1st Semester:

Subject Code: BCA(GS)181	Category: Mandatory& Industry Value
	Added Course
Subject Name: Competitive Aptitude Training I	Semester: 1st
L-T-P: 2-0-0 (Total Contact Hrs. 2)	Credit: 1
Pre-Requisites : Fundamental knowledge of Quant English.	itative Aptitude, Logical Reasoning &Verbal

Course Objective:

- 1. Will be able to enhance their aptitude & analytical skill with multiple tricky approaches.
- 2. Will be able to prepare for various competitive examinations & exams like CAT, GMAT, GRE

Course Outcome:

- 1. It will improve verbal ability skill among students.
- 2. Students will communicate effectively & appropriately in real life situation.
- 3. It will enhance students problem-solving skill.
- 4. Students will be able to prepare for various public and private sector exams & placement drives.

Module No.	Description	Hours	Blooms Level	PO (112) Mapping
1.	Quantitative Aptitude 1) Quant foundation- Vedic Maths & Collective tricks.	14	L1 (Remember) L2 (Understand) L3 (Apply)	
	2) Basic Multiplication – multiplying by numbers ending in zeroes, Multiplying by 2,3,4,5,6,7,8,9, 11,12 &			
	111.Multiplying 2 digits' numbers ending in 9 & whose tens digit at to 10, Multiplying by 2 digits' number of 9, multiplying by any 2-digit numbers ending in 9 3) Division- Divisibility by 2,3,4,5,6,7,8, 9, 11 & 13; Dividing by 5,9, 15,25,125, Dividing by Factors.			
	4) Squaring numbers- squaring any 2-digit numbers ending in 5, squaring any number ending in 5, squaring any 3digit numbers ending with 25, squaring any numbers ending in 9, squaring any			

	numbers consisting only nines. Squaring any 2-digit numbers. Cube & cube roots.			
	5) Percentage- Basic concept of percentage & it's shortcut rules & their applications.			
	6) Ratio- Basic concept of Ratio & Proportion, Shortcut tricks & their applications.			
	7) Simple equation - Linear equation of 2 & more than two variables.			
	8) Variation - Ratio, Proportion, Variation, concept of directly proportional.			
	9) Partnership – concept, rules & Applications, Percentage Advanced problems & shortcuts.			
	10) Profit & Loss - Basic concept, formulae, shortcut tricks & their application.			
2.	Logical Mental ability -1 1) Coding and Decoding & Direction Sense a) Conditional Coding, b) Word-Pattern Coding, c) Chinese Coding, d) Direction Sense Test, e) Direction Distance Test, f) Shadow based Questions.	14	L1 (Remember) L2 (Understand) L3 (Apply)	PO1, PO7
	2) Series &Numbers a) Alphabet Series, b) Random Series, c) Number Series, d) Letter Gap, e) Missing Number Series, f) Series Completion, g) Order and Ranking, h) Interchange, i) Comparison 3) Blood Relations Family Tree Questions, Indication Type BR, Coding Blood Relations, Miscellaneous Blood Relations 4) Analogy Word Analogy, Classification, Odd-Out			
3.	Objective English-1 1) Introduction of Parts of speech: Introduction, Brief discussion of Parts of speech 2) What is noun, Kinds of Noun, Rules & Application. 3) Definition of Pronoun, Examples, Rules & Application 4) Definition of Verb, Kinds of Verb, Rules & Application, Definition of Tense, Different types of Tenses, Examples, Rules & Application 5) Definition of Adjective, Kinds of Adjective,	14	L1 (Remember) L2 (Understand) L3 (Apply)	PO1, PO7,PO4

	 Rules & Application, 6) Definition of Adverb, Kinds of Adverb, Rules & Application 7) Definition of Preposition, Examples, Rules & Application, 8) Definition of Interjection, Examples, Rules & Its Application 			
	Its Application, 9) Definition of Conjunction, Examples, Rules & Application			
	10) Different types of Articles, Examples, Rules & Application English Grammar.Newspaper reading: The Hindu & Economic Times.			
4.	Data Interpretation level-I.	6	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	PO1, PO7

Learning Resources:

Text Books:

- 1. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Quantitative Aptitude—S.Chand

- 1. Advance Maths- Rakesh Yadav
- 2. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 3. A new approach to Reasoning- BS Sijwali
- 4. Quantitative Aptitude-R.S.Agarwal

	CO1	CO2	CO3	CO4
PO1	1	0	2	0
PO2	0	0	0	0
PO3	0	0	0	0
PO4	0	0	0	0
PO5	0	0	0	0
PO6	0	0	0	0
PO7	2	0	3	0
PO8	0	0	0	0

2nd Semester:

Subject Code: BCA(GS)281	Category: Mandatory& Industry Value
	Added Course
Subject Name : Competitive Aptitude Training II	Semester: 2nd
L-T-P : 2-0-0 (Total Contact Hrs. 2)	Credit: 1
Pre-Requisites: Fundamental knowledge of Quant	itative Aptitude, Logical Reasoning & Verbal
English.	

Course Objective:

- 1. Will be able to enhance their aptitude & analytical skill with multiple tricky approaches.
- 2. Will be able to prepare for various competitive examinations & exams like CAT, GMAT, GRE.

Course Outcome:

- 1. Students will learn advance tricky approaches for solving Quant.
- 2. It will enhance student's skill to appear in various aptitude test within limited time constrain.
- 3. This module will enhance students' Analytical skill & will also improve quick decision-making skill.
- 4. Students can prepare various competitive exams and different placement aptitude test as well.

Module No.	Description	Hours	Blooms Level	PO (112) Mapping
	Quantitative Aptitude 1) Average- Concept on average, different missing numbers in average estimation, shortcuts & their application. 2) Mixture & Allegation – Proportion & mixtures in percentages, populations & liquids, shortcuts & their application. 3) Number System- concept of different numbers, remainder theorem, factors. 4) Time & Work- Basic concept, Different problems & their shortcut tricks. Time & Speed & Tides- concept of speed, time & Distance, relative speed, formulae & their application. Upstream & Downstream, Pipes & cistern.	14	L1 (Remember) L2 (Understand) L3 (Apply)	PO1, PO7
2.	Logical Reasoning 1) Cube, Dice, Miscellaneous Problems 2) Data Sufficiency	14	L1 (Remember) L2 (Understand) L3 (Apply)	PO1, PO7

	 a) Problems on Blood Relation, ages, Numbers b) Logical Test Based on Data Sufficiency 3) Non-Verbal Reasoning a) Image Formation b) Water –Images c) Mirror Image d) Image completion e) Paper Cutting and Folding 			
3.	Objective English-2 1) Clauses: Definition, Examples, Rules & Application, Types of Sentences (Simple +Complex +Compound) Examples, Rules & Application, Voice- Concept, Types, Examples, Rules & Application, Narration Change- Rules (Direct & Indirect Speech) 2) Vocabulary-: Synonyms, Antonyms with examples, One-word Substitution, Idioms & Phrases 3) Spotting Errors 4) Reading Comprehension (Level II)	14	L1 (Remember) L2 (Understand) L3 (Apply)	
4.	Data Interpretation level-II Newspaper reading: The Hindu & Economic Times	6	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	PO1, PO7

Learning Resources:

Text Books:

- 1. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Quantitative Aptitude– S.Chand

- 1. Advance Maths- Rakesh Yadav
- 2. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 3. A new approach to Reasoning- BS Sijwali
- 4. Quantitative Aptitude-R. S Agarwal

	CO3	CO4	CO5	CO6
PO1	0	1	4	0
PO2	0	0	0	0
PO3	0	0	0	0
PO4	0	0	0	0
PO5	0	0	0	0
PO6	0	0	0	0
PO7	2	0	1	0
PO8	0	0	0	0

3rd Semester:

Subject Code: BCA(GS)381	Category: Mandatory& Industry Value		
	Added Course		
Subject Name: Competitive Aptitude Training III	Semester: 3rd		
L-T-P: 2-0-0 (Total Contact Hrs. 2)	Credit: 1		
Pre-Requisites : Fundamental knowledge of Quant English.	itative Aptitude, Logical Reasoning &Verbal		

Course Objective:

- 1. Will be able to enhance their aptitude & analytical skill with multiple tricky approaches.
- 2. Will be able to prepare for various competitive examinations & exams like CAT, GMAT, GRE

Course Outcome:

- 1. To enhance the problem-solving skills, to improve the basic mathematical & Logical Skills and to help students who are preparing for any type of competitive examinations.
- 2. To provide best possible training for the students through continuous training module.
- 3. To prepare students for the campus recruitment program's aptitude Test.
- 4. To enhance problem solving skill using fast track techniques without using calculator.

Module	Description	Hours		PO (112)
No.			Level	Mapping
1.	Quantitative Aptitude	14	L1 (Remember)	PO1, PO7
	1) Simple & Compound Interest- Basic concept		L2 (Understand)	
	of SI & CI, different formulas & their		L3 (Apply)	
	applications, concept of Growth & Contraction of			
	Business.			
	2) Data Interpretation- Tables, pie chart,			
	histogram, Bar chart, solution tricks &			
	techniques.			

	 3) Quant Review- Miscellaneous problems from different chapters & short cuts. 4) Indices & Surds- Basic concept, Formulae & their applications, finding out the square roots, Elimination of Surds, Equation solve. 5) Quadratic Equation- Polynomials, degree, powers, Equation & factors Solution. Progression- Concept of AP, GP & HP 			
2.	1) Syllogism a) Logical Venn diagram b) The If Else Statement 2) Puzzles	14	L1 (Remember) L2 (Understand) L3 (Apply)	PO1, PO7
	 a) Seating Arrangement b) Classification c) Seating Arrangement with Blood relations 3) Machine Input-Output a) Pattern Based I/O 4) Inequality a) Coded Inequality, b) Jumbled Inequality, c) 			
	Conditional inequality			
3.	 Sentence Corrections Fill the blanks with appropriate words/articles/preposition/verbs/adverbs/conjunct ion. Reading Comprehension (Advance Level) Vocabulary 	14	L1 (Remember) L2 (Understand) L3 (Apply)	PO1,PO4 PO7
4.	Data interpretation Advanced Level.	6	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	PO1, PO7

Learning Resources:

Text Books:

- 2. Objective General English- S.P Bakshi
- **3.** English Grammar and Competition-S.C Gupta
- 4. Fast Track Objective Arithmetic- Rajesh Verma
- 5. Quantitative Aptitude–S.Chand

- 1. Advance Maths- Rakesh Yadav
- 2. Verbal and Non-Verbal Reasoning- R.S Agarwal
- **3**.A new approach to Reasoning- BS Sijwali
- **4.** Quantitative Aptitude-R. S Agarwal

	CO7	CO8	CO9	CO10
PO1	3	1	0	0
PO2	0	0	0	0
PO3	1	0	2	1
PO4	0	0	0	0
PO5	0	0	0	0
PO6	0	0	0	0
PO7	4	0	1	2
PO8	0	0	0	0

4th Semester:

Subject Code: BCA(GS)481	Category: Mandatory& Industry Value
	Added Course
Subject Name: Competitive Aptitude Training IV	Semester: 4th
L-T-P: 2-0-0 (Total Contact Hrs. 2)	Credit: 1
Pre-Requisites : Fundamental knowledge of Quant English.	itative Aptitude, Logical Reasoning &Verbal

Course Objective:

- 1. Will be able to enhance their aptitude & analytical skill with multiple tricky approaches.
- 2. Will be able to prepare for various competitive examinations & exams like CAT, GMAT, GRE

Course Outcome:

- 1. Understand the advance concepts of QUANTITATIVE ABILITY.
- **2.** Understand the advance concepts of LOGICAL REASONING Skills & Introduction to Deductive Reasoning.
- 3. Acquire satisfactory competency in use of VERBAL REASONING.
- **4.** Solve campus placements aptitude papers covering Quantitative Ability, Logical Reasoning and Verbal Ability.
- 5. Solve various competitive exams papers like Bank, IBPS, SSC, UPSC, CAT etc

Module No.	Description	Hours	Blooms Level	PO (112) Mapping
	1) Permutation & Combination.	16	L1 (Remember)	11 0
1.	2) Probability- basic concepts of	10	L2 (Understand)	
	1 '		L3 (Apply)	
	probability, different theorems &		L3 (Apply)	
	applications, binomial, poison & normal			
	Distributions.			
	3) Geometry- Concept of different shapes			
	like triangle, quadrilateral, rectangle,			
	square, circle etc. different theorems &			
	their applications.			
	4) Mensuration- Formulae on triangles,			
	square, Rhombus, parallelogram, sphere,			
	circle, cone, pyramid etc. Application based			
	problem solving. Coordinate Geometry-			
	Locus, Straight lines, Circle etc.			
2.	1) Seating Arrangement	16	L1 (Remember)	
	a) Circular seating arrangement		L2 (Understand)	
	b) Square seating Arrangement		L3 (Apply)	
	c) Line Arrangement			
	2) Calendar and Clock			
	3) Miscellaneous Problems			

3.	1) Sentence Corrections	16	L1 (Remember)	
	2) Fill the blanks with appropriate		L2 (Understand)	PO7
	words/articles/preposition/verbs/adverbs/conj		L3 (Apply)	
	unct ion.			
	3) Reading Comprehension (Advance			
	Level)			
	4) Vocabulary			
	Newspaper reading: The Hindu &			
	Economic Times.			

Learning Resources:

Text Books:

- 4. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Quantitative Aptitude– S.Chand

- 1. Advance Maths- Rakesh Yadav
- 2. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 3.A new approach to Reasoning- BS Sijwali
- 4. Quantitative Aptitude-R. S Agarwal

	CO11	CO12	CO13	CO14	CO15
PO1	2	2	1	1	1
PO2	0	0	0	0	0
PO3	0	0	0	0	0
PO4	0	0	2	1	3
PO5	0	0	0	0	0
PO6	0	0	0	0	0
PO7	2	2	1	2	0
PO8	0	0	0	0	0

5th Semester:

Subject Code: BCA(GS)581	Category: Mandatory& Industry Value
	Added Course
Subject Name : Competitive Aptitude Training V	Semester: 5th
L-T-P: 2-0-0 (Total Contact Hrs. 2)	Credit: 1
Pre-Requisites : Fundamental knowledge of Quant English.	itative Aptitude, Logical Reasoning & Verbal

Course Objective:

- 1. Will be able to enhance their aptitude & analytical skill with multiple tricky approaches.
- 2. Will be able to prepare for various competitive examinations & exams like CAT, GMAT, GRE

Course Outcome:

- 1. The ability to communicate effectively with a range of audiences.
- 2. The ability to face the test and interview conducted by different companies and succeed
- 3. The ability to recognize the need for continuing professional development.
- 4. The ability to succeed in competitive exams (GATE /GRE/PSU's/Placement Aptitude etc.).

Course Content

Module No.	Description	Hours	Blooms Level	PO (112) Mapping
1.	Quantitative Aptitude & Data Interpretation- Miscellaneous	16	L1 (Remember) L2 (Understand) L3 (Apply)	
2.	 Logical Reasoning 1) Statement and Assumption, 2) Statement and Conclusion, 3) Statement and Course of Action, 4) Cause and Effect, 5) Drawing Inference 	16	L1 (Remember) L2 (Understand) L3 (Apply)	
	 Sentence Corrections Fill the blanks with appropriate words/articles/preposition/verbs/adverbs/conjunct ion. Reading Comprehension (Advance Level) Vocabulary Newspaper reading: The Hindu & Economic Times. 	16	L1 (Remember) L2 (Understand) L3 (Apply)	

Learning Resources:

Text Books:

- 2. Objective General English- S.P Bakshi
- 3. English Grammar and Competition-S.C Gupta
- **4.** Fast Track Objective Arithmetic- Rajesh Verma
- 5. Quantitative Aptitude– S.Chand

- 1. Advance Maths- Rakesh Yadav
- 2. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 3.A new approach to Reasoning- BS Sijwali
 4. Quantitative Aptitude-R. S Agarwal

	CO15	CO16	CO3	CO4
PO1	1	0	1	1
PO2	0	0	0	0
PO3	0	0	0	0
PO4	2	2	3	2
PO5	0	0	0	0
PO6	0	0	0	0
PO7	0	2	0	0
PO8	0	0	0	0

6th Semester:

Subject Code: BCA(GS)681	Category: Mandatory& Industry Value			
	Added Course			
Subject Name: Competitive Aptitude Training VI	Semester : 6th			
L-T-P: 2-0-0 (Total Contact Hrs. 2)	Credit: 1			
Pre-Requisites : Fundamental knowledge of Quantitative Aptitude, Logical Reasoning & Verbal				
English.				

Course Objective:

- 1. Will be able to enhance their aptitude & analytical skill with multiple tricky approaches.
- 2. Will be able to prepare for various competitive examinations & exams like CAT, GMAT, GRE

Course Outcome:

- **1.** The ability to communicate effectively with a range of audiences.
- **2.** The ability to face the test and interview conducted by different companies and succeed. And also, preparation to appear different competitive exams starts.
- **3.** The ability to recognize the need for continuing professional development.
- **4.** The ability to succeed in competitive exams (BANK/IBPS/SSC/GATE / GRE / PSU's/Placement Aptitude etc.)

Module No.	Description	Hours	Blooms Level	PO (112) Mapping
1.	Revision and Advanced Problems in Quantitative Aptitude 1. Numbers (+, -, x, etc), Percentages, Ratio, Partnership, Linear Equations, Profit & Loss	16	L1 (Remember) L2 (Understand) L3 (Apply)	′
	2. Averages, Mixtures & Allegations, Number System, Time and Work			
	 3. Simple & Compound Interest, Other / Misc Quantitative Apt., Indices and Surds, Quadratic Equations 4. Permutations & Combinations, Probability, Geometry, Mensuration 			
	5. Data Interpretation, Various Charts, Diagrams, Tables			

2.	Revision and Advanced Problems in Reasoning 1) Coding, Series & Numbers, Blood Relations, Analogy 2) Cubes, Data Sufficiency, Non-Verbal Reasoning 3) Syllogisms, Puzzles, Machine I/O, Inequality 4) Seating Arrangement, Calendar / Clock 5) Statements, Other / Misc Logical Reasoning, Decision Making (Ethics)	16	L1 (Remember) L2 (Understand) L3 (Apply)	PO1,PO7
3.	Revision and Advanced Questions in Verbal English 1) Grammar, 2) Clauses, 3) Spotting errors, 4) Sentence Correction, 5) Blanks, 6) Reading Comprehensions, 7) Vocabulary Newspaper reading: The Hindu & Economic	16	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	′

Learning Resources:

Text Books:

- 1. Objective General English- S.P Bakshi
- 2.nglish Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Quantitative Aptitude-S.Chand

Reference Books:

- 1. Advance Maths- Rakesh Yadav
- 2. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 3.A new approach to Reasoning- BS Sijwali
- 4. Quantitative Aptitude-R. S Agarwal

	CO17	CO18	CO19	CO4
PO1	1	0	1	1
PO2	0	0	0	0
PO3	0	0	0	0
PO4	2	2	3	2
PO5	0	0	0	0
PO6	0	0	0	0
PO7	0	2	0	0
PO8	0	0	0	0
