

Subject Code: 01CR0303
Subject Name: Quantitative & Logical Ability - 1
B.Tech. Year II—(Semester III)
Objective:

This course shall enrich students' preparedness for the upcoming competitive exams, entrance test, and/or placements. This course will also enhance students' logical and verbal reasoning skills, decision making skill, and comprehension skill.

Credits Earned: 0 Credit

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

1. Inculcate smart approach in logical problem solving.
2. Build a strong base in the fundamental logical concepts.
3. Grasp the approaches and strategies to solve problems with speed and accuracy.
4. Use logical deductions to make effective decisions.
5. Categorize various types of questions in terms of difficulty levels

Pre-requisite of course: Basic Knowledge of English Language

Teaching and Examination Scheme:

Teaching Scheme (Hours)			Credits	Theory Marks			Tutorial / Practical Marks		Total Marks
				E	I	V	T		
Theory	Tutorial	Practical		ESE	IA	CSE	Viva	TermWork	
1	0	0	0	50	0	0	0	50	100



Contents:

Unit	Topics (Logical Reasoning)	Contact Hours
1	Introduction and Pre-Assessment Test	1
2	Calendar Sub-topics : Calculation of day of week on a given date Calculate day of week based on another date given	1
3	Clock Sub-topics : Calculation of angle between minute hand and hour hand Calculation of minute between a given time when a particular angle is formed Gaining & Losing examples Mirror time	1
4	Class Test 1 and doubt solving session	1
5	Direction Sense Sub-topics : Identifying Distance / Direction Degree related questions Coded distance/ direction	1
6	Blood Relation Sub-topics : Word-problem simple and complex type Coded blood relation	1
7	Series Sub-topics : Number Series Letter series	1
8	Class Test 2 and doubt solving session	1
9	Coding-Decoding Sub-topics : Word coding Numeric coding Symbolic coding Sentence coding	1
10	Analytic Reasoning Sub-topics : Ranking Seating-Arrangement Combination	2
11	Cubes & Dices	1
12	Class Test 3 and doubt solving session	1
13	Revision	1
		Total Hours
		14

Suggested Textbooks/ Reference books:

1. **Analytic Reasoning** – By M K Pandey, BSC Publishing Co. Pvt. Ltd, 2018.
2. **Verbal and Non-Verbal Reasoning** – By R.S. Aggarwal, S Chand, 2019.
3. **A New Approach to Reasoning Verbal & Non Verbal** – By BS SijWalii & Indu Sijwalli, Arihant Publications India Limited, 2018

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 an effective teaching-learning process.

Distribution of Theory for course delivery and evaluation					
Remember	Understand	Apply	Analyze	Evaluate	Create
10%	15%	40%	35%	0%	0%

Instructional Method:

- a. The course delivery method will depend upon the requirement of content and need of students.
- b. The trainer shall train students through interactions, demonstration, brainstorming, group tasks, assignments and quizzes etc.
- c. Students will use supplementary resources such as online videos and books.
- d. The trainer shall train students through ppts, worksheets and marker board.

Supplementary Resources:

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

Prepared by

Mr. Nur Ali Chamadiya
Manager – Training & Counseling

Mr. Dhananjay Singh

Assistant Vice-President
Learning & Development