#### **TEACHING PLAN**

### A. GENERAL INFORMATION

Name of the Faculty : J.Suganya

Department : Software Development in

Multimedia and Animation

Programme : B.Voc

Programme code : Core Course-III

Name of the Paper : Discrete Mathematics

Lecture Hours/Practical Hours: 5 Hours

### **B.** ABOUT THE COURSE

Course Objectives	Course outcomes	Teaching Methodology
The course objective is to provide students with an overview of discrete mathematics. Students will learn about topics such as logic and proofs, sets and functions, probability, recursion, graph theory, matrices, Boolean algebra and other important discrete math concepts.	and solve recurrence	<ul> <li>Chalk and Talk</li> <li>Quiz</li> <li>Seminar</li> <li>E-Content</li> <li>E-Module</li> </ul>

## C. PLAN OF THE WORK

Unit/ Modules	Topic to be covered	Proposed date	Lecture Hrs	Practica l Hrs	Remarks
Unit I	<ul> <li>MEASURES OF AVERAGES</li> <li>AND DISPERSIONS</li> <li>Sets and Propositions</li> <li>Definition and representation of se</li> <li>Basic set operations</li> <li>Venn diagrams</li> <li>Set Identities</li> <li>Principle of Inclusion</li> <li>Exclusion.</li> <li>Propositions: Introduction</li> <li>Well formed formulas –</li> </ul>	21.02.22 to 26.02.22 28.02.22 to 12.03.22	15Hrs	NIL	3 Hrs Assessment
Unit II	<ul> <li>Truth table - Tautology,         Contradiction, Contingency</li> <li>Propositional Equivalences</li> <li>Logic- Connectives -         Predicates and Quantifiers.</li> <li>Functions and Relations</li> <li>Definition and examples -         One-to-one and onto         functions</li> <li>Permutations.</li> <li>Relations: Definition and         examples</li> <li>Binary Relations -         Properties</li> <li>Equivalence and Partial         Ordering -         <ul> <li>Representation of relation             in matrix, by Digraph</li> <li>Closure operations on</li> </ul> </li> </ul>	14.03.22 to 26.03.22 28.03.22 to 04.04.22 to 09.04.22 11.04.22 to 13.04.22 to 21.04.22	15Hrs	NIL	3 Hrs Assessment
	<ul><li>relations.</li><li>Algebraic Systems:</li></ul>	22.04.22 to	15Hrs	NIL	3 Hrs Assessment

Unit III	Definition and examples  Semi groups and monoids: Definitions and examples, Subsemigroups and Submoniods- Homomorphism of Semigroups and Moniods.	30.04.22 04.05.22 to 11.05.22			
Unit IV	Groups: Definitions and examples.  Graph Theory: Introduction - Definition and Examples - Edges sequence, walks, paths and circuits - Directed graph-Subgraph and operations on the graph - Isomorphic graphs - Connected - Matrix representation of Graphs.	12.05.22 to 23.05.22	15Hrs	NIL	3 Hrs Assessment
Unit V	Trees: Introduction - Properties - Special Classes of Trees-Definition of spanning tree - minimal spanning tree.	24.05.22 to 31.05.22 01.06.22 To 11.06.22	15Hrs	NIL	3 Hrs Assessment

# D. <u>ACTIVITIES</u>

Activities Name	Details			
Unit - 1				
Test	Well formed formulas - truth table -			
	Tautology, Contradiction, Contingency			
Assignment	Propositional Equivalences - Logic-			
	Connectives - Predicates and Quantifiers.			
Quiz	Sets and Propositions: Definition and			
	representation of sets - basic set operations			
Seminar	Principle of Inclusion - Exclusion.			
Mentor/Mentee Meeting	Week end			
U	nit - 2			
Test	Properties - Equivalence and Partial			

	Ordering, representation of relation in
	matrix, by Digraph - closure operations on
	relations.
Assignment	Permutations. Relations: Definition and
	examples - Binary Relations
Quiz	Functions and Relations: Definition and
	examples
Seminar	Permutations, Relations
Mentor/Mentee Meeting	Week end
J	Jnit - 3
Test	Groups: Definitions and examples.
Assignment	Homomorphism of Semigroups and
	Moniods
Quiz	Algebraic Systems: Definition and examples,
	Semi groups and monoids
Seminar	Subsemigroups and Submoniods
Mentor/Mentee Meeting	Week end
J	Jnit - 4
Test	Graph Theory: Introduction - Definition and
	Examples
Assignment	Edges sequence, walks,
	paths and circuits
Quiz	Directed graph
	• Subgraph
	Operations on the graph
Seminar	• Isomorphic graphs - Connected - Matrix
	representation of Graphs.
Mentor/Mentee Meeting	Week end
	Unit - 5
Test	Trees: Introduction –
	• Properties
Assignment	Special Classes of Trees
Quiz	Definition of spanning tree

	Minimal spanning tree.
Seminar	Minimal spanning tree.
Mentor/Mentee Meeting	Week end

PRINCIPAL

Principal

A.D.M. College For Women

Autonomous, Nagapattinam.

#### **TEACHING PLAN**

#### E. GENERAL INFORMATION

Name of the Faculty : J.Suganya

Department : Software Development in

Multimedia and Animation

Programme : B.Voc

Programme code : SSD

Name of the Paper : Life Skills

Lecture Hours/Practical Hours: 2 Hours

### F. ABOUT THE COURSE

Course Objectives	Course outcomes	Teaching Methodology
This course is designed to	On Completion of the	Chalk and Talk
enhance the employability	Course, Students should be able to do	• Quiz
and maximize the potential	• Define and Identify	Seminar
of the students by	different life skills	• E-Content
introducing them to the principles that underlay	required in personal and professional life	• E-Module
	<ul> <li>Develop an awareness of</li> </ul>	
personal and professional	the self and apply well-	
success, and help them	defined techniques to	
acquire the skills needed to	cope with emotions and stress.	
apply these principles in	• Take part in group	
their lives and careers	discussions	
	Use appropriate thinking	
	and problem solving	
	techniques to solve new	
	problems	
	• Understand the basics	
	of teamwork and	
	leadership	

# G. PLAN OF THE WORK

Unit/ Modules	Topic to be covered	Proposed date	Lecture Hrs	Practical Hrs	Remarks
•	Overview of Life Skills:  Meaning and significance of life skills, Life skills identified byWHO: Selfawareness,Empathy, Critical thinking, Creative thinking, Decision making, problem solving, Effective communication, interpersonal relationship, coping with stress, coping with emotion.Life skills for professionals: positive thinking, right attitude, attention to detail, having the	•	Hrs 15Hrs		3 Hrs Assessment
Unit II	big picture, learning skills, research skills, perseverance, setting goals and achieving them, helping others, leadership, motivation, self- motivation.  Self-awareness: definition, need for self-awareness; Coping With Stress and Emotions, HumanValues, tools and techniques of SA: questionnaires, journaling, reflective questions, meditation, mindfulness, psychometric tests,	14.03.22 to 26.03.22 28.03.22 to 04.04.22	15Hrs	NIL	3 Hrs Assessment

Unit III	feedback.Stress Management: Stress, reasons and effects, identifying stress, stress diaries, the four A's of stress management, techniques, Approaches: action-oriented, emotion-oriented, resilience, Gratitude Training, Coping with emotions: Identifying and managing emotions, harmful ways of dealing with emotions, PATH method and relaxation techniques.Morals, Values and Ethics:  21st century skills: Creativity, Critical Thinking, Collaboration, Problem Solving, Decision Making,Need for Creativity in the 21st century, Imagination, Intuition, Experience, Sources of Creativity, Lateral Thinking, Myths of creativity, Critical thinking Vs Creative thinking, Functions of Left Brain &Right brain, Convergent & Divergent Thinking, Critical reading & Multiple Intelligence. Steps in problem solving: Problem Solving Techniques, Six Thinking Hats, Mind Mapping, ForcedConnections.	05.04.22 to 09.04.22 11.04.22 to 13.04.22 to 21.04.22	15Hrs	NIL	3 Hrs Assessment
----------	--	--	-------	-----	---------------------

An	nalytical Thinking, Numeric,				
	mbolic, and graphic				
res	asoning. Scientific				
tei	mperament and Logical				
thi	inking.				
Gr	oup and Team Dynamics:				
Int	troduction to Groups:				
Co	omposition, formation, Cycle,				
thi	inking, Clarifying				
Unit IV ex	pectations, Problem Solving,	22.04.22			
Co	onsensus, Dynamics	to	15Hrs	NIL	3 Hrs Assessment
teo	chniques, Group vs Team,	30.04.22			11000001110110
Те	eam Dynamics, and Virtual	04.05.22			
Те	eams. Managing team	to			
pe	erformance and managing	11.05.22			
со	onflicts, Entrepreneurship				
Le	eadership: Leadership				
fra	amework, entrepreneurial				
an	nd moral leadership, vision,				
Unit V cu	lltural dimensions. Growing	12.05.22			
as	a leader, turnaround	to 23.05.22	15Hrs	NIL	3 Hrs
lea	adership, managing diverse	23.03.22			Assessment
sta	akeholders, crisis	24.05.22			
ma	anagement. Types of	to			
Le	eadership, Traits, Styles,	31.05.22			
VU	JCA Leadership, Levels of	01.06.22			
Le	eadership,Transactionalvs	To			
Tr	ransformational Leaders,	11.06.22			
Le	eadership Grid, Effective				
Le	eaders.				

# H. <u>ACTIVITIES</u>

Activities Name	Details
	Unit - 1
Test	Life skills identified by WHO
Assignment	Life skills for professionals
Quiz	positive thinking, right attitude, attention to
	detail, having the big picture, learning skills,
	research skills, perseverance, setting goals
	and achieving them, helping others,
	leadership, motivation, self-motivation, and
	motivating others, personality development
Seminar	• IQ, EQ, and SQ
Mentor/Mentee Meeting	Week end
	Unit - 2
Test	Self-awareness
	Need for self-awareness; Coping With Stress
	and Emotions,
	HumanValues,
	Tools and techniques of SA
Assignment	Stress Management: Stress, reasons and
	effects, identifying stress, stress diaries
	The four A's of stress management,
	Approaches: action-oriented, emotion-
	oriented, acceptanceoriented, resilience,
	Gratitude Training
Quiz	PATH method and relaxation techniques.
	Morals, Values and Ethics: Integrity, Civic
	Virtue, Respect for Others, Living Peacefully.
	Caring, Sharing, Honesty, Courage, Valuing
	Time, Time management,
Seminar	Avoiding Procrastination, Sense of
	Engineering Ethics.
Mentor/Mentee Meeting	Week end

	Unit - 3		
Test	• 21st century skills: Creativity, Critical		
	Thinking, Collaboration, Problem Solving,		
	Decision Making,		
	Need for Creativity in the 21st century		
Assignment	Imagination, Intuition, Experience, Sources of		
	Creativity, Lateral Thinking, Myths of		
	creativity, Critical thinking Vs Creative		
	thinking		
Quiz	Functions of Left Brain & Right brain,		
Seminar	Convergent & Divergent Thinking, Critical		
	reading & Multiple Intelligence.		
Mentor/Mentee Meeting	Week end		
	Unit - 4		
Test	Group and Team Dynamics: Introduction to		
	Groups: Composition, formation, Cycle,		
	thinking		
Assignment	Clarifying expectations, Problem Solving,		
0.:	Consensus,		
Quiz	Dynamics techniques, Group vs Team, Team		
Caminan	Dynamics,		
Seminar	Managing team performance and managing  applies Intropropourship		
Monton/Monton Monting	conflicts, Intrapreneurship.  • Week end		
Mentor/Mentee Meeting	• week end		
	Unit - 5		
Test	• Leadership: Leadership framework,		
	entrepreneurial and moral leadership, vision,		
Assignment	Cultural dimensions. Growing as a leader,		
	turnaround leadership,		
Quiz	• Managing diverse stakeholders, crisis		
	management. Types of Leadership, Traits,		
	Styles,		

Seminar	• Levels	of	Leadership,Transactionalvs
	Transformational Leaders,		
Mentor/Mentee Meeting	• Week end	đ	

PRINCIPAL

Principal

A.D.M. College For Women

Autonomous, Nagapattinam.