

পশ্চিমবঙ্গ প্রাথমিক শিক্ষা পর্ষদ ও NCTE কর্তৃক অনুমোদিত Diploma in Elementary Education (DEEd) Course-এর নতুন পাঠ্যক্রম (2014) অনুযায়ী লিখিত।

প্রাথমিক শিক্ষক শিক্ষায় গণিত শিক্ষণ

প্রথম বর্ষ

সম্পাদনায়:

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স্বীতা পাবলিকেশনTM

প্রকাশক ও পুস্তক বিক্রেতা

25B, বেনিয়াটোলা লেন

কলকাতা - 700 009

পাঠ্যক্রম (Syllabus)

Unit-1 : Perspective about Mathematical Knowledge-1

Class-9 Hours

- Meaning, nature and characteristics of mathematics 2 hours
- Processes in mathematics—mathematical representations, mathematical relations, mathematical reasoning, problem solving in mathematics and communication in mathematics. 5 hours
- Goals of Mathematics Education—Cognitive, affective and Psychomotor domain 2 hours

Unit-2 : Perspective about Mathematical Knowledge-2

Class-10 hours

- Aims of teaching mathematics—disciplinary, utilitarian, recreational. 3 hours
- Objectives of mathematics education of elementary level in terms of competencies/learning outcomes, development of interest and appreciation 5 hours
- Effect of socio-cultural back ground of children on mathematical knowledge 2 hours

Unit-3 : Pedagogic Content Knowledge-1

Class-7 hours

- Number : Number concepts, counting, place value, rational numbers, Arithmetic operations, Fractions, Decimals 4 hours
- Spatial understanding and Shapes—vocabulary of special relationship, basic geometrical shapes and their characteristics, Triangle, Rectangle, Square, Circle, Sphere, Cylinder and Cone, Rectangular parallelepiped, cube. 3 hours

Unit-4 : Pedagogic Content Knowledge-2

Class-6 hours

- Measurement : Length, perimeter and area of square & rectangle circle, weight, volume, Time and money 4 hours
- Data handling : Collection and representation of data through various methods—tables, tallies, pictogram and bar graph—interpretation of idea 2 hours

Unit-5 : Elementary Statistics

Class-8 hours

- Basic concept in statistics 1 hour
- Tabulation of Data 2 hours
- Graphical presentation thereof 2 hours
- Measure of Central Tendency and dispersion 3 hours

Unit-6 : Conceptualization of Mathematics

Class-15 hours

- Constructivist Approach in Mathematics 2 hours
- Activity based learning, strategies for concept formation and concept attainment, structuring activities for inductive thinking and inquiry

based learning, structuring learning, activities using manipulative, story problems, games, outdoor activities and real life situations.

5 hours

- Co-operative learning strategies (learning together technique) 1 hour
- Theory of Mathematics learning : Piaget, Vygotsky, Dienes, Bruner 4 hours
- Concept of Estimation—Measurement related 1 hour
- Use of out of School Mathematics for conceptualization of Formal Mathematics 2 hours

Unit-7 : Resource in Mathematics Learning Class-6 hours

- Preparation and use of learning materials in mathematics. 4 hours
- Principles of selection and effective use of LTM 2 hours

Unit-8 : Learning Methods and Approaches of Mathematics Class-7 hours

- Observation, experimentation, Demonstration, Problem Solving 4 hours
- Project 3 hours

Unit-9 : Planning for Teaching Mathematics : Class-10 hours

- Unit—wise process based lesson planning, Preparation of lesson notes on the basis of competencies. 8 hours
- Planning for Teaching—Addressing problems in mathematics teaching and their probable solutions. 2 hours

Unit-10 : Assessment of Mathematics Learning Class-12 hours

- Meaning and purpose of assessment and evaluations 2 hours
- CCE in mathematics, Formative and Summative 4 hours
- Tools of assessment in mathematics—Achievement test and diagnostic test in mathematics construction and use 4 hours
- Assessment of misconceptions in Mathematics 2 hours

সূচিপত্র

1. গাণিতিক জ্ঞানের প্রেক্ষিত-1 [Perspective About Mathematical Knowledge-1]	.....	1-34
2. গাণিতিক জ্ঞানের প্রেক্ষিত-2 [Perspective About Mathematical Knowledge-2]	.....	35-51
3. শিক্ষাসংক্রান্ত বিষয় জ্ঞান-1 [Pedagogical Content Knowledge-1]	.....	52-101
4. শিক্ষাসংক্রান্ত বিষয় জ্ঞান-2 [Pedagogical Content Knowledge-2]	.....	102-158
5. প্রাথমিক রাশিবিজ্ঞান [Elementary Statistics]	.....	159-221
6. গণিতের ধারণাকরণ [Conceptualization of Mathematics]	.....	222-262
7. গণিত শিখনে সম্পদ বা উপাদান [Resource in Mathematics Learning]	.....	263-285
8. গণিত শিখনের পদ্ধতি ও দৃষ্টিভঙ্গি [Learning Methods and Approaches of Mathematics]	.....	286-304
9. গণিত শিখনের অ্যাসেসমেন্ট [Assessment of Mathematics Learning]	.....	305-348
10. গণিত শিক্ষণের পরিকল্পনা [Planning for Teaching Mathematics]	.....	349-426
■ DEEd Part-I Examination, 2015	.....	427-429
■ DEEd Part-I Examination, 2016	.....	430-432