

Rs 35

No. : 29

॥ अंतरी पेटवू ज्ञानज्योत ॥

# **NORTH MAHARASHTRA UNIVERSITY JALGAON**



NAAC ACCREDITED

**New Syllabus for  
Master of Education (M.Ed.)  
W.e.f. June, 2006**

**NORTH MAHARASHTRA UNIVERSITY, JALGAON**

**NEW SYLLABUS FOR**  
**MASTER OF EDUCATION**  
(M. Ed.)

With effect from  
**JUNE 2006**

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.

**NORTH MAHARASHTRA UNIVERSITY, JALGAON**  
**MASTER OF EDUCATION (M.Ed.) COURSE**  
(In force from June, 2006)

**Title :** Title of the degree shall be Master of Education (M.Ed.)

**R.5.1 Admission Requirement**

Any person who has taken the degree of (Bachelor of Teaching) or Bachelor of Education of this University or a degree of another University recognized as equivalent to B.Ed. degree may be admitted to the Master of Education Course after having fulfilled the requirements as mentioned in R.

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

**Medium of Instruction**

The medium of instruction of this course is either Marathi or English. The candidate appearing for M.Ed. examination will have the option of answering all papers either in Marathi or English- provided that the option is exercised paperwise only, and not sectionwise or questionwise.

**R.5.2 :** (A) The examination for the degree of M.Ed. shall be by paper only.

(B) A candidate desiring to appear for the M.Ed. examination must either : Attend a college or any other institution recognized by the University for the purpose and shall keep two terms (one year) complete all practical work related to the course to the satisfaction of the head of the College or Institution.

OR

Complete the course under guidance of recognized teacher and complete all related practical work to the satisfaction of the head of the College or institution during two academic years.

**R.5.3.** The general objectives of M.Ed. course are-

- I. To prepare professional personnel required for staffing the Colleges of Education.
- II. To prepare administrative 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 and production of instructional material.
- IV. To prepare personnel with research out-look for various fields.

#### **R.5.4. M.Ed. course**

The course is divided between two parts

- i) Theory courses
- ii) Practicum

#### **Part I Theory courses**

The theory courses will consist of two groups.

##### **Group A Four Compulsory papers (100 Marks each)**

- 1) Advanced Educational Philosophy and Sociology.
- 2) Advanced Educational Psychology.
- 3) Element of Educational Research and Statistics.
- 4) History of Indian Education after Independence and Economics of Education.

##### **Group B Optional papers any two from the following (100 Marks each)**

- 1) Optional papers any two from the following (100 Marks each)
- 2) Comparative Study of Educational Systems in SARK.
- 3) Non-formal Education and Population Education.
- 4) Principles of curriculum construction and Text Books Development.
- 5) Environmental Education
- 6) Education of Exceptional children
- 7) Educational and vocational Guidance
- 8) Experimental Psychology.
- 9) Educational Statistics.
- 10) Testing and Measurement in Education
- 11) Instructional Technology.
- 12) Educational Administration and Planning.

#### **Part II Practicum**

##### **1. Internal Examination- 50 Marks**

There will be an internal examination for all the six theory courses. Each course will carry- 100 Marks.

##### **2. Seminar 50 Marks**

There shall be one term paper and one seminar on the paper

##### **3. Tutorials- 50 Marks**

There shall be twelve tutorials- Two on each theory course.

##### **4. Short Research Paper- 50 Marks.**

A candidate shall select a suitable topic for short research paper and shall complete the same under the guidance of a P.G. Teacher appointed by the Principal of the college. The short research paper shall be submitted to the college for appraisal by the committee appointed by the Principal. The guide of the candidate shall also be one of the members of the committee. The committee shall conduct Viva-Voce of the candidate and evaluate the report.

### **R.5.5 Standard of Passing :**

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

The Heads of passing are-

|                |         |
|----------------|---------|
| Theory courses | 1 to 6  |
| Practicum      | 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 least 55% marks in each part and 60% marks of or above in aggregate will be declared to have passed in First Class; and those who have secured 65% in each part and 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 heads of passing. Candidates claiming exemption or Merit. He/ She will be declared to have passed the examination in Second Class.

### **Structure of M.Ed. course**

Scheme of papers for M.Ed. Examination is as under-

|         |   |           |
|---------|---|-----------|
| Part I  | - | Theory    |
| Part II | - | Practicum |

### **Part I Theory courses**

The theory courses will consist of Two Groups.

**Group A** Compulsory papers : Four (100 marks each)

**Group B** Optional papers. Any two (100 marks each)

1. History of Western Education.
2. Comparative Study of Education in U.S.A. and China
3. Non-formal Education and Population Education.
4. Principles of curriculum construction and text book development.
5. Environmental Education.
6. Education of Exceptional Children.
7. Educational and Vocational Guidance.
8. Experimental Psychology.
9. Educational Statistics.
10. Testing and Measurement in Education.
11. Instructional Technology.
12. Educational Administration and Planning.

## **Part II Practicum**

The Practicum will carry 200 marks.

1. There will be an internal examination for all the six theory courses. Each course will carry 100 marks.

2. Seminar : 50 marks

There will be one term paper and more seminar on this one paper

3. Tutorials : 50 marks

There will be twelve tutorials- Two on each theory courses.

4. Short- Research paper- 50 marks.

The candidate after selecting a suitable topic for short research paper and will complete the same under the guidance of P.G. teachers in the college. The short research paper 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 candidates and evaluate the report.

**Attendance :** Minimum 80% attendance is compulsory

### **Standard of Passing :**

To pass the M.Ed. examination the candidate must secure at least 50% aggregate and 50% in each of the heads of passing. Part I theory and Part II-1, II-2, II-3, II-4 separately.

Allotment of courses to the respective B.O.S.

- 1 B.O.S. in Education : General theory course Ist and IVth optional papers 1 to 5

2. B.O.S. in Educational Psychology : General theory papers.

Group A - Course : IInd

Group B - Optional papers VI, VII, VIII & IX

3. B.O.S. in Educational administration and Evaluation.

Group A - General Course : IIIrd

Group B - Papers X, XI and XII.

**M.ED. GROUP A- PAPER 1**  
**ADVANCED EDUCATIONAL PHILOSOPHY AND SOCIOLOGY**

Marks : 100

Duration : 3 Hours

**Objectives**

To develop understanding and appreciation of-

1. Interrelationship between Philosophy and Education.
2. Basic tenets, principles and practices of the major schools of Indian and Western Philosophy.
3. Interrelationship between Sociology and Education.
4. To equip the students with adequate theoretical rationale behind the controversial issues in the different fields of education.
5. To cultivate the habit of independent thinking of changing concepts and understandings in educational discipline.
6. To develop philosophical perspectives and habit of independent thinking towards educational problems.

**Unit 1 Philosophy and Education**

- 1.1 Philosophy as an activity and dimensions of Philosophic thinking.
- 1.2 Philosophy as content and Branches of Philosophy : Ontology epistemology and axiology. (Here examples are to be given of the Philosophies in Unit 3)

**Unit 2 Indian Schools of Educational Philosophy**

- 2.1 Vedic
- 2.2 Buddhist

These schools are to be studied under the following heads the aims of education, Curriculum, methods of teaching and Pupil-teacher relationship

**Unit 3 Western (modern) schools of Educational Philosophy**

- 3.1 Perennialism
- 3.2 Essentialism
- 3.3 Pragmatism (Progressivism)
- 3.4 Existentialism
- 3.5 Logical positivism

These Philosophies are to be studied under the following heads : Aims of Education, curriculum and methods of teaching and teacher - pupil relationship.



#### **Unit 4 Sociology and Education**

- 4.1 Meaning and scope of Educational Sociology
- 4.2 Educational Sociology and Sociology of Education
- 4.3 Meaning and Functions of Education from sociological point of views.

#### **Unit 5 Culture and Education**

- 5.1 Concept of culture
- 5.2 Relationship between and cultural patterns and education
- 5.3 Reconciliation of Traditional and Technological culture

#### **Unit 6 Political Ideologies and Education**

- 6.1 Major political ideologies : Totalitarian and Democratic Meaning and their main features
- 6.2 Aims, Curriculum, methods of teaching and administration under Totalitarian states
- 6.3 Aims, curriculum, methods of teaching and administration under Democratic States.

#### **Unit 7 Modern Technology and Education**

- 7.1 The impact of Science and Technology on Education
- 7.2 A detailed study of Paulo Freire's Pedagogy of the oppressed.

#### **RECOMMENDED BOOKS**

1. Dupise Adrian 1972  
Philosophy of Education Historical perspective,  
New Delhi- Thomson Press
2. Wingo G. 1975  
Philosophy of Education : An Introduction New York, Harper and Row.
3. Butler G 1975  
Four Philosophies and their practice in Education and religion.  
New York, Harper and Row.
4. Shivarudrappa G. 1985  
Philosophical approach to Education  
Bombay, Himalaya Publishing House
5. Sodhi T. S., Sondhu G. S. and Singh S. B. 1990  
Philosophical Dimensions of Education, Ambala Contt.,  
The Inidan Publications.
6. Reddy V N. K. 1985  
Futurology, New Delhi, Bharatiya Vidya Prakashan.

7. Toffler Alvin (1970) Future Shock  
New York, Bantam Books.
8. Toffler Alvin (1980)  
Third Wave : Bantam Books
9. Toffler Alvin : (1990) Power shift : Bantam Books
10. Seth Satish (1985)  
The Next 7000 days.  
New Delhi, Wiley Eastern Ltd.
11. Smith Philip 1957  
Philosophy of Education,  
New York, Harper and Row.
12. Reddy V.N.K. 1988  
Future Education and Human Resource Management  
New Delhi : Bharatiya Vidya Prakashan
13. Paulo Freire 1982  
Pedagogy of the oppressed.  
Great Britain : Penguin Education.
14. Brubacher John 1982  
Modern Philosophies of Education  
New York : McGraw Hill
15. Mathur S. S. 1989  
A Sociological Approach to Indian Education,  
Agra : Vinod Pustak Mandir
16. T.M.P. Mahavdan : Invitation to Indian Philosophy  
Arnold Heineman Publishers Pvt. Ltd., New Delhi.
17. पंडित बन्सी बिहारी (१९९०) भविष्याभ्यास आणि उद्याचे शिक्षण, नूतन प्रकाशन, पुणे
18. कुण्डले म. बा. : शैक्ष. तंत्रज्ञान व शैक्षणिक समाजशास्त्र, नागपूर महाराष्ट्र ग्रंथ निर्मिती मंडळ
19. बुबेकर जॉन : शिक्षणाची आधुनिक तत्त्वज्ञाने, श्री विद्या प्रकाशन, पुणे

**M.ED. GROUP A- PAPER II COURSE II**  
**ADVANCED EDUCATIONAL PSYCHOLOGY**

Duration : 3 Hours

Marks : 100

**Objectives**

After studying this course you will able to

1. Clarify the meaning of Advanced Educational Psychology
2. Analyse and evaluate elements of learning, Human development, Intelligence and personality.
3. Explain different theories of development, learning, intelligencies, personality.
4. Interpret the various problems of students.

**Unit 1 : Nature and Scope of Educational Psychology**

- 1.1 Educational Psychology - Teaching and teacher
  - 1.1.1 Concept of good teaching
  - 1.1.2 Ultimate goal of teaching
  - 1.1.3 Role of educational Psychology as a content and process.
- 1.2 Using Research to understand and improve teaching
  - 1.2.1 Descriptive studies
  - 1.2.2 Correlational studies
  - 1.2.3 Experimental studies
  - 1.2.4 Use of theories in teaching learning process

**Unit 2 Human Development**

- 2.1 Definition of development and aspects of Human development
- 2.2 Theories of Human development
  - 2.2.1 Maturation Theory (Casell)
  - 2.2.2 Psychoanalytical Theory (Freud)
  - 2.2.3 Psychosocial Theory (Erikson)
  - 2.2.4 Cognitive development Theory (Piaget/ Bruner)
  - 2.2.5 Moral Development Theory (Kohlberg)
- 2.3 Influence of Heredity and environment on normal and abnormal growth.
- 2.4 Role and duty of parents and teachers in proper development of children.

### **Unit 3 : Schools of Psychology**

- 3.1 Contribution of various schools with reference to Teaching and Learning (Behaviourism, Psychoanalysis, Gestal and Humanistic- schools)
- 3.2 Indian Psychological thoughts with reference to concept and function of Pradnya, Dhitta and Personality.

### **Unit 4 : Learning and Learning Theories**

- 4.1 Need of Learning theories and historical background of learning theories.
- 4.2 Classification of Learning theories according the views of Learning
  - 4.2.1 Behavioural views
  - 4.2.2 Congnitive views
  - 4.2.3 Social-cognitive views
  - 4.2.4 Modern views
- 4.3 Different Learning theories
  - 4.3.1 Skinner's present conditioning theory
  - 4.3.2 Kurt Lewin's field theory
  - 4.3.3 Bruner's cognitive theory
  - 4.3.4 Bandura's social Learning
  - 4.3.5 Ausubel's meaninggul Learning theory
  - 4.3.6 Information procesing model of learning

### **Unit 5 Intelligence and creativity**

- 5.1 Intelligence
  - 5.1.1 Meaning of intelligence
  - 5.1.2 Brain structure and intelligence (Naid Harmann structure)
- 5.2 Structure of Intelligence
  - 5.2.1 One (ability) factor factor or many  
Represented by Spearman and Carroll
  - 5.2.2 Multiple intelligences  
Represented by Thustone, Guilford, -Fuiford and Howard Gardner
  - 5.2.3 Meaning of concept's - like
    - 5.3.1 Emotional intelligence and E.Q.
    - 5.3.2 Artificial intelligence
    - 5.3.3 Crystalline and fluid intelligence

## 5.4 Creativity

5.4.1 Meaning and definition of the creativity

5.4.2 Four aspects of the creativity

5.4.3 Views of Mednic S.A. and Martha Mednic Paul Torrance and Kari Rogers

5.4.4 Measurement of the creativity

## Unit 6 : Personality

6.1 Definitions- Explaining  
Psychological meaning of personality

6.2 Theories of personality

6.2.1 Type theories- represented by Shelodon, Kremshmez, Card jung

6.2.2 Trait theories- represented by  
Guilford, Allport, Raymond Catlél and H. J. Eysenck

6.2.3 Psychoanalytical theories  
Represented by Freud, Erikson- NeoFreudian views of Jung and Adler

6.2.4 Social Behavioural theories  
Represented by Bandura, Miller- Dollard and Walters

6.2.5 Phenemenological and Humanistic theories  
Represented by Rogers, Maslow and Kelley

6.3 Influence of Heredity and enviropment on personality

6.4 Assessment of personality - 3 approaches  
Tra't approach, Holistic approach and projective techniques approach

6.5 Personality types and their characteristics  
Integrated, Distorted, Neurotic personality

6.6 Educational importance of personality study

## REFERENCE BOOKS

- 1 Anita Woolfolk - "Educational Psychology"  
Allyn and Bacon- London Singapur
- 2 Chauhan S. S.- "Advanced Educational Psychology"  
Vikas Publishing House
- 3 Bigge M. L.- "Learning theories for Teachers"  
Harper & Row Publishers
- 4 Harold W Bernard- "Psychology of Learning and Teaching"- McGraw Hills
- 5 W. A. Hillix and M. H. Marx  
"System and Theories in Psychology"- McGraw Hills

6. John P. Deccaco- "Psychology of Learning and Instruction"  
Prentice Hall Publisher
7. G. W. Allport- "Personality- a Psychological Interpretation"  
Henry Hall & Co.
8. अ. पां. खरात- 'प्रगत शैक्षणिक मानसशास्त्र' श्री विद्या प्रकाशन, पुणे
9. संपादक ह. ना. जगताप- 'शैक्षणिक मानसशास्त्र' अनमोल प्रकाशन, पुणे
10. र. वि. पंडित- 'शैक्षणिक मानसशास्त्र' पिंपळापुरे अँड पब्लिशर्स, नागपूर
11. ह. ना. जगताप- 'अध्ययन उपपत्ती व अध्यापन' नूतन प्रकाशन, पुणे.

**M.ED. PAPER III**  
**ELEMENTS OF EDUCATIONAL RESEARCH AND STATISTICS**

Duration : 3 Hours

Marks : 100

**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 kinds of educational research.
- 6 Understand the use of different tools and techniques of educational research.
- 7 Use different types of statistics in this research project.
- 8 Present a research report.
- 9 Criticise simple research articles/reports
10. To acquaint with computer for statistics.

**Unit 1 Need and Sources of generating knowledge**

- 1.1 Need of generating knowledge
- 1.2 Different sources of generating knowledge, Personal experience, Authority, Deductive reasoning and Inductive reasoning.
- 1.3 Scientific method as a source of generating knowledge : Its nature, characteristics and steps involved in it.

**Unit 2 Concept, Nature and Types of Research**

- 2.1 Concept and characteristics of research
- 2.2 Relationship between scientific method and research
- 2.3 Approaches of research : Positions (Quantitative) and Interpretivist (Qualitative)
- 2.4 Types of research : Fundamental and Applied

**Unit 3 Educational Research**

- 3.1 Concept and characteristics of educational research.
- 3.2 Steps involved in the conduct of educational research (Research plan/ proposal)

#### **Unit 4 Classification Research**

- 4.1 Historical Research.
- 4.2 Descriptive Research.
- 4.3 Correlation Research.
- 4.4 Experimental and Quasi- experimental Designs
- 4.5 Ex-post-facto design

#### **Unit 5 Selection and Definition of a problem**

- 5.1 Sources, selection and characteristics of research problems.
- 5.2 Statement of a research problem
- 5.3 Review of related literature and its importance
- 5.4 Formulation and statement of Hypothesis :  
Research hypothesis, statistical (Null) hypothesis, Directional and non-directional hypothesis and or objectives

#### **Unit 6 Sampling**

- 6.1 Definition and purpose of sampling
- 6.2 Methods of selecting samples : Random, Stratified, Cluster and Systematic
- 6.3 Determining the size of the samples.

#### **Unit 7 Data Collection Instruments**

- 7.1 Characteristics of data collection Instruments : Reliability and validity
- 7.2 Achievement tests, Attitude scales, Interest Inventories, Intelligence Tests (IQ) & Emotional Intelligence (EQ) Tests, Creativity Tests
- 7.3 Questionnaires and Interview schedules
- 7.4 Content analysis

#### **Unit 8 Data analysis and Interpretation**

- 8.1 Descriptive Statistics
  - 8.1.1 Measures of central tendency
  - 8.1.2 Measures of Variability
  - 8.1.3 The Normal Curve
  - 8.1.4 Measures of relationship
  - 8.1.5 Measures of relative position



## 8.2 Inferential Statistics

8.2.1 Concept of standard error, Levels of significance and Type I & Type II errors

8.2.2 Testing hypotheses of differential tests for Independent and correlated samples

8.2.3 Testing hypotheses of relationship : chi-square and correlation.

8.2.4 Simple Analysis of Variance (ANOVA)

This unit is to be studied from the interpretative point of view and not from the point of view of statistical calculations

## Unit 9 Preparation of a Research Report

9.1 Rational for a research report

9.2 Language and style of writing

9.3 Format of a research report

Preliminary Pages-

Title page

Acknowledge page

Table of contents

List of tables

List of figures

Abstract

### Main Body of the report

Introduction

Statement of the problem

Review of related literature

Statement of hypothesis and or research questions

Method

Subjects

Instruments

Design

Procedure

Results

Discussion (Data analysis, interpretations and findings)

Recommendations

References (Bibliography)

## RECOMMENDED BOOKS

1. Best, J. W. & Kahn J. V. (19) Research in Education, New Delhi : Prentice Hall
2. Buch M. B. (1974) : A Survey of Research in Education : Baroda : CASE
3. Buch M. B. (1974) : Second survey of research in Education, Baroda : Society
4. Buch M. B. (1987) : Third survey of research in education,  
New Delhi : NCERT
5. Buch M. B. (1991) : Fourth survey of research in Ed. Vol. I & II,  
New Delhi : NCERT
6. Buch M. b. (1997) : Fifth survey of educational research Vol. I & II : NCERT
7. Kreppendorff Klans (1985) : Content Analysis : An Introduction : Sage : London
8. Gay L. R. (1992) : Educatinal Research : Competencies for Analysis and application  
Columbus : Charles E. Merrill.
9. Guilford J. P. (1955) : Fundamental Statistis in Psychology and Education, New York,  
McGraw Hill
10. पंडित बन्सीबिहारी (१९८९) : शिक्षणातील संशोधन अभिकल्प : नूतन प्रकाशन, पुणे
11. पंडित बन्सीबिहारी (२००५) : कृती संशोधन, नूतन प्रकाशन, पुणे
12. पंडित बन्सीबिहारी (२००५) : शिक्षणातील संशोधन (संख्यात्मक व गुणात्मक) नित्य नूतन  
प्रकाशन, पुणे
13. भाण्डारकर पु. ल. (१९७६) : सामाजिक संशोधन पद्धती, नागपूर : महाराष्ट्र साहित्य निर्मिती मंडळ
14. मुळे, रा. शं. आणि उमाटे वि. तु. (१९८७) : शैक्षणिक संशोधनाची मूलतत्वे : नागपूर : महाराष्ट्र  
साहित्य निर्मिती मंडळ

**GROUP - A**

**COURSE - IV**

**HISTORY OF EDUCATION IN INDIA AFTER INDEPENDENCE AND  
ECONOMICS OF EDUCATION**

Duration : 3 Hours

Marks : 100

**Objectives**

1. To acquaint with the general development of progress of Education after independence.
2. To assess and evaluate various plan - efforts put into effect from time to time.
3. To understand the concept of Economics of Education.
4. To appreciate its significance in the growth of education.

**Unit 1** Major Issues, qualitative reforms and qualitative growth in : Primary, Secondary, Higher Secondary and Adult Education.

**Unit 2** Spread and progress in special fields of Education. Professional, Technological, Vocational, Woman's Education, Education for physically handicapped and Education for gifted.

**Unit 3** Agencies and Institutions developed for qualitative improvement of Education at National and State level. University Grants Commission, National and State level. University Grants Commission, National Council for Educational Research and Training, State Council for Educational Research and Training, State Council for Educational Research and Training and NCTE and District Institute of Education and Teacher.

**Unit 4** Recommendations of various Education Commissions- University Education Commission (Dr. Radhakrishanna), Secondary Education Commission (Dr. Mudaliar), Educational Commission (Dr. Kothari) and Rammurathi Commission.

**Unit 5** Major Innovation in the field of Education- Public Schools, National Talent Search, Navodaya Schools and Open University.

**Unit 6** Concept of Economics of Education. Its scope. Its utility. Its resources. Its importance in the growth and experiments.

**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 returns etc.

**Unit 9** Education and economic growth, Manpower- development. Policy, planning and employment opportunity.

**Unit 10** Economic provisions for education. Financing agencies both private and Government. Co-ordination of efforts. Avoidance of economic of economic wastage in education.

## RECOMMENDED BOOKS

1. Essays in the History of Indian Education, Basu Aparna, New Delhi, 1982
2. History of Indian Education, Rawal R. L.
3. Studies in Educational Reform in India (5 Vols), Panchmukhi R. R.
4. The Report of University Education Commission, Govt. of India, (Chairman, Dr. S. Radhakrishana), New Delhi, 1960.
5. Secondary Education Commission, Govt. of India, (Chairman- Mudliyar)
6. Report of the Review Committee on the Curriculum for ten year School., Govt. of India, (Chairman- I. J. Patel), New Delhi- 1975-75.
7. The Education commission and After, J. P. Naik.
8. Policy Documents on Education : 1968, 1979, 1986, 1990
9. Development of Education in India, Shivakumar Saini, New Delhi, 1980
10. Recent Development in Indian Education, Agrawal J. C.
11. Education in India, Jagannath Mohaty.
12. History of Education in India, S. N. Mukharji
13. The Philosophy of Open Education, Nyberg D.
14. Introduction to Economics of Education, Blaug M.
15. Perspectives of the Economics of Education, Benson C. S.
16. Education and Manpower Growth, Haribinso F. and C. A. Myers.
17. Education for Developing Region, Hunter G.
18. Economics of Higher Education, Mushkin S. J.
19. Measurement of Cost Productivity and Efficiency, Pandit H. M.
20. Forecasting Educational needs for social and Economic Developments, OECD
21. Education and Human Resource Development, V.K.R.V. Rao.
22. Budget Documents and Five Years Plans, Govt. of India.

## **GROUP - B-1**

### **HISTORY OF WESTERN EDUCATION**

Duration : 3 Hours

Marks : 100

#### **Objectives**

After studying this paper student will be able

1. To explain the characteristics of education during each period
2. To explain the impact of various thinkers and their philosophy on Education.
3. To explain the contribution of various thinkers to education.
4. To compare education during various periods.
5. To explain the impact of Western Education on Indian Education System.

#### **Unit 1 Education during Greek and Roman period**

- A. Origin and development of Greek and Roman education. Spartan and Athenian education, Sophism and Education.

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

- B. Roman Education

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

#### **Unit 2 Medieval period and Monastic system 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 view on education and their significance. Contribution and evaluation of educational principles of comenius.

- C. Naturalism in education (18th)

Educational Naturalism, Meaning and Significance of education ideals of naturalism. Study of educational ideas and practices of the thinkers- Rousseau and Pestalozzi.

D. Scientific Tendency in Education : Meaning and significances; her ideology and contribution of Herbert Sponser and T. S. Huxley to education.

**Unit 4** The growth of Democratic Education in 20th Century. Colonial Education in America. American educational awakening. Popularization of democratic education. Equality of educational opportunity. Educational theory and contribution of John Dewey, White, Head and Bertrand Russell.

#### **REFERENCE BOOKS**

1. Wilds Elmer and Lottich Kenneth : The Foundations of Modern Education. Holt, Rinehart and Winston (N.Y.)
2. Curtis S. J. and Boulwood M.E.A. : A short history of Educational Ideas, University Totorial Press (London)
3. Power Edward : Main currents in the History of Education McGraw Hill Book Company, (N.Y.)
4. Chaube S. P. : History of Indian Education, Vinod Pustak Mandir, Agra.

**GROUP - B-2**

**COMPATIVE STUDY OF EDUCATION IN U.S.A. AND CHINA**

Marks : 100

Duration : 3 Hours

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

**Unit 3 Problems on Comparative Education**

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

**Unit 4 The study of China with reference to the following points-**

- a) Historical background
- b) Aims and objectives of Education.
- c) Administration of Education (Primary to Higher)
- d) Current problems.

**SECTION - II**

**Unit 5 Problems to be studies in world perspective**

- a) Language
- b) Woman Education
- c) Teacher Education and Teacher's Status

**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 (Primary to Higher)
- d) Current problems.

**Unit 8 Comparative study of Educational systems of U.S.A. and China and their bearing on education in developing countries.**

**BOOKS FOR STUDY AND REFERENCES**

1. Education in New Era : I. L. Kandel
2. Comparative Education : Moshteman and Roucek.
3. World Survey of Education : UNESCO
4. Education Patterns in Contemporary Societies : Thut and Adams. McGraw Hill.
5. Problems in Education- A comparative Approach, Brian Holmes.
6. Contemporary Education : J. F. Cramer and C. S. Browne
7. The World Educational Crisis- A systems analysis, Phil H. Coombs, Oxford University Press
8. Essay on World Education- The crisis of supply and demand, Edited by G. A. F. Hereday, Oxford University Press.
9. Comparative Method in Education- George Z. F. Bereday Hold Rinehard and Wiston Inc. New York. (Available in cheap edition for Rs. 8/- only)
10. Towards a Science of Comparative Education : Harold J. Noah and Max A. Eckstein. The MacMillan Company Collier- McMill and Ltd. London.
11. Scientific Investigations in Comparative Education : Max A. Ecksten and Harold J. Noah. The MacMillan Company, Colliers MacMillan Ltd., London
12. Introduction of American Public Education : De-Young, Mac-Graw Hill.
13. The American School System : Douglas Aubey, Rinehard, New York.
14. Higher Education in American Republics : Harod R. W., Mac-Graw Hill
15. Education in China : J. B. Priestlay
16. Education in Communist China : Price.



## **GROUP - B-3**

### **NON-FORMAL EDUCATION AND POPULATION EDUCATION**

Duration : 3 Hours

Marks : 100

#### **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 to 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 education.
6. To help the students to understand the objectives of population education.
7. To acquaint the students the special features of Indian Population 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 method and means to control population growth in India.

Type and methods of non-formal education, adult education, distance education, continuing education, open universities, correspondence courses and mass media.

#### **SECTION - I**

- Unit 1** a) Meaning, Nature, Scope and Special features of Non-formal Education.  
b) Objectives of Non-formal Education  
c) Importance and need of non-formal education in the world perspective in general and India particular
- Unit 2** Types and methods 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 educational, 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**

1. Non-formal Education for all- Arvind Candra & Anupama
2. Some perspectives on non-formal Education- J. P. Naik
3. Population Education- S. K. Nanda, Doaba House
4. Population Education- S. C. Mohanty, Shri Durga Pustak Bhandar, Natraj Market, Sambalpur- Orisa.

**GROUP - B-4**

**PRINCIPLES OF CURRICULUM AND TEXT BOOK DEVELOPMENT**

Marks : 100

Duration : 3 Hours

**Objectives**

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

**Unit 1 Terminology of curriculum**

- a) Curriculum, syllabus, course of studies and units.
- b) Fusion, integration, inter subject 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 ideologist tradition, cultural heritage and national development on curriculum.
- c) Implications of principles accepted in the constitution of India, Democracy, secularism, socialistic pattern 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 and 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 Foundations**

- 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 curricular change**

- a) Organisational patterns
  - i) Organisation by subjects and correlation of different subjects
  - ii) Organisation by units- subject matter units and experience units.
  - iii) Organisation by core and electives.
- b) Agencies- Role of following agencies.
  - i) Demanding society
  - ii) Associations of subject- teachers and parent- teacher- association
  - iii) Research organisations : 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 textbook 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 organisation : Chapterisation, paragraph, headings, logical and psychological considerations.

## **Unit 9 Textbook Production**

Important dimensions of textbooks production.

- a) Preparation
- b) Production
- c) Distribution
- d) Use
- e) Try-out experts and research workers
- f) Revision
- g) Additional instructional material

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

## **Unit 10 Evaluation of Textbooks**

- a) Use of appraisal tools- Opinnaries and rating scales
- b) Content analysis techniques
- c) Experimental procedure

## **Practical Work**

1. Visit to agencies producing textbooks e.g. M. S. Bureau of text book production and curriculum research, Pune.

## **RECOMMENDED BOOKS**

1. Association of Supervision and Curriculum Development N.E.A.- Balance in Curriculum (Year 1961)
2. UNESCO- Psychological Foundation of Curriculum, 1962
3. Ministry of Education- The Improvement of curriculum in Indian Schools H. E. Harray
4. Taba H. - Curriculum Development, Theory and Practice by Harcours, Brace and World, New York.
5. Anderson V. E.- Principles and Procedures of curriculum Improvement, The Ronald Press Co. N. Y.
6. Tyler R. W.- Principles of curriculum and Instruction- University of Chicago Press.
7. Christine C. T. & Christine- Practical guide to curriculum and instruction, Parket Publish Company Lnc. N. Y.
8. Leese Frasure and Johnson- The teacher in curriculum making Harper and Row N. Y.
9. Saylor and Alexander- Curriculum Planning Holt Rinchart and Winston, N. Y.
10. Hall Quest Alfred, L. - Teh textbook : How to use it Judge it ? Mcmilan and Company

11. Department of textbooks, NCERT, New Delhi- Preparation and evaluations text books in mother tongue Second language, English, History, Geography, Social Studies, General Science, Physics, Biology [at middle schools stage]
12. M. S. Bureau of textbook production and curriculum- Research Publication Nos. 8th and onwards [Set of various research publishing company]
13. Holsti Ole R.- Content analysis for the social sciences and humanities, Addison- Wesley Publishing Company.
14. Fraunce R. C. and Bossing N. L.- Development 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.

## **GROUP - B-5**

### **ENVIRONMENTAL EDUCATION**

Duration : 3 Hours

Marks : 100

#### **Objectives**

1. To develop understanding and insight in to the concept of Environment. Environmental Education and into the problem of issues relating to the Environment.
2. To provide theoretical background for teacher in order to developing competencies of identifying investigating evaluation environmental problems and to fostering right citizenship action for protecting, preserving aspects of human environment.
3. To equip teachers with adequate knowledge, attitudes and skills required for promoting awareness to environment among the students.

#### **Unit 1 Concept of Environmental Education**

- 1.1 Meaning of environment- Its types, physical, social and psychological
- 1.2 Meaning and scope of environmental education
- 1.3 Emergency of environmental education as a district entry.
- 1.4 Goals of environmental education.

#### **Unit 2 Environmental problems and issues**

##### **2.1 Aspects of Human Environment**

- 2.1.1 Population : Growth, Crisis and problems of unplanned population.
- 2.1.2 Land : Uses and Reclamation
- 2.1.3 Natural Resources : Types- renewable and non-renewable uses and recycling of natural resources. Depletion of natural resources.
- 2.1.4 Food and Nutrition : Food production, types, quality and supply
- 2.1.5 Health and Hygiene : Individual, Family and community health, Health hazards.

##### **2.2 Population**

- 2.2.1 Meaning of pollution
- 2.2.2 Types of pollution : Water, air, soil and sound pollution.
- 2.2.3 Pollution by pesticides, chemicals and waste disposals of the Industries.
- 2.2.4 Adverse effects of pollution and aspects of human environments.

### **Unit 3 Awareness to Environment**

- 3.1 Man in relation to the other components of biosphere.
- 3.2 Environmental quality and Man's future on Earth
- 3.3 Need for promoting awareness to Environment
- 3.4 Conservation of natural resources- land and soil; energy and water,
- 3.5 Presevation of Natural Beauty
- 3.6 Enactments and Statutes related to Environment.

### **Unit 4 Teaching and Learning Strategies for Environmental Education**

- 4.1 Constraints and hurdles in implementing environmental educational education.
  - 4.1.1 Lacuna in conceptual understanding of environmental local vs. Global
  - 4.1.2 Variations in the environments of the learners
  - 4.1.3 Ways to overcome the constraints and difficulties.
- 4.2 Integration of environmental education with the teaching and learning of life sciences and social sciences.
- 4.3 Competencies to be developed in environmental problem identification, investigation, evaluation and citizenship actions for protecting and preserving aspects of human environment.
- 4.4 Strategies for developing competencies in environmental education.
  - 4.4.1 Preparation of A. B. Aids and their uses
  - 4.4.2 Field trips and Laboratory experiences
  - 4.4.3 Role and use of Mass-media
- 4.5 Evaluation of the learning outcomes of Environmental Education

### **BOOKS AND REFERENCES**

- 1. Environmental Education at the School Level- A lead paper NCERT, New Delhi.
- 2. A study in the Area of Adapting Science and Technology Education to changing society and to the Diversity of Needs, Atreya, Mishra and Gune, NCERT, New Delhi (Minieographed)
- 3. All India Environmental studies project for the Training Inservice Teacher Educationers (volumes) NCERT, New Delhi (Minieographed)
- 4. The curriculum Guide on Nutrition and Health Education and Environmental Sanitation in Primary Schools, NCERT, New Delhi.



- 5 Strategies for Developing an Environmental Curriculum- A discussion guide for UNESCO training workshop in environmental education, UNESCO, Paris.
- 6 Strategies for the training of teachers in environmental education- A discussion guide for UNESCO training workshops in environmental education, UNESCO Paris.
- 7 Introduction to Environmental Studies : J. Turk
- 8 Environment Protection Paris Diwan
- 9 The State of India's Environment : Citizen Report 1985
- 10 Environmental Challenges- Attar Chawel
- 11 Environmental Studies- Botkin and Kellar
- 12 Environmental Education- Rao-Reddy, Common wealth Publishers, New Delhi
- 13 पर्यावरणशास्त्र- अहिरराव, शिरसीकर, पाटील, पेंडसे, परचुरे, चौधरी, अलिझाड आणि पाटील

## GROUP - B-6

### EDUCATION OF THE EXCEPTIONAL CHILDREN

Duration : 3 Hours

Marks : 100

#### Objectives

Knowledge with comprehension : The learner

1. States the meaning and characteristics of exceptional children.
2. Explains the needs of special education for exceptional children.
3. Gives the types and the special characteristics of each type of exceptional children.
4. Explains the different methods to identify the different types of exceptional children.
5. Gives the causes of exceptions in children.
6. States the agencies of education for exception children.
7. Explains the importance of different aspects of education for exceptional children.
8. Explains the different administrative aspects of education for exceptional children.
9. Describes the qualities and qualifications of the teacher for exception children.
10. Explains the methods of selection placement, training for teacher of exceptional children.

Application : The learner

1. Prepares the report based on the case study of one exceptional child.
2. Prepare 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 Identifications of exceptions in children**

4.1 Heredity

4.2 Environment

4.2.1 Pretal 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 Evaluations

## **Unit 7 Administration**

- 7.1 Financing
- 7.2 Selection
- 7.3 Organisation
- 7.4 Maintenance of cumulative records
- 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

## **Practical Work**

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

## **REFERENCE BOOKS**

- 1. James R. L. : New Directions in special education : Allyn and Baker, 1971
- 2. Wilson : Diagnosis of learning difficulties : McGraw Hill, 1971
- 3. Dutch M. : Social Class Race and Psychological Development : Holt, Rinehart and Winston, 1968
- 4. Sarson S. P. and Dornis J. : Psychological problems in Mental deficiencies.
- 5. Curickshank W. and Johnson O. : Education of Exceptional children Prentice Hall, 1965
- 6. Dunn L. M. : Exceptional children in the schools : Holt, Rinehart, Winston, 1963
- 7. Dr. Premala Kala : Apawadatmak Balkanche Shikshan, Majestic Prakashan.

**GROUP - B-7**  
**EDUCATIONAL OF THE EXCEPTIONAL CHILDREN**

Duration : 3 Hours

Marks : 100

**Objectives**

Knowledge with comprehension:

The learner

1. Explains bases, meaning and need of guidance
2. Tells types of guidance.
3. Explains the procedure of knowing the pupil
4. Interprets the educational and psychological data of the pupils.
5. Explains the seven point plan
6. Tells the sources of occupational information.
7. Compares the techniques of individual and group guidance.
8. Tells the sources of occupational information
9. Explains the importance of placement and follow-up services.
10. Explains the meaning of adjustive guidance.
11. Tells the recent trends and research in guidance.

**Application : The learner**

Uses the 'Seven-Point Plan' to study the pupil. Applies his knowledge of job-study for studying the jobs. Administers various tests and collects and interprets the result.

**Unit 1 Bases : 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, functional 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, Exhibitions, Visits

### **Unit 4 Technique of Guidance**

#### **4.1 Individual Guidance**

##### **4.1.1 Counselling- meaning, characteristics and theories**

i) Directive, ii) non-directive, iii) Electric

##### **4.1.2 Interview- meaning, purpose, 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, leturers, 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 for placement.**

#### **6.2 Follow-up**

The importance and purpose of the follow-up service.

## **Unit 7 Adjustive Guidance**

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

## **Unit 8 Recent Trends and Research of Guidance**

### **Practical Work**

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

### **BOOKS RECOMMENDED**

1. Agrawal J. C.- Educational Vocational Guidance and Counselling Doaba House, Nai Sark, Delhi-8, 2965
2. Crow L. D. and Crow- An introduction to Guidance : Eurasia House, New Delhi, 1942
3. Dosah N. L.- Guidance Service in India, Any Book Depot, New Delhi-5, 1969
4. Huston I. W.- The Guidance Function in Education, Appleton Century- Crofts.
5. Jayaswal S. R.- Guidance and Counselling : Prakashan Kendra, New Buildings, Aminabad, Lucknow, 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 Pvt. Ltd., Delhi-6, 1967
8. Koshe G. S.- Vocationalisation of Education, Pune Vidyarthi Griha Prakashan, Pune-30, 1989
9. Myer G. E.- Principle and Technique of Vocational Guidances, McGraw Hill Book co., 1941
10. Weinbers Car-I- Social foundation of Educational Guidances, The Free Press, New York, 1969
11. Report of all India Conferences of State Bureau of Educational and Vocational Guidance, New Delhi, 1976

EXPERIMENTAL PSYCHOLOGY

Duration : 3 Hours

Marks : 100

**Objectives**

Knowledge with comprehension :

The learner

1. Gives the brief history of experimental psychology
2. States the different steps in experimentation.
3. Describes the method of experimentation psychophysics.
4. Explains the nature of errors introduced in psychological experiments and the measures for minimizing them.
5. Gives the general psychology of sense organs
6. Describes the experimental procedures for the study of characteristics of the process of perception with the help of different organs.
7. Describes the characteristics of psychological process involved in perception with the help of different sense organs.
8. Describe the characteristics of psychological process involved in the perception of form, space-time and movements.
9. Explains the methods of study the development of language in a child.
10. Describe the nature of learning curve and its characteristics.
11. States the types of learning.
12. Explains the methods of experimental study of conditioning.
13. Describes the methods of measuring retention.
14. Describes the methods of experimental study of determinants of retention, interference and forgetting.
15. Describe the methods of measuring fatigue.
16. Explains the methods of experimental study of fatigue.
17. States the types and measures of reaction time.
18. Explains the methods of experimental study of determinants of reaction time.
19. Explain the methods of experimental study of association formation.
20. Describe the experimental methods to study different types of thinking.
21. Describes the experimental methods to study emotional and social behaviour of human beings.



### **Application : The learner**

1. Performs the Psychological experiments with proper materials and apparatus.
2. Records the procedure, conclusions and interpretations of the experimental systematically.

### **Unit 1 Development of Experimental Psychology**

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

### **Unit 2 Psycho-Physics**

- 2.1 Meaning
- 2.2 Problems in Psycho-Physics
- 2.3 Methods in Psycho-Physics
  - 2.3.1 Method in Limits
  - 2.3.2 Method of Constant Stimuli.
  - 2.3.3 Method of average work error.
- 2.4 Types of errors introduced in Psycho-Physical expts, and measures of minimising them.

### **Unit 3 Sensations**

- 3.1 General study of Psychology 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 and Hering's
  - 3.2.2 Audition acutely  
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.

#### **Unit-4 Perception and Language Development**

- 4.1 Perception of form, space, time and movement
- 4.2 Illusion
- 4.3 Experimental study of concept formation and 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 design 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 of 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.

#### **Reference Books :**

1. Mary Collins and James Drever : Experimental Psychology, Layall Book Depot, Ludhiana.
2. Postman Leo and Egan James : Experimental Psychology, Kalyani Publisher's, New Delhi.
3. Bugelaski B. R. : Experimental Psychology, Holt, Rinehard, Winston, New York.
4. Boring E.G. : A History of Experimental Psychology, The Times of India Press, Bombay.
5. Andrea B.C. : A History of Experimental Psychology - Willey Eastern Pvt. Ltd., New Delhi.

- 6 Underwood B.J. : Experimental Psychology - The Times of India Press, Bombay.
- 7 Valentine C.W. An Introductio to Experimental Pyschology. University Tutorial Press Ltd., New Oxford.
- 8 Kotherkar V.K. and Vanarase S.J. : Experimental Psychology, A Systematic Introduction, Willey Eastern Pvt. 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 Kappu Swami B : Elementary Experiments in Psychology, Geoffery, Madras.
- 12 Wundt N.T. : A Laboratory Mannual in General Experimental Psychology, Houghton Mifflin Company, Cambridge

|    | Unit                   | Topic  | Object of Experiment   |
|----|------------------------|--|--|
| 1. | Psychophysical methods | Method of Limits<br>Method of right and wrong cases<br>Method of mean error  | 1) To calculate the threshold using the methods of limits.<br>2) To determine the differential threshold by using the method of right and wrong cases.<br>3) To calculate the space error by using the method of mean error.   |
| 2. | Sensation              | Vision : Mapping the blind spot<br>Vision : Contrast effect<br>Field of vision<br>Vision colour mixing<br>Vision- order of color preference<br>Vision- color blindness | 4) To map the area of the blind spot.<br>5) To study the phenomenon of successive colour contrast<br>6) To study the phenomenon of simultaneous colour contrast<br>7) To map the radial fields of vision for different colors<br>8) To verify the laws of color mixing.<br>9) To determine the subjects order of color preference<br>10) To detect the presence of color blindness.<br>11) To determine the absolute threshold for sound intensity.<br>12) To determine the accuracy of location of sounds of different position in the horizontal coronal and sagittal planes |
| 3. | Sensation              | Cutaneous Sensation<br><br>Kinaesthetic sensation of movement  | 13) To map the heat and cold spot on the limited area of the skin of the subject.<br>14) To map the pain and touch spots on the limited area of the skin of the subject<br>15) To determine the special threshold or the aesthesiometric index<br>16) To estimate the successive simultaneous movements of the individual  |

|    | Unit                               | Topic  | Object of Experiment  |
|----|------------------------------------|--|---|
| 4. | Perception<br>concept<br>formation | Perception of form<br>concept formation  | 17) To study the factor affecting<br>Gestalt figures.<br>18) To study the process of concept<br>formation   |
| 5. | Learning                           | Bilateral Transfer<br><br>Interferences<br><br>Maze learning                                     | 19) To study the effect of<br>Bilateral transfer<br>20) To study the effect of interference<br>in learning.<br>21) To measure the process of learning<br>in unseen stylus mazes and to<br>discover and compare the method<br>employed   |
| 6. | Retention and<br>forgetting        | Retention  | 22) To compare the efficiency of retention<br>by the measures recall and<br>recognition.  |
| 7. | Work and<br>Fatigue                | Fatigue  | 23) To prepare and study the stages of<br>the work.   |
| 8. | Reaction time<br>and Association   | Reaction Time<br><br>Association   | 24) To measure the simple reactions,<br>time, discriminatory, time for visual<br>and auditory stimuli.<br>25) To study the individual differences in<br>association formation.  |
| 9. | Human<br>Behaviour                 | Thinking<br><br>Intelligence<br><br>Emotional behaviour<br>Problem solving in<br>group situation | 26) To measure the individual<br>capacity at the test, for obstruct and<br>clear thinking.<br>27) To judge intelligence from<br>photographs<br>28) To study a performance test of<br>intelligence.<br>29) To Judge emotions from photographs.<br>30) To compare the problem solving<br>behaviour or subjects working alone<br>and in a group situation. |

## GROUP - B - 9

### Advanced Educational Statistics

#### Objectives :

Knowledge with comprehension : The learner explains :

1. The properties of normal distribution
2. The methods of measuring divergence from normality
3. The uses of normal P. curve in education.
4. The meaning of regression.
5. The method of preparing regression equations in prediction.
6. The application of regression equations in prediction.
7. The significance of the statistical measures and the difference between them.
8. The hypothesis of chance.
9. The meaning of null hypothesis.
10. The use of chi-square test.
11. The difference methods of scaling.
12. The meaning of reliability and validity of test scores.
13. The process of item analysis.
14. The meaning and significance of partial and multiple correlation.
15. The meaning of variance and covariance.
16. The methods of analysing variance and covariance.
17. The meaning of factor analysis.
18. The basic assumptions of factor analysis.

#### Application :

1. The learner solves the statistical problems in Psychology and education based on the difference units and sub units 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 percentages and of the co-efficient of correlation
- 3.2 The significance of the difference between means, sign and percentages and correlation co-efficients.

## **Unit-4 Testing Experience 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 stanine 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 determine 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 Methods at 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.

### **References and Books for Study :**

1. H.E.Gartt 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.Thempson, Factorial Analysis of Human Ability, University of London Press.



**TESTING AND MEASUREMENT IN EDUCATION**

**Objectives :**

**Knowledge with comprehension :**

**The learner**

- States about the concept of testing measurement and evaluation.
- States and development of testing with Indian context explains the terms validity, reliability and inter pretability.
- Explains the terms validity, reliability and inter pretability.
- Explains general principles of test constructions.
- Interprets the data i.e.test scores.
- Describes and process of standardization of a test.
- Describes the process of constructing a test.
- States the uses of different tests.
- Differentiates and standardized test and classroom test.
- Explains the different factors influencing test and testing.

**Application :**

**The learner**

- Administrates different tests in the class.
- Prepares classroom tests.
- Interprets 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 concepts.
- 1.4 Need and uses ith special reference to social consequences.

**Unit-2 Theory and Practice of Psychology Testing.**

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

| Practical          | Technical        |
|--------------------|------------------|
| Purposiveness      | Standardization  |
| Comprehensiveness  | Objectivity      |
| Economical         | Discriminativity |
| Easiness           | Reliability      |
| Acceptability      | Validity         |
| Representativeness | Norms.           |

### **Unit-3 Statistical concepts in test preparation**

- 3.1 Test scores and their transformation - scores  
T-scores percentage, statistics scores, percentiles,  
T.Q. Deviation scores
- 3.2 Test standardization- Norms
- 3.3 Concept of factor analysis method (factor loading)

### **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 method 3/4 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 Achievement | 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 test.
- 7.2 Psychological factors.
- 7.3 Environmental factors.

## **Unit-8 Tests relation to teacher behaviour and teaching situation**

8.1 Testing in teacher effectiveness (Aptitude/Attitude)

8.2 Testing teaching process.

8.3 Testing for environment of education.

### **Practical Work :**

Preparation, Administration and Reporting a classroom test.

### **Books Recommended :**

1. Measuring Learning Out comes - By Bruce W. Tukman Publisher, Harcourt, Brace, Jovanovich.
2. Educational and Psychological measurement and evaluation Julian C., Stanley, Konneth D. Hopking, Publisher-Prentice Hall of India.
3. Educational measurement - Editor Lingquist, Publisher - American Council on Education, Washington.
4. Theory and practice of Psychoogical testing by - Frank S. Freeman, Publisher - Holt, Rinchart and Winston, New York.
5. Educational and Psychological measurement - By Payne and Mc Morris, Publishers - Oxford and IBH.
6. Classroom test construction - (1971)
7. A Survey of Research in Psychology - 1972 Bombay.
8. A Survey of research in Education - M.B.Buch.
9. Measurement and Evaluation in Psychology and Education - By Torndiko and Hegan Publisher - John Willey and Sons, London, New York.
10. Measurement and evaluation in Education and Psychology - By Meherens - Lehmann, Publisher, John Willey and Sons, London, New York.
11. An Introduction to Psychological testing and statistics By - Prof. Dandekar and Prof. Rajguru, Sheth Publishers, Bombay-4.
12. आधुनिक मनोवैज्ञानिक परीक्षा एवं मापन (हिन्दी) - लेखक- डॉ. महेश भार्गव, प्रकाशन हरप्रसाद भार्गव, ४/२३०, कचेरी घाट, आग्रा.

## **GROUP - B - 11**

### **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 curricula. The changing extra school communication world.
- b) The basic communication process.
- c) Psychological barriers to effective teaching.
  - 1) Verbalism
  - 2) Referent confusion
  - 3) Day-dreaming
  - 4) Limited perception
  - 5) Physical discomfort

#### **Unit-2 Learning and Teaching with media six tests of media related learning.**

- 2.1 Each learner is unique.
- 2.2 Perception is the foundation of learning.
- 2.3 The learner must become involved.
- 2.4 Learning experience must be suitable
- 2.5 Teaching strategies must be appropriate
- 2.6 Creativity is the outcome of learning.

#### **Unit-3 Teaching with Pictures and Graphs**

- 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) Pictures quality.
- c) Nature and Characteristics of Graphics
  - i) Definition of Graphics
  - ii) Types of Graphs
  - iii) Diagrams
  - iv) Charts
  - v) Students and teacher made Graphics
  - vi) Postures.
  - vii) Cartoons 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 systems.
  - ii) The visual file as a learning experience.
  - iii) Storage facilities.

#### **Unit-4 Three Dimensional Teaching Material**

- a) Types of 3-dimensional materials.
  - 1) Models
  - 2) Objects and specimens
  - 3) Mock-ups
  - 4) Dioramas
  - 5) Outdoor laboratories.
  - 6) Museums
- b) Teaching with three dimensional material
  - 1) Selection in terms of learning needs
  - 2) Principles of effective use.
- c) School displays and exhibits.

#### **Unit-5 Display for learning**

- a) Study displays
  - 1) Functions for study displays
  - 2) Distinctive characteristics of study displays
- b) Provision of display areas
- c) Special display surfaces
  - 1) Pegboards
  - 2) Felt boards
  - 3) Hook and loop boards
  - 4) Magnetic boards
  - 5) Chalk boards
- d) Planning and organising the study display
- e) Evaluating displays for learning.
  - 1) Achievement of purpose
  - 2) Effectiveness of design.
  - 3) 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
  - 1) Walking trips
  - 2) Field study
  - 3) Visits by resources persons
  - 4) Special learning trips
  - 5) Research surveys.

#### **Unit-7 Audio-recording and playback**

- a) Types of audio-recorders
  - 1) Classroom recorders and playback
  - 2) large group recorders.
  - 3) Card-type audio-recorder.

- b) Recording- Process
  - 1) Microphone placement
  - 2) Some microphone techniques for teachers and pupils
  - 3) Duplicating of dubbing
  - 4) Evaluation recording
- c) Playback
  - 1) Classroom audio-play-back
  - 2) Audio tape playback and self-evaluation
  - 3) Audio lingual playback
  - 4) Dial access playback

#### **Unit-8 Audio-cued learning**

- a) Audio-cued learning definition
- b) Advantages
- c) Sources
- d) Developing audio-learning skills
- e) Selecting and evaluating audio learning experience

#### **Unit-9 Still Projection**

- a) Motion pictures film learning
- b) Instructional T. V.
- c) Computers simulation and games.
- d) Individual instructions and technology
- e) Multimedia instruct on and developments

#### **Unit-10A Writing lessons for**

- a) Radio
- b) T.V.
- c) Video
- d) Computer aided learning

#### **Practical Work**

- 1 Preparation of audio-cued learning material
- 2. Writing of a lesson for TV or Radio (At least one)

## References

1. Leedham John- Educational Technology, A first Book : Pitman Publishing (1973)
2. N.C.E.R.T. educational Technology progress and promise, N.C.E.R.T., (1973)
3. Audio-Visual methods in teaching : Edgar Dale; Dryen Press, New York (1948) 7th Printing.
4. Handcook- Planning for E.T.V., A Hand Book Educational T.V., Longman Group Ltd., London (1975)
5. Instructional Technology : Its nature and use : Walter Withich, Charles F. Schuller (5th Edition)



## GROUP - B - 12

### EDUCATIONAL ADMINISTRATION AND EDUCATIONAL 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 and use of research for policy decisions and qualitative improvement.

#### Course Outline

##### Unit- 1

- a) The concept of Educational Administration, Administrative function, 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 : authorization, deocratic, delegatory, de-central-leader, qualities : as judgement, efficiency and leadership required.

**Unit- 3** A comparative study of the structure of administration under Government of India Act of 199, 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.

- (Management and control of education Distribution of work, extracting timely compliance, Inter personal relation, humanitarian view, assessment of the work of assistance)
- Omitted since covered at B.Ed.

**Unit- 5** Supervision and Inspection in Education, its meaning scope and function techniques and trends in educational supervision and inspection, accreditation. Important through self-reliance and self help.

**Unit- 6** Educational planning, its meaning and scope, difference between approaches of Economics and Educators; Economic models of planning for developing countries; cost of education type of educational cost, opportunity costs and unit costs; Methods determining the costs; Decisive factor in costs.

**Unit- 7** Perspective planning of Education; Important Educational planning, Interrelationship of social indicator and planned Educational developing. Kothari commission on planning; Education in the five year plans; Manpower 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- 8** Educational finance; principles of Educational financier. 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 producing in respect of primary to University level.

**Unit- 9** Educational policy- review of national and state levels: 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

#### **Required Readings**

1. Mukherji, S. N.                      Administration of Education in India  
Acharya Book Depot, New Delhi
2. Mukerji, S. N.                      Problems of Administration of Education in  
India, Kitab Mahal, Allahabad
3. Mathur, S. S.                      Educational Administration- Principles and  
Practices., Krishna Brothers, Jalluncer, 1967
4. Campbell, R. F.                      Introduction to Educational Administration (4th Ed.)
5. Corebally, J. E.  
Remseyer, J. A.                      Beaters, Allen and Becon, 1971
6. Aggrawal, J. C.                      Educational Administration Inspection,  
Planning and finacing in India,  
Arya Book Depot, New Delhi
7. Sears, J. B.                      The nature of Administrative process  
McGraw Hill, New York, 1959
8. Naik J. P.                      The Role of Government of India in Education,  
Ministry of Education, Government of India, New Delhi
9. Glatte, R.                      Management Development for Education Profession,  
Harap, London, 1972
10. Asian Institute of  
Edul Planning and  
Administration                      Modern Management Techniques in  
Educational Administration, New Delhi, 1971
11. Campbell, R. F.                      Administration behaviour in Education

12. Grogg, R. T. Harper and Row, New York, 1957
13. Getzel J. M. Educational Administration as a social process
14. Luman J. M. Theory, Research and Practice.
15. Campbell, R. F. Harper and Row, New York, 1968
16. Boardman, C. W. Democratic supervision in School, Houghton Milton C.
17. Ricks, Harne, J. Educational supervision and practice,  
The Ronald Press Co. New York, 1980
18. Gadgil A. V. Supervision in Education,  
Shubhada Saraswat, Pune, 1982
19. N.C.E.R.T. Report of the stud-Group on Supervision  
and Inspection, New Delhi
20. UNESCO Economics and social aspects of Educational Planning, 1963
21. Naik J. P. Education Commission and after,  
Allied Publication, Delhi, 1982
22. Naik J. P. Planning in Education, Oxford Univ. Press.
23. Naik J. P. Educational Planning in India.  
Allied Publishers, New Delhi, 1965
24. Naik J. P. Educational Planning in a District  
{Asian Institute of Educational Planning,  
and Administration}, New Delhi, 1969
25. Rao, V. K. R.V. Education and Human Resource  
Development, Allied Publishers, New Delhi
26. Beeby, C. e. (Ed.) Qualitative Aspects of Educational  
Planning, (IIEP) UNESCO Publication
27. Ministry of Education  
Govt. of India,  
New Delhi Education in India, Education in State;  
Education in Universities.
28. Govt. of India  
UNESCO Budget documents and Five year plans  
Financing in Education
29. Misra Atmanand Education Finance in India,  
Asia Publishing House, 1962
30. Ministry of Education  
Govt. of India,  
New Delhi Education Commission (Kothari) Report, 1964-66
31. Beeby, C. F. The Quality of Education in Developing Countries  
Haeward Univ. Press, Cambridge, 1975
32. Harblson, F. Educatinal Planning and Human Resource  
Development (IIEP), UNESCO, 1967