

UNIVERSITY OF MADRAS
BACHELOR OF COMPUTER APPLICATIONS (BCA)
DEGREE PROGRAMME
SYLLABUS WITH EFFECT FROM 2023-2024

Year: I

Semester: II

Quantitative Aptitude	120S2A
Common for B.C.A. , B.Sc.-SA , B.Sc.-CSc , B.Sc.-CSc-wAI , B.Sc.-CSc-wDS	
Credits 2	Lecture Hours: 2 per week
Learning Objectives: (for teachers: what they have to do in the class/lab/field) To improve the quantitative skills of the students To prepare the students for various competitive exams	
Course Outcomes: (for students: To know what they are going to learn) CO1: To gain knowledge on LCM and HCF and its related problems CO2: To get an idea of age, profit and loss related problem solving. CO3: Able to understand time series simple and compound interests CO4: Understanding the problem related to probability, and series CO5: Able to understand graphs, charts	

Units	Contents
I	Numbers - HCF and LCM of numbers - Decimal fractions - Simplification - Square roots and cube roots - Average - problems on Numbers
II	Problems on Ages - Surds and Indices - percentage - profits and loss - ratio and proportion - partnership - Chain rule.
III	Time and work - pipes and cisterns - Time and Distance - problems on trains - Boats and streams - simple interest - compound interest - Logarithms - Area - Volume and surface area - races and Games of skill.
IV	Permutation and combination - probability - True Discount - Bankers Discount - Height and Distances - Odd man out & Series.
V	Calendar - Clocks - stocks and shares - Data representation - Tabulation - Bar Graphs - Pie charts - Line graphs

Learning Resources:

Recommended Texts

1. "Quantitative Aptitude", R.S. AGGARWAL., S. Chand & Company Ltd.,

Web resources: Authentic Web resources related to Competitive examinations