

According to Uniform Curriculum Structure for Two-Year BEd  
Programme in WEST BENGAL following NCTE Regulations, 2014

# Pedagogy of Mathematics Teaching

3rd SEMESTER • COURSE-VII(B)

WITH PRACTICUM

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# Syllabus

## Course: VII-(B) (1.2.7B) Pedagogy of a School Subject Part-I (1/2)

Theory: 50 ● Engagement with the field: 50 ● Full Marks: 100

### PEDAGOGY OF MATHEMATICS

#### Unit I: *Mathematics curriculum and Text-book preparation:*

- Review of the existing curriculum of mathematics of West Bengal Board of Secondary Education in the perspective of the principles of curriculum construction and its comparison with that of the CBSE.
- Review of the existing text books of mathematics of West Bengal Board of Secondary Education in the perspective of the principles of text-book preparation and its comparison with that of the CBSE.

#### Unit II: *Practical activities associated with Mathematics concepts:*

- Performance of the all the practical activities stated in the text books of West Bengal Board of Secondary Education and preparation of allied teaching-learning materials.
- Co-curricular activities (including Mathematics club and Mathematics laboratory) in relation to mathematics teaching

#### Unit III: *Assessment and Evaluation related to teaching—learning of Mathematics:*

- Construction of achievement tests and their administration
- Preparation of a Continuous and Comprehensive Evaluation plan for a particular class (VI to X)

#### Unit IV: *Pedagogical Analysis:*

- Concepts and Methods of Pedagogical Analysis
- The Pedagogical knowledge of the content from various classes (Class-VI to VIII, IX-X, XI-XII) on the following items:
  1. Breaking of Unit into Sub-unit with no. of Periods,
  2. Previous knowledge,
  3. Instructional Objectives in behavioural terms,
  4. Sub-unit wise concepts,
  5. Teaching-Learning Strategies,
  6. Use of teaching aids,
  7. Blueprint for criterion reference test Items

#### Unit V: *Mathematics Education in a cross-cultural Perspective:*

- Anxiety associated with learning of Mathematics
- Maths Laboratory ● Maths Club
- Connecting mathematics to the environment
- Management of learning of slow and gifted learners

#### Engagement with Field / Practicum:

Any one of the following:

- Identify the slow learners, in Mathematics from the classroom during practice teaching (Case Study)
- Conducting of Action Research for selected problems.
- Development and try-out of Teaching-learning strategy for teaching of particular Mathematical concepts
- Use of Computer in Teaching of Mathematics
- Use of Mathematics activities for recreation
- Development and use of Mathematics laboratory
- Prepare mathematical activities in the context of socio-cultural aspects.
- One Pedagogical Analysis.
- One Achievement Test Construction.

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