APPLICABILITY OF REGULATIONS FOR THE TIME BEING IN FORCE

Notwithstanding the integrated nature of the course spread over four semesters in two academic years, the regulations in force at the time a student joins a course shall hold good only for the examinations held during or at the end of each semester. Nothing in these regulations shall be deemed to debar the University from amending the regulations subsequently and the amended regulations, if any, shall apply to all students whether old or new.

M.Ed (EDUCATIONAL TECHNOLOGY)

CHOICE BASED CREDIT SYSTEM

TWO YEARS REGULAR COURSE WITH SEMESTER SYSTEM

SEMESTER WISE OUTLINES OF SYLLABI, COURSES AND TESTS FOR THE DEGREE OF M.Ed (EDUCATIONAL TECHNOLOGY) FOR THE EXAMINATION OF 2015-17

GENERAL OBJECTIVE:

To prepare students as Teacher Educators, Administrators and Researchers for various institutions engaged in Teaching, Educational Research and Educational Technology.

SPECIFIC OBJECTIVES:

e) Reservation and relaxation for SC/ST/OBC/PWD and other applicable categories shall be as per the rules of the Central Government/ State Government whichever is applicable.

f) Any other qualifications recognized by the Syndicate as equivalent to (a).

g) Qualify Entrance Test for M.Ed with atleast 20% marks (15% in case of SC/ST/BC and blind candidates).

NOTE FOR ADMITTED CANDIDATES

Admitted candidates are required to complete successful study of 24 compulsory papers, 1 elective paper, self development skills, one compulsory dissertation and compulsory Field Internship (four to seven weeks) to satisfy the criteria of NCTE for award of degree of M.ED (ET). Dissertation and Field Internship will be evaluated at the end of Semester IV. The student has to obtain a minimum of 80 credits towards fulfillment of course completion criteria. Further:

1. A student is required to have a minimum of 80% attendance for theory courses and practicum in each semester to be eligible to appear

GUIDELINES FOR CONTINUOUS INTERNAL ASSESSMENT

The following are the guidelines, mode of testing and evaluation for Continuous Internal Assessment of students. It may include written assignment, snap tests, participation in discussion in the class, sessional work, term papers, attendance etc.
In order to incorporate an element of Continuous Internal Assessment of students, the Department will conduct one written test and one snap test as quantified below:

1.	Written Test	:	30 marks
2.	Sessional work/Practical	:	30 marks
3.	Snap Test	:	10 marks
4.	Participation in Class discussion	:	10 marks
5.	Term Paper/Assignment/Presentation	:	10 marks

M.Ed. (EDUCATIONAL TECHNOLOGY)

PROGRAM OUTLINE, LIST OF COURSES AND EVALUATION

M.Ed (Educational Technology)   Semester I

Program Code : MEDET – I

PAPER	COURSE CODE	COURSE TITLE	CREDITS	EVALUATION		
				External	**Internal**	**Total**
I	C01-PSF-1	Philosophical and Sociological Foundations of Education – I	4	70	30	100
II	C02-LLP-1	Learner and Learning Process– I	4	70	30	100
III	C03-ERS-1	Educational Research and Statistics – I	4	70	30	100
IV	C04-EDT-1	Educational Technology and ICT– I	4	70	30	100
V	C05-CRS-1	Curriculum Studies – I	4	70	30	100
VI	C06-DIS-1	Dissertation– I (Orientation to writing a synopsis)	0	--	--	--
VII	C07-SDS-1	Self Development Skills– I (Academic/ Professional Writing and Communication Skills)	1		25	25

Aggregate of Semester – I = 525 marks

Total Credits = 21

One Credit = 1 Hour

M.Ed   (Educational Technology) Semester - II

Program Code : <u>MEDET – II</u>

PAPER	COURSE CODE	COURSE TITLE	CREDITS	EVALUATION		
				External	Internal	Total
I	C08-PSF-II					

M.Ed (Educational Technology)   Semester III

Program Code : MEDET – III

PAPER	COURSE CODE	COURSE TITLE	CREDITS	EVALUATION		
				External	Internal	Total
I	C13-PID-III	Process of Instructional Designing-III	4	70	30	100
II	C14-DII- III	Designing Individualized Instruction-III	4	70	30	100

M.Ed (Educational Technology)   Semester IV

Program Code : MEDET – IV

PAPER   COURSE
**   CODE**

OUTLINES OF TESTS, SYLLABI AND COURSES OF READING FOR M.Ed.

(EDUCATIONAL TECHNOLOGY) SEMESTER SYSTEM

FOR THE EXAMINATION OF 2015-2017

SEMESTER-I

Program Code MEDET-I

PAPER-I
COURSE CODE : C01-PSF-I
COURSE TITLE : PHILOSOPHICAL AND SOCIOLOGICAL FOUNDATIONS OF EDUCATION-I

Credits=4
Total Marks=100
External=70
Internal =30

COURSE OBJECTIVES

On the completion of this course, the students will be able to :

- identity the aims as suggested by the Western Schools of Philosophy.
- identify the aims as suggested by the Indian Schools of Philosophy.
- explain the modern concept of philosophy.
-

Unit II

a) Indian schools of philosophy: Sankhya, Vedanta, Buddhism and Islamic traditions with reference to nature of knowledge, values and reality.
b) Educational implications for aims, content and methods according to these philosophies.

Unit III

a) Derivation of objectives from aims and goals: their forms, types and taxonomy of educational objectives.
b) Models of formulating instructional objectives, Miller, Mager and Gagne.

Unit IV

a) Derivation of curriculum from different (i) Western and (ii) Indian schools of philosophy
b) Contributions of Swami Vivekananda, Rabindra Nath Tagore, Mahatma Gandhi and Aurobindo to education.

Sessional Work :

o Evaluation of text book at secondary level.

SUGGESTED READINGS

1. Aggarwal, J.C. (2005): Theory & Principles of Education, New Delhi, Vikas Publication House Pvt. Ltd.

2. Banerjee, A.C. and Sharma, S.R. (1999): Sociological & Philosophical Issues in Education, Jaipur, Book Enclave.

3. Bhimbat, L. and Wadehra, R. (2011) Evolution of Edu

9.   Dash, B. (2010) Theories of Education and Education in Emerging Indian Society, New Delhi, Dominant Publishers and Distributors.

10.   Dewey, J. (1963): Democracy & Education, New York, the Macmillan Company.

11.   Eraut, M. (1996): The International Encyclopedia of Educational Technology, Great Britain: Pergamum Press.

12.   Jukes, I., Dasaj, A. and Macdonald, B. (2000): Net Savvy: Building Information Literacy in the Classroom, California: Corwin Press, Inc.

13.

PAPER II

COURSE CODE : CO2-LLP-I

COURSE TITLE : LEARNER AND LEARNING PROCESS-I

Unit II

a) Determinants of Individual Differences. Role of Heredity and Environment and its implications.
b) Concept of growth and development. Differences between growth and development. Principles of development. Development during adolescence: physical, cognitive, social and emotional.
c) Cognitive processes : sensation, attention, perception, cognition; Piagetian model of cognitive processes

Unit III

a) Concept and nature of learning. Factors affecting learning. Relationship between teaching and learning.
b) S-R theories (Pavlov, Thorndike, Skinner and Hull) and cognitive field theories (Kohler and Tolman).
c) Concept and types of motivation, its relation with learning. Achievement motivation.

Unit IV

a) Gagne's hierarchy of learning.
b) Strategies for teaching and learning for concepts, principles and problem solving.

Sessional Work

Designing teaching learning process for concepts, principles and problem solving.

SUGGESTED READINGS

1. Adelman, H. and Taylor, L. (2010) Mental Health in Schools, New Delhi, SAGE India Pvt. Ltd.

2.

7.   Eggen, P., D. (1988): Strategies for Teachers Teaching Contact and Thinking Skills, New Jersey: Prentice Hall, Englewood Cliffs.

8.   Fiori, N. (2010) Cognitive Neuroscience, New Delhi, PHI Learning Pvt. ltd.

9.   Gowda, N. (2010) Learning and The Learner-Insights in to the Processes of Learning and Teaching, New Delhi, PHI Learning Pvt. Ltd.

10.

PAPER-III

COURSE CODE : C03-ERS-I

COURSE TITLE : EDUCATIONAL RESEARCH AND STATISTICS-I

Credits= 4
Total marks = 100
External = 70
Internal = 30

COURSE OBJECTIVES:

On consultation of this course students will be able to:

- define educational research.

- explain need and importance of educational research and types of research.

- explain the scientific method in Educational Research.

- describe different areas of research in Education.

- explain steps of educational research with special emphasis on defining, identifying research problem and variables of research.

- explain the concept, types, significance and formulation of research hypotheses.

- explain need and types of sampling.

- describe the concept and application of Normal Distribution curve.

- elaborate the concept of significance of difference and analyse given data for differences in means.

- describe the concept and calculation of correlation.

NOTE: Examiner will set 9 questions, two from each unit and one question (Question No.9) covering the entire syllabus will consist of four short answer type questions. Students are required to attempt one question from units I, II, III and IV and question No.9 is compulsory. All questions carry equal marks. Duration of external examination will be 3 hours.

Table of critical values for statistical inference, e.g., F-ratio, t-ratio, r, chi-square, NPC areas, NPC ordinates, Wilcoxon- Mann- Whitney table etc. may be provided to the students.

COURSE CONTENT:

Unit I

a) Educational Research: Concept, Need, types (Fundamental, Applied and Action research) and Importance, scientific method in educational research.
b) Steps of Educational Research.
c) Areas of research and defining research problem, identifying and specifying the variables of research.

Unit II

a) Concept, types, significance and formulation of research hypotheses, testing of hypotheses.
b) Sampling: need of sampling, types of sampling, sampling errors and Type I and type II errors.

Unit III

a)

6. Edwards, A.L. (1960) : Experimental Design in Psychological Research, New York, Holt (revised ed.).

7. Edwards, T. (2011) Research Design and Statistics A Bio-Behavioural Focus, New Delhi, Tata McGraw Hill Education Pvt. Ltd.

8. Ferguson, G.A. and Takane, Y. (1989): Statistical Analysis in psychology and Education.

9. Forrester, M. (2010) Doing Qualitative Research in Psychology, New Delhi, SAGE Publications India Pvt. Ltd.

10. Garrett, H.E. (1986): Statistics in Psychology and Education. Bombay, Vikils Ferrers and Simons Pvt. ltd.

11. Guilford, S. & Fruchter, B. (1978): Fundamental Statistics in Psychology and Education. New York: Mc Graw Hill & Co.

12. Kaul, (1984): Methodology of Educational Research, New Delhi: Vikas Publishing House.

13. Kumar, R. (2011) Research methodology a step-by-step guide for beginners, New Delhi, SAGE Publications India Pvt. Ltd.

14. Lindquist, E.F. (1953): Design and Analysis of Experiments in Education and

1. Marg.

   Publications India Pvt. ltd.

16. Mceod, (2011) a.

   Delhi, SAGE Publications India Pvt. td.

PAPER-IV

COURSE CODE: C04-EDT-1

COURSE TITLE: EDUCATIONAL TECHNOLOGY AND ICT-I

Credits =4

Total marks = 100

External = 70

Internal =30

COURSE OBJECTIVES

On completion of this course, students will be able to :

- explain the concept, nature and scope of Educational Technology.
- trace the history of Educational Technology.
- discuss recent trends in Educational Technology.
- explain the concept and variables of teaching.
- explain the phases and levels of teaching.
- explain the concept, elements and families of models of teaching.
- discuss different models of teaching.
- explain the different types of teaching skills.
- discuss the meaning and process of micro-teaching.
- discuss the meaning and process of simulated teaching.
- explain various classroom observation systems.
- explain the concept, process, principles and barriers of communication.
-

b) Historical perspective of Educational Technology. Types of Educational Technology.
c) Recent trends in Educational Technology. Major institutions of Educational Technology in India CIET, EMRC, CEC.

Unit II

a) Teaching: Concept, variables, phases and levels of teaching.
b)

6.   Dececco J.P. & Crawford, W.R., (1970) : Psychology

PAPER-V

COURSE CODE : C05-CRS-I

COURSE TITLE : CURRICULUM STUDIES-I

Credit = 4
Total marks = 100
External = 70
Internal = 30

COURSE OBJECTIVES

On completion of this course the students will be able to:

- explain the concept of curriculum and curriculum development.
- explain the foundations of curriculum development.
- discuss factors affecting curriculum change.
- appreciate the role of teacher as a curriculum maker.
- explain the nature, purposes, scope and principles of curriculum development.
- explain Taba's model of curriculum development.
- explain the concept and need of curriculum design.
- explain features of different curriculum design.
- explain electic model of curriculum design.
- explain different models of curriculum engineering.
- appraisal critically the present day curriculum of Indian schools.
- discuss curriculum issues and trends
- predict future directions for curriculum.

NOTE : Examiner will set 9 questions, two from each unit and one question (Question No.9) covering the entire syllabus will consist of four short answer type questions. Students are required to attempt one question from units I, II, III and IV and question No.9 is compulsory. All questions carry equal marks. Duration of external examination will be 3 hours.

COURSE CONTENT

Unit I

a) Concept of curriculum, curriculum development and other curricular fields. Components of curriculum.
b) Epistemological, social and psychological foundations of curriculum development.
c) Factors affecting curriculum change, viz., social factor pressure groups, writers and publishers. Role of teacher as curriculum maker.

Unit II

a) Curriculum development: Nature, purposes, scope and principles.

b) Principles of formulating aims, selecting content, teaching learning and evaluation

13. Hugh (1976): Designing the Curriculum, London, Open Books.

14. Joyce, B., Weil, M. and Calhoun, E. (2009) Models of Teaching, New Delhi, jay Print Pack Pvt. Ltd.

15. Lewy, A. (1991): Studying Curriculum. Buckingham, Open University Press,.

16. Ornstein, A.C.A., Curriculum Foundations, Principles and Issues, London, Prentice Hall International Ltd.

17. Pratt, D. (1980): Curriculum Design and Development, New York, Harcourt Brace and World Inc.

18. Romiszowski, A.J. (1986): Designing Instructional System-Decision Making in Course Planning & Design.

19. Saylor & Alexander, (1960) : Curriculum Planning, New York, Holt Rinehart & Winston,

20. Solomon, P. G. (1998): The Curriculum Bridge, Corwin Press Inc

21. Tylier, R.W. (1974): Basic Principles of Curriculum and Instruction, London, Open University Pub.

22. Zais, R.S. (1976): Curriculum Principles and Foundations, London, Harper & Row Pub.

PAPER VI

COURSE CODE: C06-DIS-I

COURSE TITLE: DISSERTATION – I

Students will be guided to select a research problem after survey of related literature.

PAPER VII

COURSE CODE : C07-SDS-I

COURSE TITLE : SELF DEVELOPMENT SKILLS-I

Credit=1

Internal Marks=25

Academic/Professional writing and communication skills.

SEMESTER-II

PAPER I

COURSE CODE : C08-PSF-II

COURSE TITLE : PHILOSOPHICAL AND SOCIOLOGICAL FOUNDATIONS OF EDUCATION-II

Credits=4
Total Marks =100
External=70
Internal =30

COURSE OBJECTIVES

On the completion of the course, the students will be able to :

- explain the concept of sociology of education.
- explain the meaning and nature of social change and constraints on social change in India.
- explain education of socially and economically disadvantaged sections of society.
- explain meaning and nature of culture.
- explain impact of LPG (liberalization, privatization and globalization) on education.

Unit II

a) Culture: meaning and nature, cultural lag, Acculturization, relationship of culture and education.
b)

8.	Brubacher, J.S. (1962): Modern Philosophy of Education, N.J., Prentice Hall Inc. Englewood Cliffs,

9.	Dash, B. (2010) Theories of Education and Education in Emerging Indian Society, New Delhi, Dominant Publishers and Distributors.

10.	Dewey, J. (1963): Democracy & Education, New York, The Macmillan Company.

11.	Eraut, M. (1996): The International Encyclopedia of Educational Technology, Great Britain: Pergamon Press.

12.	Jukes, I., Dasaj, A. and Macdonald, B. (2000): Net Savvy: Building Information Literacy in the Classroom, California: Corwin Press, Inc.

13.	Lawrence, J. (2010) Educational Philosophy, Delhi, Rajat Publications.

14.	Mehra, V. (2010): A Text Book of Educational Technology, New Delhi, Sanjay Prakashan.

15.	Naseema, C. and Alam, M.A. (2004): From Blackboard to the Web. Integrating Technology and Education, New Delhi: Kanishka Publishers, Distributors.

16.	National Education Commission, 1964-66.

17.	National Policy of Education (1986): Ministry of Hu

PAPER-II

COURSE CODE : C09-LLP-II

COURSE TITLE : LEARNER AND LEARNING PROCESS-II

Credits=4

Total marks=100

External=70

Internal =30

COURSE OBJECTIVES

On completion of this course, students will be able to :

- explain the concept of intelligence.
- discuss theories of intelligence.
- explain techniques of measurement of intelligence.
- explain the concept and theories of personality.
- explain the assessment of personality.
- discuss the concept of adjustment and causes of maladjustment.
- explain the concept and importance of social learning.
- discuss the concept of classroom dynamics.
- discuss the problem of violence in schools.
- classify and identify children with special needs.
- explain the need and process of inclusive education.

NOTE : Examiner will set 9 questions, two from each unit and one question (Question No.9) covering the entire syllabus will consist of four short answer type questions. Students are required to attempt one question from units I, II, III and IV and question No.9 is compulsory. All questions carry equal marks. Duration of external examination will be 3 hours.

COURSE CONTENT

Unit I

a) Concept of intelligence (from unitary to multiple intelligence).
b) Theories of intelligence (Spearman, Thurstone, Guilford, Gardner and Sternberg).
c) Measurement of intelligence.
d) Emotional Intelligence : Concept and Importance.

Unit II

a)

Unit-II

a) Historical Research: Meaning, Steps with emphasis on internal and external criticism.

b) Descriptive research; Meaning, types with special reference to surveys, case study, longitudinal and cross sectional studies, trend studies and predictive studies, Ex-post facto research.

c) Experimental Research: Meaning, Steps and Threats to internal and external validity.

7. Edwards, T. (2011) Research Design and Statistics A Bio-Behavioural Focus, New Delhi, Tata McGraw Hill Education Pvt. Ltd.

8. Ferguson, G.A. and Takane, Y. (1989): Statistical Analysis in psychology and Education.

9. Forrester, M. (2010) Doing Qualitative Research in Psychology, New Delhi, SAGE Publications India Pvt. Ltd.

10. Garrett, H.E. (1986): Statistics in Psychology and Education. Bombay, Vikils Ferrers and Simons Pvt. ltd.

11. Guilford, S. & Fruchter, B. (1978): Fundamental Statistics in Psychology and Education. New York: Mc Graw Hill & Co.

12. Kaul, (1984): Methodology of Educational Research, New Delhi: Vikas Publishing House.

13. Kumar, R. (2011) Research methodology a step-by-step guide for beginners, New Delhi, SAGE Publications India Pvt. Ltd.

14. Lindquist, E.F. (1953): Design and Analysis of Experiments in Education and Psychology, Houghton Mifflin Co., Boston.

15. Margolis, E. and Pauwels, L. (2011) Visual Research Methods, New Delhi, SAGE Publications India Pvt. ltd.

16. McLeod, J. (2011) Qualitative Research in Counselling and Psychotherapy, New Delhi, SAGE Publications India Pvt. ltd.

17. Norton, L.S. (2009) Action Research in Teaching and Learning. London and New York : Roultedge.

18. Oliver, P. (2008) Writing your thesis. New Delhi: Sage.

19. Siegel, S. (1965): Non-parametric Statistics, New York, McGraw Hill Books Company.

20. Tuckman, B.W. (1972): Conducting Educational Research, Harcourt Brace, Javanovich.

PAPER-IV

| **COURSE CODE : C11-DIS-II** | Credits=2 |
| **COURSE TITLE : DISSERTATION -II** | Internal Marks=50 |

The students will be required to submit their synopsis in the month of March, 2016.

PAPER-V

| **COURSE CODE: C12 - SDS - II** | Credits=1 |
| **COURSE TITLE : SELF DEVELOPMENT SKILLS - II** | Internal Marks=25 |

Writing CV and Interview Skills

PAPER-VI (Any one of the following :)

E01-PSE- II (Pedagogy of Science Education-II)

E02-PSS- II (Pedagogy of Social Science Education-II)

E03-PLE- II (Pedagogy of Language Education-II)

E04-PME- II (Pedagogy of Mathematics Education-II)

COURSE CODE E01-PSE-II

PEDAGOGY OF SCIENCE EDUCATION-II

Course Credit : 4
Maximum marks: 100
External: 70
Internal: 30

COURSE OBJECTIVES

On completion of this course, the students will be able to:

- explain the nature of science as a dynamic, expanding body of knowledge and as a social endeavor;

- explain the difference and complementarity between Science and Technology;

- understand the need to evaluate curricula and evaluate the same on the basis of different validities;

- know about and critically study innovative curricular efforts in India and abroad;

- explain diversity of instructional materials, their role and the need for contextualization in science education;

- appreciate the role of co-curricular activities in science education;

- understand the constructivist approach to science instruction;

- understand the role of assessment in the teaching –learning process in science;

- familiarize with innovative trends in assessment;

- analyze issues in Science education pertaining to equity and access, gender, special groups and ethical aspects.

NOTE : Examiner will set 9 questions, two from each unit and one question (Question No.9) covering the entire syllabus will consist of four s

c) Role of experiments in science, development of laboratory design, planning and organisation of laboratory work, improvisation in the laboratory and low cost science experiments,

d) Metacognitive strategies-giving space to pupils to think, organize their knowledge and express teacher as a reflective practitioner.

e) Use of ICT in teaching-learning of science concepts at secondary level.

Unit IV

Evaluation Assessment and Contemporary Issues in Science Education

a) Evaluation in science: Formative and summative

b) Self-assessment by students and by teachers, peer assessment, assessment of teachers by students.

c) Contribution of Indian scientists

d) Scientific and technological literacy

e) Innovations and creativity in science.

TRANSACTIONAL MODE

Group discussion, lecture-cum –discussion, panel discussion, symposium, school visits and sharing of experiences, experimentation with kits and laboratory work project and assignments focusing in observation and interaction with children adolescent, group and individual field based assignments followed by workshops and seminar presentation.

Sessional Work:

The student teacher may undertake any one of the following activities:

- Development of a lesson plan
- Development of Achievement test

SUGGESTED READINGS

1. Sharma B.M. (2002). Teaching of Science. Chandigarh: Abhishek publishers.

2.

E02-PSS-II

PEDAGOGY OF SOCIAL SCIENCE EDUCATION-II

<div align="right">

Credits: 4

Total Marks: 100

External : 70

Internal: 30

</div>

OBJECTIVES:

Unit III

Approaches to Pedagogy of Social Science

a)   Critical appraisal of approaches to teaching learning social sciences – behaviourist approach; constructivist approach; inter disciplinary approach, integrated approach;

5.   GOI (1993), Learning Without Burden: Report of the National Advisory Committee appointed by the Ministry of Human Resource Development, Department of

22. NCERT (2006b), Syllabus for Classes at the Elementary Level, National Council of Educational Research and Training, New Delhi.

23. Pathak, A. (2002) Social Implications of Schooling: Knowledge, Pedagogy and

E03-PLE-II

PEDAGOGY OF LANGUAGE EDUCATION - II

Credits: 4

Total Marks: 100

External: 70

Internal: 30

OBJECTIVES

On completion of the course student-teachers will be able to:

- gain an understanding of the nature, functions and the implications of planning for teaching language/languages
- understand the psychology of language learning
- gain an understanding in the pedagogy of language learning
- study and analyze different approaches, methods and techniques for differentiating between teaching language and teaching literature in the context of first language and second language
-

Unit II

Language Analysis and Individualization of Language Learning

a) Discourse Analysis: Theories of discourse analysis including speech acts, conversational maxims, conversational analysis, ethno-methodology, text analysis, and critical discourse analysis.
b) Meta- linguistic awareness with a focus on listening, speaking, reading, comprehension at writing.
c) Need and techniques (viz. differential assignments, classroom tasks, etc.) for personalized system of instruction

Unit III

Curriculum and Pedagogy of Language

a) Language learning at secondary and higher secondary stage
b) Pedagogy of First language, Second language, Third language
c) Development of language curriculum and the syllabus: dimensions, factors that influence the curriculum, selection and sequencing of content, contexts, transaction and evaluation techniques

Unit IV

Issues in Language Learning and Evaluation

a) Cross linguistic influence in learning another language; ecology of bilingual memory
b) Multilingual classroom
c) Medium of instruction – recommendation of NPE 1986/1992, NCF -2005
d) Preservation of heritage language
e) Home language & school language – problem of tribal dialects
f)

SUGGESTED READINGS

1. Bennett, W.A. (1969). Aspects of Language and Language Teaching. London, Cambridge University Press.

2. Braden, K (2006). Task Based Language Education: Fr

COURSE CODE –E04-PME-II

COURSE TITLE: PEDAGOGY OF MATHEMATICS EDUCATION-II

Credit= 4

Total Marks: 100

External: 70

Internal: 30

COURSE OBJECTIVES

On completion of this course, students will be able to:

- appreciate the abstract nature of mathematics.
- distinguish between science and mathematics.
- develop the skill of solving real life problems through mathematics modelling as an art.
- develop the understanding of using constructivist approach in mathematics.
- develop the skill of using various methods and techniques of teaching mathematics.
- develop problem solving skills.
- develop the skills required for action research in mathematics.

NOTE : Examiner will set 9 questions, two from each unit

Unit II

Curriculum of Mathematics

a) Curriculum: Meaning, Principles of curriculum, Construction and Organisation.
b) Curriculum Evaluation and Reform in School Mathematics Curriculum: Rationale, Objective, Principles, Learning Experiences and Materials in mathematics, Recent Curriculum reforms at National and State Levels (NCF 2009).
c) Developing Remedial Leaning experiences and teaching material to overcome special problems of students. Developing enriched programmes and materials for teaching gifted and backward students in mathematics.

Unit III

Strategies of Teaching Learning Mathematics

a) Approaches of Mathematics Teaching-Learning: Constructivist Approach, Competency- Based Approach.
b) Methods of Mathematics Teaching- Learning: Inductive and Deductive Method, Analytic- Synthetic method, Computer Based Instructions and Computer Aided Learning.
c) Techniques of Mathematics Teaching- Learning: Problem –Solving: Stages of Problem Solving Techniques to improve Problem- Solving Skills (Polya   Method), Co-operative Learning (Jigsaw Method, Think Pair- Share).

Unit IV

Evaluation in Mathematics

a) Evaluation in Teaching Learning Process: Formative, Summative and Diagnostic. Identification and analysis of mistakes in mathematics, prevention and suggested remedial measures. Enrichment Programmes in mathematics learning: National mathematics Talent Search, Mathematics Olympiad.
b) Types of test items in mathematics: Meaning, merits, limitations and Construction of long answer type, short answer type, very short answer type and objective type construction and standardization of an achievement test in mathematics.
c) Action Research in Mathematics

Sessional Work: The student teacher may undertake any one of the following activities:

- Development of a lesson plan
- Development of Achievement test

SUGGESTED READINGS

1. Baw, G.R. & George L.U. (1976): Helping children learn mathematics- a competency basedlaboratory approach. California, Cummings Publishing Co.

2. Butler, C.H.& Wren, F.L. (1965): the teaching of Secondary Mathematics. NewYork: Mc Graw Hill.

3. Carpenter, T.P., Dossey, J.A. & Koehler, J. L.(2004): Classics in mathematics Education Research United States of America. The National Council of Teachers of Mathematics.

4. Chambers, P.(2010): Teaching Mathematics. New Delhi: Sage Publications.

5. Cooney, T.J. (1975): Dynamics of Teaching Secondary School Mathematics, Boston: Houghton Mifflin.

6. Driscoll, M. (1999): Fostering algebraic Thinking: A guide for teachers, grade 5-10. Portsmouth, NH: Heinemann.

7. Driscoll, M., Nikula, E.M. & DiMatteo, R.W. (2007): Fostering Geometric thinking : A guide to teachers, Grade 6-10, Portsmouth, NH: Heinemann.

8. Grouws, D.A.(ED)(1992): Handbook of research on mathematics teaching and learning, NY: Macmillan Publishing Lester.

9. Heimer, R.T. & Trueblood, C.R.(1970): Strategies for teaching children Mathematics; Reading. Massachusetts: Addison Wesley Publishing Co.

10. Howard T. & Jones, S.(2000): Becoming Successful Teacher of Mathematics. London: Rout ledge Falarer Series.

11. Kruteteski, V.A. (1976): The psychology of mathematical abilities in school children, University of Chicago Press.

12. Lieback, P (1984): How children learn mathematics. Penguin Books.

13. Malove, J. & Taylor, P.(1993): Constructivist interpretations of teaching and learning mathematics, Perth: Curtin University of Technology.

14. Marilyn, N.(2000): Teaching and learning mathematics: A guide to Recent Research and its applications, NY: Continuum.

15. Marshal, S.P. (1995): Schemes in Problem Solving, NY: Cambridge University Press.

16. Michael, D. R. (1977): Mathematics as a Science of Patterns. Oxford Press.

17.

20. Resonik, L.B. & Ford W.W. (1980):The psychology of Mathematics instruction, New Jersey: Lawrence Eribaurn Associates.

21. Schonell, F.J.& Schonell, F.E. (1965): Diagnostic and Attainment Testing. Edinburg, London: Oliver and Boyd Ltd.

22. Singh.M (2004): Modern Teaching of Mathematics, New Delhi, D.K. Publishers.

PROGRAM CODE : MEDET-III

COURSE CODE : C13-PID-III

COURSE TITLE : PROCESS OF INSTRUCTIONAL DESIGNING-III

Credits=4

Total Marks=100

External=70

Internal =30

COURSE OBJECTIVES

On the completion of this course students will be able to :

*

Unit II

Principles of instructional design.

    i)

SUGGESTED READINGS

1.   Allen, S. (1971): Dynamic Management, Prentice Hall.

2.   Bloom, B.S., Hastings, J.T. and Madaus, G.F. (1971): Handbook of Formative and Summative Evaluation Student Learning, New York, McGraw Hill.

3.   Bruner, J.S. (1966): Towards a Theory of Instruction, Cambridge, Mass, Harvard University Press.

4.   Cropper, G.L. (1974): Instructional Strategies, Englewood Cliff, N.J. Educational Technology Publications.

5.   Davis, I.K. (1971): The Management of Learning, London, McGraw Hill.

6.   Forsyth, I., Jolliffe, A. and Stevens, D. (1999): Evaluating a Course. Practical Strategies for Teachers, Lectures and Trainers. Lon

PAPER-II

COURSE CODE : C14-DII-III

COURSE TITLE : DESIGNING INDIVIDUALIZED INSTRUCTION-III

<div align="right">

Credits=4

Total Marks=100

External=70

Internal =30
</div>

COURSE OBJECTIVES :
On the completion of this course, students will be able to :
- describe the surviving principles of Program instruction.
- identify the characteristic features of different programming styles.
- select the styles for the given content and specified level of learners according to the characteristic features of programming with some frames of linear, branching and mathetic styles.
- differentiate between Linear and Branching Program with respect to various characteristics.
- develop and Validate linear style of Programs.
- explain the different types of evaluation.

NOTE : Examiner will set 9 questions, two from each unit and one question (Question No.9) covering the entire syllabus will consist of four short answer type questions. Students are required to attempt one question from units I, II, III and IV and question No.9 is compulsory. All questions carry equal marks. Duration of external examination will be 3 hours.

COURSE CONTENT

Unit I

a)   Psychological   Basis631.441(B)862(l)f,22(s).n [U)-0.145192(9))3.78731( )-b01(v)11.490 O4 862(l)-8.733

Unit III

a)   Developing of a Program (Preparation stage): Concept and specification of terminal behaviour, classification of objectives (Bloom's taxonomy). Mager's approach to

PAPER-III

COURSE CODE : C15-TED-III

COURSE TITLE : TEACHER EDUCATION-III

<div align="right">

Credits=4

Total marks=100

External=70

Internal =30

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COURSE OBJECTIVES

On completion of this course, the student will be able to :

- describe the importance and scope of teacher education.
- appreciate the r4862(l)1.8To0.871153(l)1..506(a)-2.0301(s)-3.93186(c)-4.87431(ta-2.0301(n)-.871153(d)0.

Unit II

a)

COURSE CONTENT

The students will be introduced to components, activity sequences, diagrams, operation and diagnosing minor failures of the following instruments:

- Audio-cassette recorder
- Overhead project
- Voice Recorder
- CD Player
- LCD Projector
- Video Cassette recorder
- Practice in handling and working with computers.

OUTLINE FOR INSTRUCTION

It is a practical course where the students will learn to operate upon above mentioned instruments and develop mastery in their use for a variety of purposes. Each instrument will be introduced verbally followed by practical demonstration of its application by the Incharge teacher of the practicals. All the students will operate repeatedly for the variety of modes of

3. Dean, C. and Quentin, W. (1984): A Handbook of Computer Based Training, London, Logon Page.

4.

Unit II

a) Nature, characteristics and types of distance learners (successful, non-starter and mid-course drop-outs)
b) Role of self-learning and study skills in distance learning.
c) Problems of distance learners.
d) Learner Support Services: concept, need, importance and organization.

Unit III

a) Meaning, scope and importance of Self Learning Materials.
b) Self Learning Materials in distance learning-print, audio, video, interactive, on-line and web-based.
c) Instructional materials in distance education-Self-Learning Materials, assignments, audio visual aids, use of ICT.
d) Planning self-learning materials.

Unit IV

a) Concept and need of evaluation in distance education.
b) Formative and summative evaluation.
c) Importance of feedback in distance education
d) Counselling of students in distance education.

Sessional Work

i) Visit to a Distance Education Institution and writing its report.
ii) Review of Self Learning Material of any paper of Distance Education.

SUGGESTED READINGS

1.   Bates, A. (1995): Technology, Open Learning and Distance Education. London : Routledge.

2.   Holmberg, B. (1977): Distance Education: A Survey and Bibliography. London: Kogan Page.

3.   Holmberg, B. (1985): Status and Trends of Distance Education. 2nd ed. Lund: Lector Publishing.

4.   Khan, I. (1991): Distance Education. Some readings. Delhi: Amar Prakashan.

5.   Lockwood, F. (1998): The Design and Production of Self-Instructional Materials. London : Kogan Page Ltd.

6.   Matheswaran, V.P. (2005): Distance Education: Student Support Services. New Delhi: Anmol PublishDrs.

8.   Rowntree, D. (1994): Preparing Materials for Open Distance and Flexbile Learning. London: Kogan Page.

9.   Simpson, O. (2000): Supporting students in Open and Distance Learning. London: Kogan Page.

PAPER-II
COURSE CODE : C20-DII-IV
COURSE TITLE : DESIGNING INDIVIDUALIZED INSTRUCTIONS-IV

Credits=4
Total Marks=100
External=70
Internal =30

COURSE OBJECTIVES:

Unit II

a) Bloom's and Keller's Mastery Learning Strategies.

b) Components of Mastery Learning: Tasks of Teachers for each component;

    i)   Defining mastery

    ii)   Planning for mastery

    iii)   Teaching for mastery

    iv)   Grading for mastery

c) Implications of Mastery Learning Strategies

Unit III

a) Computer fundamentals, internet and www.
b) Concept of computer based instruction: virtual classrooms, EDUSAT; Characteristics, applicability, advantages and limitations of computer based instruction.

Unit IV

a) Online teaching and learning: concept, advantages, challenges and methodology.
b) M-learning: concept, features, methodology, advantages, disadvantages.

Sessional Work

Preparing mastery learning plans in Bloom's and Keller style.

SUGGESTED READINGS

1.   Ahuja, M. (2007): Mastery Learning a Practical Approach, Meerut, Vivek Publishers, (2nd Ed.).

2.   Bhushan, A. and Ahuja, M. (2003): Educational Technology: Theory and Practice, Patiala, Bawa Publishers, (2nd edition).

3.   Block, J.H. and Anderson, L.W. (1974): Mastery Learning in Classroom Instruction: New York, Macmillan.

4.   Deva, V. (2003): E-knowledge, New Delhi: Commonwealth Publishers.

5.   French, D. (1999): Internet Based Learning: Stylus Publishing LIC.

6.   Hitz S.R. & Goldman, R. (2005): Learning Together Online: London, Lawrence Erlbaum Associates, Publishers.

7.   Jolliffee, A. & Others (2001): Online Learning, The Handbook: Kogan Page limited.

8.   Mager, R.T. (1961): Preparing Objectives for Programd Instruction, San Francisco, Pearson.

9.   Maier, P. and Warren, A. (2000): Integrating Technology in Learning and Teaching. London: Kogan Page.

10.   Mayer, R.E. (2001): Multimedia Learning, USA: Cambridge University Press.

11.   Rudestam, K.E. (2002): Handbook of Online Learning, New Delhi, Sage Publications.

12.

Unit III

a) Course Management in e-learning
b) Learning Management Systems
c) Use of wikipedia, wikieducator and other web-based technologies for online learning and training.

Unit IV

a) Concept and elements of online evaluation
b) Different methods of online testing
c) Evaluation of courseware, assessment of e-content

Sessional Work

i) Critical analysis of computer based media packages with reference to its use in learning process.
ii) Preparation and presentation of slides/e-content for teaching any topic at the school level.

SUGGESTED READINGS

1.   Armitage, S. and O'Leary. (2003). A guide for Learning Technologists (LSTNE-learning series No.4) New York : LTSN.
2.   Clarke, A. (2008). E-learning skills. New York: Palgrave Macmillan.
3.   Com(2001). E-learning Action Plan : Designing Tomorrow's Education, Commission of the European Communities, of the European Communities, 172 final, http://europa.en.imt./enr- lex/en/com/cnc/2001/com2001-0172enol.pdf.
4.   Holmes, B. & Gardner, J. (2006). E-learning: Concepts and Practices. London : Sage Publications.
5.   Mehra, V. (2013). E-learning in Teacher Education. In M.M. Pandey, R. Pandey and P. Tyagi (Editors) Uses of ICT in Teacher Education Program. New Delhi: Omega Publications.
6.   Naidu, S. (2003). E-learning: A Guide Book of Principles, Procedures and Practices. New Delhi: CEMCA.
7.   Rossen, E. and Hartley, D. (2001) Basic of e-learning Info-Line, 109.
8.   Sharma, R.C. & Mishra, S. (2007). Cases on Global e-learning Practices and Pitfalls. London: Information Science Publishing.
9.   Singh, P.P. & Sharma, S. (2005). E-learning : New Trends and Innovations. New Delhi: Deep and Deep Publications.
10.   Wiley, J. & Schooler, J.W. (2001). The Mental Web: pedagogical and Cognitive Implications of the Net. In C.R. Wolfe (Ed.), Learning and Teaching on the World Wide Web. San Diago : Academic Press.