Course Code	18PDM301L	Course Name	ANALYTICAL AND LOGICAL THINKING SKILLS	Course Category	M	Mandatory	L	T	P	C
							0	0	2	0

Pre-requisite Courses	Nil	Co-requisite Courses	Nil	Progressive Courses	Nil
Course Offering Department	Career Development Centre		Data Book / Codes/Standards	Nil	

Course Learning Rationale (CLR):	The purpose of learning this course is to:		Learning			Program Learning Outcomes (PLO)																
			1	2	3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
CLR-1 :	Recapitulate fundamental mathematical concepts and skills																				
CLR-2 :	Sharpen logical reasoning through skillful conceptualization																				
CLR-3 :	Enable to solve problems and to crack competitive exams.																				
CLR-4 :	understand and master the mathematical concepts to solve types of problem																				
CLR-5 :	identify problems																				
CLR-6 :	give the right knowledge, skill and aptitude to face any competitive examination																				

Course Learning Outcomes (CLO):	At the end of this course, learners will be able to:	Level of Thinking (Bloom)	Expected Proficiency (%)	Expected Attainment (%)	Engineering Knowledge	Problem Analysis	Design & Development	Analysis, Design, Research	Modern Tool Usage	Society & Culture	Environment & Sustainability	Ethics	Individual & Team Work	Communication	Project Mgt. & Finance	Life Long Learning	PSO - 1	PSO - 2	PSO - 3
CLO-1 :	build a strong base in the fundamental mathematical concepts	1	80	75	L	H		M					M	L		H			
CLO-2 :	Apply the learn conditions towards solving problems analytically	1	80	75	L	H		M					M	L		H			
CLO-3 :	grasp the approaches and strategies to solve problems with speed and accuracy	2	80	75	L	H		M					M	L		H			
CLO-4 :	Collectively solve problems in teams and groups	2	80	75	L	H		M					M	L		H			
CLO-5 :	solve problems	1	80	75	L	H		M					M	H		H			
CLO-6 :	gain appropriate skills to succeed in preliminary selection process for recruitment	3	80	75	L	H		M					M	H		H			

Duration (hour)		6	6	6	6	6
S-1	SLO-1	Arithmetic Progression	Clocks	Time, Speed, Distance	Geometry - Triangles	Data sufficiency Introduction
	SLO-2	Solving Problems	Solving Problems	Solving Problems	Geometry – Lines and Angles	Data sufficiency Type 1
S-2	SLO-1	Geometric Progressions	Calendar	Time, Speed, Distance-Races	Geometry - Circles	Data sufficiency Type 2
	SLO-2	Harmonic Progression	Solving Problems	Solving Problems	Solving Problems	Solving Problems
S-3	SLO-1	Averages	Ratio	Problems on Trains	Mensuration Area	Data Interpretation - Introduction
	SLO-2	Solving Problems	Proportion	Solving Problems	Solving Problems	Data Interpretation - Table
S-4	SLO-1	Weighted Averages	Variation	Boats & Streams	Mensuration – Volume and Surface Area	Data Interpretation - Pie Chart
	SLO-2	Solving Problems	Solving Problems	Solving Problems	Solving Problems	Data Interpretation - Line Graphs
S-5	SLO-1	Sets Two Variables	Mixtures & Solutions	Time and work	Trigonometry- Identities	Data Interpretation – Bar Graphs
	SLO-2	Sets Three Variables	Solving Problems	Solving Problems	Solving Problems	Solving Problems
S-6	SLO-1	Functions	Allegation Method	Pipes and Cisterns	Trigonometry - Height and Distances	Revision I
	SLO-2	Graphs	Solving Problems	Solving Problems	Solving Problems	Revision II

Learning Resources	1. Abhijit Guha, Quantitative Aptitude for Competitive Examinations,Tata McGraw Hill, 3rd Edition, 2011 2. Arun Sharma-Quantitative aptitude for CAT, Tata McGraw Hill 3. Dinesh Khattar-The Pearson Guide to QUANTITATIVE APTITUDE for competitive examinations.	4. Edgar Thrope, Test of Reasoning for Competitive Examinations, Tata McGraw Hill, 4th Edition, 2012 5. Archana Ram, Placementor, Oxford University Press,2018 6. P.A.Anand, Quantitative Aptitude for Competitive Examinations, Wiley Publication, 2016

Learning Assessment											
	Bloom's Level of Thinking	Continuous Learning Assessment (100% weightage)								Final Examination	
		CLA – 1 (20%)		CLA – 2 (30%)		CLA – 3 (30%)		CLA – 4 (20%)#			
		Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice
Level 1	Remember	-	40%	-	30%	-	30%	-	30%	-	-
	Understand										
Level 2	Apply	-	40%	-	40%	-	40%	-	40%	-	-
	Analyze										
Level 3	Evaluate	-	20%	-	30%	-	30%	-	30%	-	-
	Create										
	Total	100 %		100 %		100 %		100 %		-	

CLA – 4 can be from any combination of these: Assignments, Seminars, Tech Talks, Mini-Projects, Case-Studies, Self-Study, MOOCs, Certifications, Conf. Paper etc.,

Course Designers		
Experts from Industry	Experts from Higher Technical Institutions	Internal Experts
1. Mr Nishith Sinh, dueNorth India Academics LLP, Dehradun, nsinha.alexander@gmail.com		1. Dr.P.Madhusoodhanan SRMIST
2. Mr Ajay Zenne, Career Launcher, ajay.z@careerlauncher.com		2. Dr.M.Snehalatha SRMIST
3. Mr.Pratap Iyer, Study Abroad Mentors, Mumbai, pratap.iyer30@gmail.com		3. Mr Murali K SRMIST
		4. Mr.Harinarayana Rao SRMIST