

Board of Study (BOS), Bundelkhand University, Jhansi

National Education Policy (NEP) - 2020

Graduation Level Syllabus (B.A./B.Sc./B.Com) for Session 2021-22

In the context of- पत्रांक: बु0वि0/एकेडमिक/2021/6030

Minor Elective Subject: **Elementary Mathematics**

Unit	Contents	Allotted Lectures
I	Brief history of Indian Mathematics, Chronological development, Indian Mathematicians & their important contributions, Importance of Indian Vedic mathematics.	12
II	Nature and Scope of Mathematics, How Children Learn Mathematics, Mathematics in School Curriculum, Roll of mathematics in other discipline.	12
III	Approaches and Strategies for Learning Mathematics, Organizing Teaching-Learning Experiences, Learning Resources and ICT for Mathematics	12
IV	Statistics and Probability, Parallel Lines, Parallelograms and Triangles, Trigonometry and its Application,	12
V	Number Systems, Number Theory, Exponents and Logarithms, Polynomials: Basic Concepts and Factoring. <i>Introduction to MathType (MS Word Plugin), MATLAB, and LaTeX (Offline and Online Overleaf).</i>	12
Total Credit = 51		

Reference of Content:

1. "A Modern Introduction to Ancient Indian Mathematics" By T.S. Bhanu Murthy, New Age International Publishers.
2. "Pedagogy of Mathematics" By NCERT (2012), Textbook for Two Year B.Ed. Course, NCERT, New Delhi.
3. "Primary Mathematics across the Curriculum" By Hansen Alice and Vaukins Diane, Sage Publication India Pvt-Ltd, New Delhi.
4. Websites: <https://www.overleaf.com/>, <https://matlab.mathworks.com/>