ME SDP SYLLABUS

<u>1ST SEMESTER:</u>

Subject Code : IVC102	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: 0
Pre-Requisites: Basic & fundamental knowledge of Logical & Analytical skill.	f mathematics up to class 10 th standard,

Course Objective:

- 1. To improve verbal ability skill and communicative skill of the students.
- 2. To enhance the analytical skill and problem solving skill of the students.
- 3. To make them prepare for various public and private sector exams & placement drives.

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	Description	Hours	Blooms Level	PO(112)
No.				Mapping
No.	Objective English-1 Introduction of Parts of speech, What is noun, Kinds of Noun, Rules & Application, Definition of Pronoun, Examples, Rules & Application, Definition of Verb, Kinds of Verb, Rules & Application, Definition of Tense, Different types of Tenses, Examples, Rules & Application, Definition of Adjective, Kinds of Adjective, Rules & Application, Definition of Adverb, Kinds of Adverb, Rules & Application, Definition of Preposition, Examples , Rules & Application, Definition of Interjection, Examples, Rules & Its Application, Definition of Conjunction, Examples, Rules & Application, Different types of Articles, Examples, Rules & Application English Grammar. News paper reading: The Hindu &	28	L1 (Remember) L2 (Understand) L3 (Apply)	Mapping PO1,PO2,
	Economic Times.			

2.	Data Interpretation level-I	20	L1 (Remember)	PO1,PO2,
			L2 (Understand)	PO10
			L3 (Apply)	

- 1. Objective English- Arihant Publications
- 2. Data Interpretation R.S Agarwal
- 3. Objective English Grammar- Kiran Publications

2ND SEMESTER:

Subject Code : IVC202	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: 0				
Pre-Requisites: Basic & fundamental knowledge of mathematics up to class 10 th standard,				

Logical & Analytical skill.

Course Objective:

- 1. To improve verbal ability skill and communicative skill of the students.
- 2. To enhance the analytical skill and problem-solving skill of the students.
- 3. To make them prepare for various public and private sector exams & placement drives.

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
1.	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) Time & Work- Basic concept, Chain rule, formulae & their application. Pipes & cistern. 4) Time and distance - Basic concept, Different problems & their shortcut tricks. Time & Speed & Tides- concept of speed, time & Distance, relative speed, Upstream &Downstream, formulae & their application.	16	Level L1 (Remember) L2 (Understand) L3 (Apply)	PO1,PO2,
2.	Logical Reasoning:	10	L1 (Remember)	PO1,PO2,P

	1) Cube - Dice, Miscellaneous Problems		L2 (Understand)	O10
	2)Data Sufficiency-		L3 (Apply)	
	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	12	L1 (Remember)	
	1) Clauses: Definition, Examples, Rules &		L2 (Understand)	O10
	Application, Types of Sentences		L3 (Apply)	
	(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)			
4.	Data Interpretation level-II	10	L1 (Remember)	
	News paper reading: The Hindu &		L2 (Understand)	O10
	Economic Times		L3 (Apply)	

- 1. Fast Track Arithmetic- Rajesh Verma
- 2. Verbal& non-verbal reasoning- R.S Agarwal
- 3. Quantitative Aptitude- R.S Agarwal
- 4. Analytical Reasoning –Peeyush Bhardwaj

3RD SEMESTER:

Subject Code : IVC302	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: 0				
Pre-Requisites: Basic Mathematics, General English from primary to high school.				

Course Objective:

- 1. To enhance the aptitude & analytical skill of students with multiple tricky approaches.
- 2. To prepare the students for various competitive examinations & professional exams

Course Outcome:

At the end of the course the students will be able

- 1. To enhance their problem solving skills, to improve the basic mathematical & Logical Skills for any type of competitive examinations.
- 2. To get best possible training for the them students through continuous training module.
- 3. To find themselves sound for the campus recruitment program's aptitude Test.
- 4. To enhance problem solving skill using fast track techniques without using calculator.

Module	Description	Hours	Blooms Level	PO(112)
No.				Mapping
1.	Quantitative Aptitude Simple & Compound Interest, Data Interpretation, Indices & Surds, Number System, Quadratic Equations		L1 (Remember) L2 (Understand) L4 (Analyse)	
2.	Logical Reasoning: Syllogism, Logical Venn diagram, If Else StatementPuzzlesSeating Arrangement, Classification, Seating Arrangement with Blood Relations Machine Input-Output Pattern Based I/O Inequality a) Coded Inequality, b) Jumbled Inequality, c) Conditional inequality.	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	
3.	Verbal English Sentence Corrections,Fill the blanks with appropriate words/ articles/ preposition/ verbs/adverbs/ conj nction. Reading Comprehension (Advance Level) Vocabulary.	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	
4.	Data interpretation: Advanced Level.	6	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	

- 1. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Advance Maths- Rakesh Yadav
- 5. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 6. A new approach to Reasoning- BS Sijwali
- 7. Quantitative Aptitude-R.S Agarwal

Subject Code : IVC402	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: 0				
Pre-Requisites: Basic Mathematics, General English from primary to high school.				

Course Objective:

- 1. To enhance the aptitude & analytical skill of students with multiple tricky approaches.
- 2. To prepare the students for various competitive examinations & professional exams

Course Outcome:

At the end of the course the students will be able

- 1. To enhance their problem solving skills, to improve the basic mathematical & Logical Skills for any type of competitive examinations.
- 2. To get best possible training for the them students through continuous training module.
- 3. To find themselves sound for the campus recruitment program's aptitude Test.
- 4. To enhance problem solving skill using fast track techniques without using calculator.

Module No.	Description	Hours	Blooms Level	PO(112) Mapping
1.	Quantitative Aptitude Permutation & Combination, Probability, Geometry, Mensuration	6	L1 (Remember) L2 (Understand) L4 (Analyse)	
2.	 Logical Reasoning Seating Arrangement Seating Arrangement Circular seating arrangement Square seating Arrangement Line Arrangement Calendar And Clock	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	
3.	 Verbal English Sentence Corrections Fill the blanks with appropriate words/articles/preposition/verbs/adver bs/conjunction. Reading Comprehension (Advance Level) Vocabulary 	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	

- 1. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Advance Maths- Rakesh Yadav
- 5. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 6. A new approach to Reasoning- BS Sijwali
- 7. Quantitative Aptitude-R.S Agarwal

Subject Code : IVC502	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: 0				
Pre-Requisites: Basic Mathematics, General English from primary to high school.				

Course Objective:

- 1. To enhance the aptitude & analytical skill of students with multiple tricky approaches.
- 2. To prepare the students for various competitive examinations & professional exams

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

Module No.	Description	Hours	Blooms Level	PO(112) Mapping
1.	Quantitative Aptitude & Data Interpretation- Miscellaneous	12	L1 (Remember) L2 (Understand) L4 (Analyse)	
2.	 Logical Reasoning Statement And Assumption, Statement And Conclusion, Statement And Course Of Action, Cause And Effect, Drawing Inference 	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	
3.	 Verbal English Sentence Corrections Fill the blanks with appropriate words/articles/preposition/ verbs/adverbs/conjunction. Reading Comprehension (Advance Level) Vocabulary 	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	

- 1. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Advance Maths- Rakesh Yadav
- 5. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 6. A new approach to Reasoning- BS Sijwali
- 7. Quantitative Aptitude-R.S Agarwal

Subject Code : IVC602	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: 0			
Pre-Requisites: Basic Mathematics, General English from primary to high school.				

Course Objective:

- 1. To enhance the aptitude & analytical skill of students with multiple tricky approaches.
- 2. To prepare the students for various competitive examinations & professional exams

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	Description	Hours	Blooms	PO(112)
No.			Level	Mapping
1.	Revision and Advanced Problems in	12	L1 (Remember)	PO1,PO2,
	Quantitative Aptitude:		L2 (Understand)	PO10
	1)Numbers (+, -, x, etc), Percentages, Ratio,		L4 (Analyse)	
	Partnership, Linear Equations, Profit & Loss			
	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			
	Data Interpretation, Various Charts,			
	Diagrams, Tables			
2.	Revision and Advanced Problems in	12	L1 (Remember)	
	Reasoning		L2 (Understand)	POI0
	1)Coding, Series & Numbers, Blood		L3 (Apply)	
	Relations, Analogy		L4 (Analyze)	
	2)Cubes, Data Sufficiency, Non-Verbal			
	Reasoning			
	3)Syllogisms, Puzzles, Machine I/O,			
	Inequality			
	Seating Arrangement, Calendar /			

	Clock 5)Statements, Other / Misc Logical Reasoning, Decision Making (Ethics)			
3.	Revision and Advanced Questions in	12	L1 (Remember)	· · · ·
	Verbal English		L2 (Understand)	PO10
	1)Grammar,		L3 (Apply)	
	2)Clauses,		L4 (Analyze)	
	3)Spotting errors,			
	4)Sentence Correction,			
	5)Blanks,			
	6)Reading Comprehensions, 7)Vocabulary			

- 1. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Advance Maths- Rakesh Yadav
- 5. Verbal and Non-Verbal Reasoning- R.S Agarwal
- **6.** A new approach to Reasoning- BS Sijwali
- 7. Quantitative Aptitude-R.S Agarwal

Subject Code : IVC702	Category	: Mandatory& Industry Value Added Course	
Subject Name : COMPETITIVE APTITUDE TRAINING-VII	Semester: 7 th		
L-T-P : 2-0-0 (Total Contact Hrs. 2)	Credit: 0		
Pre-Requisites: Basic Mathematics, General English from primary to high school.			

Course Objective:

- 1. To enhance the aptitude & analytical skill of students with multiple tricky approaches.
- 2. To prepare the students for various competitive examinations & professional exams

Course Outcome:

- **1.** Revision of entire Syllabus along with specific type of Mock Tests for the competitive exams like UPSC, IBPS, SBI PO/SO, SSC,RAIL, INSURANCE etc.
- **2.** Learning Advance quantitative Aptitude Techniques on Algebra, Geometry, Mensuration, Tr etc which is very essential for appearing in different competitive Exams along with SSC.
- **3.** Solving Puzzle based problems & learning different Analytical techniques.
- 4. Misc Practice sets on different Competitive Exams mains level papers.

Module No.	Description	Hours	Blooms Level	PO(112) Mapping
	Quantitative Aptitude Miscellaneous Problems on quantitative aptitude [CAT level-4].	12	L1 (Remember) L2 (Understand) L4 (Analyse)	· · · · · · · · · · · · · · · · · · ·
	Logical Reasoning: Miscellaneous Problems on Logical Reasoning [CAT level 4].	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	<i>'</i>
	Verbal English Miscellaneous Problems on Verbal English [CAT level-4].	12	L1 (Remember) L2 (Understand) L3 (Apply) L4 (Analyze)	<i>'</i>

- 1. Objective General English- S.P Bakshi
- 2. English Grammar and Competition-S.C Gupta
- 3. Fast Track Objective Arithmetic- Rajesh Verma
- 4. Advance Maths- Rakesh Yadav
- 5. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 6. A new approach to Reasoning- BS Sijwali
- 7. Quantitative Aptitude-R.S Agarwal

Subject Code : HSMC802	Category: Mandatory& Industry Value Added Course			
Subject Name : COMPETITIVE APTITUDE TRAINING-VIII	Semester : 8TH			
L-T-P : 2-0-0 (Total Contact Hrs. 2)	Credit: 0.5			
Pre-Requisites: Basic Mathematics, General English from primary to high school.				

Course Objective:

- 1. To enhance the aptitude & analytical skill of students with multiple tricky approaches.
- 2. To prepare the students for various competitive examinations & professional exams

Course Outcomes:

- 1. To make the students aware of all the nuances of various public sector examinations.
- **2.** To motivate them hone their previously learnt skills necessary for cracking various exams like civil service examination (UPSC and State PSC), Staff Selection Commission, Railway Services and other exams.
- **3.** This part of the syllabus will also expertise them to boost their conversational skills by allowing them to speak on a variety of topics with ease.
- 4. Appearing mock tests of different competitive exams both prelims & mains.

Course Content:

Module No.	Description	Hours		PO(112) Mapping
1.	Mock tests OF UPSC CSAT-II.	12	L1 (Remember) L2 (Understand) L4 (Analyse)	, , ,

Learning Resources:

- 1. Verbal and Non-Verbal Reasoning- R.S Agarwal
- 2. Quantitative Aptitude-R.S.Agarwal
- 3. GK PUBLICATION –for UPSC Civil Services