INSTITUTE	**FACULTY OF TECHNOLOGY**
PROGRAM	**BACHELOR OF TECHNOLOGY (MECHANICAL ENGINEERING)**
SEMESTER	**4**
COURSE TITLE	**QUANTITATIVE & LOGICAL ABILITY - 2**
COURSE CODE	**01CR0402**
COURSE CREDITS	**0**

Objective:

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

2 It will enhance the numerical skills of the students through the group interactions, practice sessions, and videos.

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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

5 Categorize various types of questions in terms of difficulty levels

Pre-requisite of course: Basic Knowledge of Mathematics

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 & Pre-Assessment Test** Introduction & Pre-Assessment Test	1
2	**Vedic Maths – 1 (Multiplication tricks & Squaring of numbers) 2x2 digit numbers and 3x3 digit numbers** Vedic Maths – 1 (Multiplication tricks & Squaring of numbers) 2x2 digit numbers and 3x3 digit numbers	1
3	**Types of Numbers & Divisibility Test** Types of Numbers & Divisibility Test	1

Contents : Unit	Topics	Contact Hours
4	**Class Test 1 and doubt solving session** Class Test 1 and doubt solving session	1
5	**Factors & Multiples** Factors & Multiples	1
6	**Cyclicity & Remainder** Cyclicity & Remainder	1
7	**HCF & LCM** HCF & LCM	2
8	**Class Test 2 and doubt solving session** Class Test 2 and doubt solving session	1
9	**Average** Average	1
10	**AP & GP** AP & GP	1
11	**Problem Based on Ages/Numbers** Problem Based on Ages/Numbers	1
12	**Class Test 3 and doubt solving session** Class Test 3 and doubt solving session	1
13	**Revision** Revision	1
Total Hours		**14**

Textbook :

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

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

References:

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

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 and evaluation

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.
3. Students will use supplementary resources such as online videos and books.
4. The trainer shall train students through slides, worksheets and marker board.

Supplementary Resources:

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