i) Class room audio-play-back.
 - (ii) Audiotape playback and self evaluation.
 - (iii) Audio lingual playback.
 - (iv) Dial access playback.

Unit 8 : Audio-cued Learning

- (a) Audio-cued learning Definitions.
- (b) Advantages.
- (c) Sources.
- (d) Developing audio-learning skills.
- (e) Selecting and evaluating audio learning experiences.

Unit 9 : Still Projection

- (i) Motion pictures film learning.
- (ii) Instructional TV.
- (iii) Computers simulation and games.
- (iv) Individual instructions and technology.
- (v) Multimedia instruction and developments.

Unit 10 : (a) Writing lessons for

- (i) Radio.
- (ii) TV.
- (iii) Video.

(b) Computer aided learning.**Practical Work :**

- (i) Preparation of audio-cued learning material.
- (ii) Writing of a lesson for TV or Radio (at least one).

Books Recommended

1. Leedham John—Educational Technology—A first book, Pitman Publishing (1973)
2. N.C.E.T. Educational Technology Progress and Promise N.C.E.T. (1973).
3. Audio-visual methods in teaching—Edgar Dale, Dryden Press, New York (1948).
Seventh Printing.
4. Handbook—Planning for E.T.V.—A hand book of Educational T.V. Longman.
Group Ltd. London (1975)
5. Instructional Technology—Its nature and use, Walter Wittich, Charles F. Schuller
(Fifth Edition).

सहस्रवाची सूचना :

“या अभ्यासक्रमात व त्यासंबंधीच्या नियमांमध्ये यानंतर जे बदल होतील ते संबंधित विद्यार्थ्यांवर व संबंधित महाविद्यालये / माध्यमाप्राप्त संस्था यांच्यावर बंधनकारक राहतील.”

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