AR20

CODE: 20SSS301 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, August, 2023

Soft Skills

(Common to all Branches)

Time: 3 Hours **Max Marks: 60**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

		Marks	CO	Blooms Level
	UNIT-I			
1.	Illustrate the importance of communication in day to day life and Write in detailed about various types of Communication?	10	C1	K1
	(OR)			
2.	Explain the process of communication with a diagram and illustrate the seven principles of effective communication?	10	C1	K1
	UNIT-II			
3.	Explain Interpersonal and intrapersonal communication and differentiate inter and intra personal communication with an example?	10	C2	K2
	(OR)			
4.	Illustrate the importance of emotions in interpersonal communication and give the various barriers of interpersonal communication?	10	C2	K2
	UNIT-III			
5.	Explain the following terms: Kinesics, Para linguistics, Proxemics and Haptics and give any five business Etiquettes with example?	10	C3	K2
	(OR)			
6.	Illustrate the importance of non-verbal communication and explain in detail various types of nonverbal communication?	10	C3	K2
	UNIT-IV			
7.	Prepare a suitable resume for a software engineer profile in TCS?	10	C4	K3
	(OR)			
8.	Illustrate the importance of business communication and draft an email to the principal of your institution seeking permission to do one month internship in ISRO	10	C4	K3
	UNIT-V			
9.	Illustrate the importance of presentation skills and the stages of an effective presentation?	10	C5	K2
	(OR)			
10.	Illustrate the skills assessed in a group discussion and explain the dos and don'ts of group discussion?	10	C5	K2
	UNIT-VI			
11.	Illustrate the importance of Teambuilding skills and the process for a effective team building?	10	C6	K2
	(OR)			
12.	Write your mission statement and the importance of goal setting?	10	C6	K6

AR16

CODE: 16OE3044 **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, August, 2023

INTRODUCTION TO AUTOMOBILE ENGINEERING

(Open Elective, Common to CE, ECE, CSE and EEE Branches)

Time: 3 Hours **Max Marks: 70**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1.	a)	Compare the merits of front wheel drive vehicle with rear engine wheel drive vehicles.	4M
	b)	Explain splash lubrication system with neat sketch.	10M
		(OR)	
2.	a)	What is the difference between two stroke and four stroke engine?	4M
	b)	Explain pressure lubrication system with neat sketch.	10M

UNIT-II

3.	a)	What are the basic components used in petrol engine fuel supply system?	4M
	b)	Explain the working principle of simple carburettor with a neat sketch.	10M
		(OR)	
4.	a)	What is the function of fuel injection system?	5M
	b)	Explain the mechanism of jerk type of fuel injection pump with detail sketch.	9M

UNIT-III

5.	a)	What are the advantages of liquid cooling system?	5M
	b)	Give the detailed account of the battery ignition system. Illustrate your answer with neat sketch?	9M
		(OR)	
6.	a)	What are the functions of ignition systems in automobile?	5M
	b)	Describe with a neat sketch the working of air cooled system and what are its applications?	9M

UNIT-IV

7.	a)	What is the function of clutch?	5M
	b)	Explain the construction and operation of a Constant mesh gear box with the help of a neat sketch.	9M
		(OR)	
8.	a)	What is the function of gear box?	4M
	b)	Explain the construction and operation of a sliding mesh gear box with the help of a neat sketch.	10M

UNIT-V

9.	a)	What is the role of steering in automobile?	5M
	b)	Sketch and explain Davis steering gear mechanism.	9M
		(OR)	
10.	a)	What are the objectives of suspension system?	7M
	b)	Explain the working of Mechanical brake system.	7M

AR18

CODE: 18IET33B **SET-1**

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, August, 2023

COMPETITIVE PROGRAMMING - II

(Interdisciplinary Elective – III)

Time: 3 Hours **Max Marks: 60**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1.	a)	Discuss how to sort elements using merge sort with suitable example. Write an algorithm for merge sort.	6M
	b)	Define searching. Discuss linear search technique with algorithm and suitable example.	6M
		(OR)	
2.	a)	Discuss how to sort elements using quick sort with suitable example. Write an algorithm for quick sort.	6M
	b)	Define searching. Discuss binary search technique with algorithm and suitable example.	6M

UNIT-II

3.	a)	Write an algorithm to delete an element anywhere from singly linked list and also explain applications of singly linked list.	6M
	b)	Explain the operations on simple stack with algorithms. Explain applications of stack.	6M
		(OR)	
4.	a)	Write an algorithm to delete an element anywhere from doubly linked list and also explain applications of doubly linked list.	6M
	b)	Explain the operations performed on queue with algorithms and applications.	6M

UNIT-III

5.	a)	Define a tree. Explain tree terminology and applications.	6M
	b)	Define binary search tree. Show how to insert and delete an element from BST.	6M
		(OR)	
6.	a)	What is a graph? Explain graph representations.	6M
	b)	Explain BFS and DFS with suitable examples.	6M

UNIT-IV

7.	a)	Explain the syntax of SELECT, CREATE, INSERT and DELETE of SQL?	6M
	b)	Explain SQL data types, Operators and functions.	6M
		(OR)	
8.	a)	Design an ER diagram for the Students data system taking in account atleast four entities.	6M
	b)	Present some popular applications of database systems and role of databases.	6M

UNIT-V

9.	a)	What are different types of JOINS? Explain in detail.	6M
	b)	Explain subquery and correlated subquery with suitable example.	6M
		(OR)	
10.	a)	Give a set. Of FDs for the relation schema R(A,B, C,D) with primary key AB under which R is in 1NF but not in 2NF.	6M
	b)	What is Structural query language? Explain its advantages and disadvantages?	6M

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AR18

CODE: 18IET332 SET-1

ADITYA INSTITUTE OF TECHNOLOGY AND MANAGEMENT, TEKKALI

(AUTONOMOUS)

III B.Tech II Semester Supplementary Examinations, August, 2023

ENVIRONMENTAL IMPACT ASSESSMENT

(Interdisciplinary Elective – III)

(Common to ECE/EEE/MECH)

Time: 3 Hours **Max Marks: 60**

Answer ONE Question from each Unit
All Questions Carry Equal Marks
All parts of the Question must be answered at one place

UNIT-I

1.	a)	Examine the limitations of EIA.	6M
	b)	Categorize the various Environmental parameters to be considered for project evaluation.	6M
		(OR)	
2.	a)	Define what is EIA? How can it be conducted?	6M
	b)	What is the purpose of Environmental Impact Assessment? Describe the major areas covered in an EIS.	6M

UNIT-II

3.	a)	Describe the concept of Net works method of Impact assessment; explain net works methodology for pulp mill impact assessment with a flow diagram.	8M
	b)	Appraise the Ad-hoc method of EIA.	4M
		(OR)	
4.	a)	Assess the application of overlay analysis in coal mining.	4M
	b)	List important Environmental impact assessment methodologies, describe Leopold Interaction matrix method.	8M

UNIT-III

5.	a)	Explain what are the harmful effects of air pollution on ecosystems? Describe their mitigation methods.	6M
	b)	Organize a detailed note on Biological Impact Assessment.	6M
		(OR)	
6.	a)	Describe biological and regulatory mitigation measures for the mitigation of biological impact.	7M
	b)	Explain various impacts on flora and fauna by developmental projects.	5M

UNIT-IV

7.	a)	Explain what is Environmental auditing and describe its advantages.	5M
	b)	Determine the role of environmental audit for sustainable development.	7M
		(OR)	
8.	a)	Describe the two types of Environmental auditing.	4M
	b)	Examine the stages in Environmental audit (pre-audit/activities at site/post audit activities).	8M

UNIT-V

9.	a)	Explain why the acts are necessary and write its objectives?	4M
	b)	Develop an EIS report to a coal mining company.	8M
		(OR)	
10.	a)	Explain what are the major steps/elements covered in EIS? What is the format for EIS documentation?	8M
	b)	Distinguish the functions of CPCB & SPCB in relation to water act.	4M