



**BHAVAN'S VIVEKANANDA COLLEGE  
OF SCIENCE, HUMANITIES AND COMMERCE  
SAINIKPURI, SECUNDERABAD  
Affiliated to Osmania University  
Autonomous College  
Accredited with 'A' grade by NAAC  
SEMESTER-V  
(60 Hrs)**

(w.e.f 2022-23 for the students admitted from the year 2020-21)

**Course Name: Basic Mathematics  
Course Code: GE521**

**HPW: 4L  
Credits: 4**

**Course Objectives:** The main aim of this course is to develop skills of students to prepare the Competitive examinations.

- COB1:** Develop understanding about basic concepts in Number Theory.  
**COB2:** Enhance the problem solving skills in finding the Average and Percentage.  
**COB3:** Understand the how to determine Ratio & Proportion and to calculate Profit & Loss.  
**COB4:** Enhance the problem solving skills in Time, Work, Distance, Simple & Compound Interest.

**Unit – I (10 Hrs)**

Numbers, H.C.F. & L.C.M. of Numbers, Simplification, Square Roots & Cube Roots.

**Unit – II (15 Hrs)**

Average, Problems on Numbers, Problems on Ages, Percentage.

**Unit – III (15 Hrs)**

Profit & Loss, Ratio & Proportion, Partnership.

**Unit – IV (20 Hrs)**

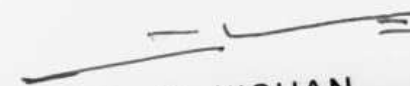
Time & Work, Time & Distance, Simple Interest, Compound Interest.

**Prescribed Text Book:**

R. S. Aggarwal, Quantitative Aptitude ,Reprint 2016, S. Chand.

**Reference Books:**

1. R.V.Praveen, Quantitative Aptitude and Reasoning, 2nd Revised Edition 2013, Prentice-Hall of India Pvt.Ltd.
2. G. K. Ranganath, C. S. Sampangiram and Y. Rajaram, A text Book of business Mathematics, 2008,Himalaya Publishing House.

  
**Dr. N. KISHAN**  
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HYDERABAD-500 007. T.S.

- QT 1- Section 1: 1,2,4,5
- QT 2- Section 1: 6,7,8,10
- QT 3- Section 1: 11,12,13
- QT 4- Section 1: 15,17,21,22

Learning Outcomes: Students will be able to

- 01: Analyze basic concepts in Number Theory.
- 02: Solve the problems based on Average and Percentage.
- 03: Evaluate the problem based on Profit, Loss, Ratio & Proportion.
- 04: Solve the problem involving Time, Work, Distance, Simple & Compound Interest.



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