

SRM Institute of Science and Technology College of Engineering and Technology School of Computing

Mode of Exam **OFFLINE**

DEPARTMENT OF COMPUTING TECHNOLOGIES

SRM Nagar, Kattankulathur – 603203, Chengalpattu District, Tamil Nadu

Academic Year: 2024 - 2025 - Odd Semester

Test: CLAT3

Batch 2 – Set D

Course Code & Title: 21GNH101J Philosophy of Engineering
Year & Sem: I Year & I Sem

Date: 11.12.2024

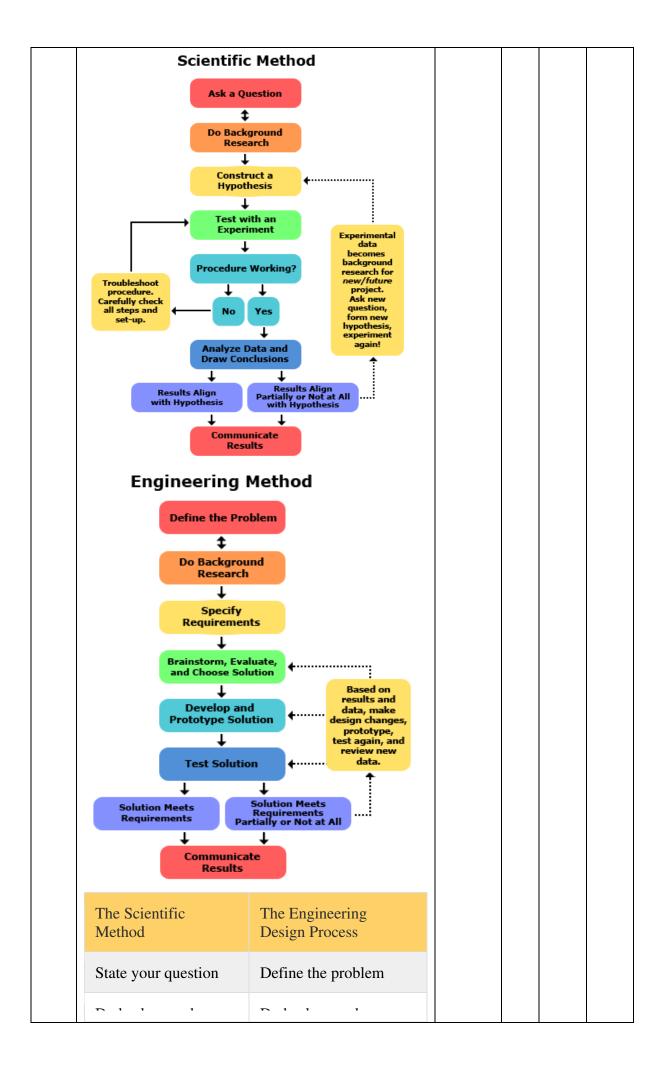
Duration: 60 min
Max. Marks: 35

Registration Number:

	Part – A				
	(10 * 1 = 10 Marks)				
	Instructions: Answer all the Quest	tions			
Q.	Question	Marks	BL	CO	PO
No					
1	Which step comes after evaluating prototypes and			_	
	gathering feedback?	1	1	4	1
	a) Finalizing the design				
	b) Implementing and production				
	c) Monitoring and improving				
	d) Researching and gathering information	1	1	4	1
2	What is the purpose of defining design criteria in the	1	1	4	1
	engineering design process?				
	a) To create prototypesb) To brainstorm ideas				
	c) To establish requirements for the final				
	design				
	d) To evaluate and refine designs				
3	What is a key principle of the methodology of				
	engineering?	1	1	4	3
	a) Adherence to strict regulations				
	b) Creativity and innovation				
	c) Speed of execution				
	d) Profit maximization				
4	During which phase of the ADDIE model are	1	1	4	4
	instructional materials and activities created?				
	a) Analysis				
	b) Design				
	c) Development				
	d) Implementation				
5	What does "scalability" refer to in system	1	1	4	1
	architecture?				
	a) The color scheme of the system				
	b) The ability of handle increased traffic or				
	growth				
	c) The security of the system				
6	d) The deployment process Ethics is measured by the concept of	1	2	5	1
U	Ethics is measured by the concept of	1	<u> </u>	3	1
	a) Sustainabilityb) Diversity				
	The state of the s				
	c) Equity				1

1	I) Contains				
	d) Social license		2	_	4
7	The is noted for being the worlds largest	1	2	5	1
	technical professional organization.				
	a) National Society Professional Engineersb) IEEE				
	·				
	c) American association engineering societiesd) Society of women engineers				
8	Design as is more affiliated with	1	1	5	1
0	management of a wide range of fields from business	1	1	3	1
	to military and from hospitals to academy.				
	a) Engineering				
	b) Epistemology				
	c) Planning				
	d) Activity				
9	is the most discussed aspect of	1	2	5	1
_	sustainability.	•	_		•
	a) Environment				
	b) Economic				
	c) Ethical				
	d) Equity				
10	The core concept of 3Es focusses on	1	2	5	6
	a) Technology				
	b) Assets				
	c) Work				
	d) Equity				
	Part – B				
	Part – B (1* 10 = 10 Marks)				
	Part – B (1* 10 = 10 Marks) Instructions: Answer any ONE Que				
Q.	Part – B (1* 10 = 10 Marks)	estion Marks	BL	СО	PO
No	Part – B (1* 10 = 10 Marks) Instructions: Answer any ONE Question	Marks		СО	
_	Part – B (1* 10 = 10 Marks) Instructions: Answer any ONE Que Question Explain in detail on how Addie model is useful for		BL 1	CO 4	PO 1
No	Part – B (1* 10 = 10 Marks) Instructions: Answer any ONE Question Explain in detail on how Addie model is useful for building training support tools.	Marks			
No	Part – B (1* 10 = 10 Marks) Instructions: Answer any ONE Que Question Explain in detail on how Addie model is useful for building training support tools. Solution	Marks			
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D	Ø					
I	•					
E	O	EVALUATE Awareness, k behaviour, results	nowledge,			
Summarize t	he various pi	rofessional organization	10	2	5	1
PROFESSION ENGINEERS Engineering important suppadvocate on bedevelopment latest innovation community. Engineering Mecoming a organizations, associations, of engineering the field. • Nation EEE • American Society • Society	professional port to engine ehalf of engine opportunities, tions, and consumer and an agement demander of Below find which serve beg as well as stall Society of Formula of Women England Society of Formula of Women England Society of Formula of Women England Society of Women England Society of Formula Office of Women England Society of Women Eng	organizations provide ers. These groups work to eers, provide professional publish updates on the onnect engineers to the rsuing a Master of egree would benefit from at least one of these the top 5 engineering of the general profession specific industries within Professional Engineers etion of Engineering on the ersuing of Engineering engineers ering Consortium				
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method and do these proo the fields of s <u>DIFFERENC</u>	key difference the engineering cesses cater to cience and en CE BETWEEN	es between the scientific ing design process. How o different objectives in gineering? N SCIENTIFIC	15	2	4	1
	Summarize to for engineers PROFESSIO ENGINEERS Engineering important sup advocate on bedevelopment latest innoval community. Engineering to becoming a organizations, associations, of engineering the field. • Nation Societ. • Societ. • Societ. • International Explain the Imethod and do these proof the fields of societ.	Summarize the various property for engineers. PROFESSIONAL ORGAN ENGINEERS Engineering professional important support to engineer advocate on behalf of engined development opportunities, latest innovations, and concommunity. Anyone pure Engineering Management of organizations. Below find associations, which serve be of engineering as well as set the field. National Society of Figure 1. EEE American Associations as the field. National Society of Figure 1. International Engineering the International Engineer	ANALYSIS of needs, requtasks, participants' curre capabilities DESIGN learning objective delivery format, activities exercises DEVELOP - Create a prodevelop course materials pilot session IMPLEMENTATION Training implementation, tools in observation EVALUATE Awareness, behaviour, results Engineering professional organizations provide important support to engineers. These groups work to advocate on behalf of engineers, provide professional development opportunities, publish updates on the latest innovations, and connect engineers to the community. Anyone pursuing a Master of Engineering Management degree would benefit from becoming a member of at least one of these organizations. Below find the top 5 engineering associations, which serve both the general profession of engineering as well as specific industries within the field. National Society of Professional Engineers EEE American Association of Engineering Societies Society of Women Engineers International Engineering Consortium Part - C (1* 15 = 15 Marks)	A DESIGN learning objectives, delivery format, activities & exercises DEVELOP - Create a prototype, develop course materials, review, pilot session IMPLEMENTATION Training implementation, tools in place, observation EVALUATE Awareness, howledge, behaviour, results ENGINEERS Engineering professional organizations provide important support to engineers. These groups work to advocate on behalf of engineers, provide professional development opportunities, publish updates on the latest innovations, and connect engineers to the community. Anyone pursuing a Master of Engineering Management degree would benefit from becoming a member of at least one of these organizations. Below find the top 5 engineering associations, which serve both the general profession of engineering as well as specific industries within the field. National Society of Professional Engineers IEEE American Association of Engineering Societies Society of Women Engineers International Engineering Consortium Part - C (1* 15 = 15 Marks) Instructions: Answer any ONE Question Explain the key differences between the scientific method and the engineering design process. How do these processes cater to different objectives in the fields of science and engineering? DIFFERENCE BETWEEN SCIENTIFIC	A D DESIGN learning objectives, delivery format, activities & exercises DEVELOP - Create a prototype, develop course materials, review, pilot session IMPLEMENTATION Training implementation, tools in place, observation EVALUATE Awareness, nowledge, behaviour, results Engineering professional organizations provide important support to engineers. These groups work to advocate on behalf of engineers, publish updates on the latest innovations, and connect engineers to the community. Anyone pursuing a Master of Engineering Management degree would benefit from becoming a member of at least one of these organizations. Below find the top 5 engineering associations, which serve both the general profession of engineering as well as specific industries within the field. National Society of Professional Engineers International Engineering Consortium Part - C (1* 15 = 15 Marks) Instructions: Answer any ONE Question Explain the key differences between the scientific method and the engineering design process. How do these processes cater to different objectives in the fields of science and engineering? DIFFERENCE BETWEEN SCIENTIFIC	ANALYSIS of needs, requirements, tasks, participants' current casks, parti



research	research		
Formulate your hypothesis, identify variables	Specify requirements		
Design experiment, establish procedure	Create alternative solutions, choose the best one and develop it		
Test your hypothesis by doing an experiment	Build a prototype		
Analyze your results and draw conclusions	Test and redesign as necessary		
Communicate results	Communicate results		
be local and impacts of their long-lasting • have an under social and cultu own normal com • understand the sustainable devel • recognize the project on communicorporate the communities Environment of the sustainable devel • recognize the project on communicorporate the communities	O ACHIEVE		

environmental degradation.		

Course Outcome (CO) and Bloom's level (BL) Coverage in Questions

