

New College

NUMBER THEORY AND TRIGONOMETRY

B.A./B.Sc. I
Semester-II

$$\left[\sum_{d|n} d(d) \right]^2 = \sum_{d|n} \frac{\sigma(n!)}{n} [d(d)]^3$$



JEEVANSONS PUBLICATIONS

CONTENTS

<i>Chapter</i>		<i>Pages</i>
<u>NUMBER THEORY</u>		
1. <i>Divisibility</i>	....	1.1 — 1.40
2. <i>Congruences</i>	....	2.1 — 2.35
3. <i>Fermat's, Wilson's and Chinese Remainder Theorem</i>	....	3.1 — 3.27
4. <i>Euler's Function and Residue Systems (mod m)</i>	....	4.1 — 4.22
5. <i>Some Functions of Number Theory</i>	....	5.1 — 5.36
6. <i>Quadratic Residues and Quadratic Reciprocity Law</i>	....	6.1 — 6.44
<u>TRIGONOMETRY</u>		
7. <i>De Moivre's Theorem and its Applications</i>	....	7.1 — 7.50
8. <i>Circular Functions of a Complex Variable</i>	....	8.1 — 8.13
9. <i>Hyperbolic Functions</i>	....	9.1 — 9.18
10. <i>Logarithm of a Complex Quantity</i>	....	10.1 — 10.17
11. <i>Inverse Circular and Inverse Hyperbolic Functions</i>	....	11.1 — 11.34
12. <i>Summation of Series</i>	....	12.1 — 12.34
• <i>Short Answer Questions</i>	....	(i) — (iv)
• <i>Model Test Papers</i>	....	(v) — (x)