INSTITUTE	**FACULTY OF TECHNOLOGY**
PROGRAM	**BACHELOR OF TECHNOLOGY (COMPUTER ENGINEERING)**
SEMESTER	**5**
COURSE TITLE	**QUANTITATIVE & LOGICAL ABILITY - 3**
COURSE CODE	**01CR0503**
COURSE CREDITS	**0**

Objective:

1 This course shall enrich students' preparedness for the upcoming competitive exams, entrance test, and/or placements.

2 This course will also enhance students' logical skills, decision making skill, and comprehension skill.

Course Outcomes: After completion of this course, student will be able to:

1 Inculcate smart approach in quantitative problem solving.

2 Build a strong base in the fundamental mathematical concepts.

3 Grasp the approaches and strategies to solve problems with speed and accuracy.

4 Devise plans for QA domain of the placement drives and competitive exams

Pre-requisite of course:..

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
1	0	0	50	0	0	0	50

Contents : Unit	Topics	Contact Hours
1	**Introduction and Pre-Test** Pre Class Test	1
2	**Percentage** Reciprocals & equivalent percentage Speed techniques of calculating percentage Change of base concept Multiplying factor concept	1
3	**Profit, Loss & Discount** Explanation of basic terms Simple profit & loss concept Discount & multiple discount concept Faulty balance & wrong measurement, discount or mark up or mixing impurities Other combined examples	1

MR. DHANANJAY SINGH
Digitally signed by (Name of HOD)

MR. DHANANJAY SINGH
Digitally signed by (Name of Dean/ Principal)

Contents : Unit	Topics	Contact Hours
4	**Simple Interest & Compound Interest** Important formulae & Calculation Calculation of missing value concept Difference between SI and CI for various years. Comparison of SI and CI investment concept Sub topics: Difference between SI and CI for various years. Comparison of SI and CI investment concept	1
5	**Class Test 1 and doubt solving session** Class Test	1
6	**Ratio and Proportion** Ratio & Proportion, Ratio concept and rules & distributing amount in ratio	1
7	**Partnership** Partnership, Partnership ratio and profit distribution	1
8	**Class Test 2 and doubt solving session** Class test	1
9	**Time & Work** Concept of Time, Work & Efficiency, Concept of negative work, Product constancy, Pipes & Cisterns, Miscellaneous Examples	1
10	**Time, Speed & Distance** Basic formulae & its proportionality, Concept of Relative Speed (Same & Opposite directions) Concept of Average Speed, Problems on Trains	2
11	**Permutations and Combinations** Concept of Permutations & Combinations Permutation & combination with conditions Permutation & Combination of identical things Circular Permutation	1
12	**Probability** Formula & Basic terms Finding total no. of cases Examples of Coin and Dice Types of events Odds in favour & Odds against Conditional Probability Independent Events	1
13	**Class Test 3 and doubt solving session** Class Test	1
Total Hours		**14**

Textbook :

1 Quantitative Aptitude, Dr. R. S. Agarwal, S. Chand, 2021

2 Quantitative Aptitude, Abhijit Guha, MC Graw Hills, 2020

3 Quantum Cat, Sarvesh Kumar Verma, Arihant Publication, 2020

References:

1 Magical Book On Quicker Maths, Magical Book On Quicker Maths, M. Tyra, BSC Publishing Co. Pvt. Ltd, 2013

MR. DHANANJAY SINGH

Digitally signed by (Name of HOD)

MR. DHANANJAY SINGH

Digitally signed by (Name of Dean/ Principal)

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	**Understand**	**Apply**	**Analyze**	**Evaluate**	**Higher order Thinking / Creative**
10.00	15.00	40.00	35.00	0.00	0.00

Instructional Method:

1. The course delivery method will depend upon the requirement of content and need of students.
2. The trainer shall train students through interactions, demonstration, brainstorming, group tasks, assignments and quizzes etc.

Supplementary Resources:

1. www.indiabix.com
2. www.careerbless.com
3. www.allindiaexams.com
4. www.freshersworld.com

MR. DHANANJAY SINGH

Digitally signed by (Name of HOD)

MR. DHANANJAY SINGH

Digitally signed by (Name of Dean/ Principal)