

SARDAR PATEL UNIVERSITY
Programme & Subject: Bachelor of Education (Advanced)
Semester: I
Syllabus with Effect from: June-2010

Paper Code: UE01CBEA08	Total Credit: 3
Title Of Paper: Methodology of Teaching Mathematics	

Unit	Description in Detail	Weightage (%)
I	<p>Concept of Mathematics and objectives of teaching Mathematics Place of Mathematics in curriculum and life Meaning, nature and structure of Mathematics Value of teaching Mathematics Importance of Mathematics in Modern Society Relationship of Mathematics Among the different branches of mathematics Inter disciplinary relation with mathematics Objectives of teaching Mathematics in the 21st Century Meaning of objectives, types of objectives and their significance Bloom's Taxonomy of Educational objectives in terms of Mathematics Teaching General and Specific objectives of teaching Mathematics</p>	30%
II	<p>Approaches, Methods and Techniques of Teaching Mathematics Planning: concept, types, steps, significance and planning of a lesson. Difference between a Lesson Plan and Unit Plan Methods of teaching Mathematics Inductive - deductive Method Analytic -synthetic Method Problem solving Method Project Method Laboratory/Experiment Method Techniques in teaching Mathematics Drill and Review in Mathematics Demonstrating Discussing- Group discussions Approaches in teaching Mathematics Inductive-deductive Approach Participatory Approach Major trends for the future of Mathematics Teaching Process Oriented teaching-learning Swing towards self education Developing technological capabilities Teaching Aids, Material Production and Showcasing Concept of Teaching Aids Types of teaching Aids Significance of Teaching Aids Preparation of Improvised Teaching Learning Materials Preparation of Improvised Teaching Learning Materials (Preparation of Improvised TLM [ANY TWO] like workbooks, scrap book, Presentations, individualized materials, herbarium sheets, printed materials, magazines, educational games, etc.) Use of authentic materials and bulletin board in teaching Mathematics</p>	30%
III	<p>Mathematics: Content As per the prescribed syllabus of C.B.S.E. and G.S.E.B of STD VIII to X</p>	40%



Basic Texts & Reference Books:-

- G.S.E.B Text-books of Std. VIII to XII
- Sidhu K.S. (2005). Teaching of Mathematics, Sterling Publishers, Private Limited, New Delhi.
- Russel J. (2004). Teaching of Mathematics, Campus Books International, New Delhi.
- Pandey V. P. (2004). Teaching of Mathematics, Sumit Enterprises, New Delhi.
- Agrawal S. Teaching of Mathematics to Blind Students through Programmed Learning Strategies, Abhijit Publication, New Delhi.
- Ediger M. O. (2006). Teaching Mathematics successfully, Discovery Publishing House, New Delhi.
- Rao D. B. & Latha D.P.(2003). Achievement in Mathematics, Discovery Publishing House, New Delhi.
- Natraj. S. (2006). Learning To Teach , Vallabh Vidya Nagar: CVM

