26ESCC114

MANGALORE INSTITUTE OF TECHNOLOGY & ENGINEERING

(A Unit of Rajalaxmi Education Trust®, Mangalore)
Autonomous Institute affiliated to VTU, Belagavi, Approved by AICTE, New Delhi
Accredited by NAAC with A+ Grade & ISO 9001:2015 Certified Institution

Model Question Paper

First/Second Semester BE Degree Examination

Design Thinking

Time: 1.5 Hours (90 Minutes) **Max. Marks: 50**

Note: 1. Answer any FIVE full questions, choosing ONE full question from each module.
2. M: Marks, L: RBT (Revised Bloom's Taxonomy) level, C: Course outcomes.

		Module -1	M	L	C
Q1	a.	Explain the challenges of a rapidly changing workplace and discuss the survival skills required to succeed in it.	05	L2	CO1
	b.	State the six key mindsets of Design Thinking with suitable examples.	05	L1	CO1
		OR			
Q2	a.	Discuss different models of design thinking	05	L2	CO1
	b.	Define the 3Ps of Design Thinking with a suitable example.	05	L1	CO1
		Module- 2			
Q3	a.	Explain the five-phase model of Design Thinking with a neat diagram.	05	L2	CO1
	b.	Compare Design thinking with Traditional thinking	05	L2	CO1
		OR			
Q4	a.	Describe the Prototype and Test phases of Design Thinking. Explain the role of flexibility, feedback and iteration in refining a low-fidelity prototype.	05	L2	CO1
	b.	Explain any two applications of design thinking in detail	05	L2	CO1
		Module – 3			
Q5	a.	Explain divergent and convergent thinking in detail	05	L2	CO3
	b.	Apply mind mapping techniques to develop a suitable diagram illustrating the concept of Global Warming.	05	L3	CO3
		OR			
Q6	a.	Describe the Six Thinking Hats technique and explain the purpose of each hat in the Design Thinking process.	05	L2	CO3
	b.	Apply the Star bursting technique to explore the topic of Global Warming by generating relevant Who, What, When, Where, Why, and How questions	05	L3	CO3
		Module - 4			
Q7	a.	What is ethics in Design Thinking? Explain the values, models and the five ways of ethical thinking.	05	L2	CO2
	b.	Discuss the common ethical issues in design and the causes of unethical practice.	05	L2	CO2
		OR			
Q8	a.	Explain the sources of ethics and the universal principles of ethics.	05	L2	CO2
	b.	List the qualities needed by ethical design thinkers and explain the Ethical Design Test with an example.	05	L2	CO2
		Module - 5			
Q9	a.	Describe how Design Thinking was applied in the Karnataka Health Promotion Trust explain	05	L2	CO3
	b.	Explain the three pillars of sustainability and the concept of sustainable design.	05	L2	CO2
		OR			
Q10	a.	Describe how Netflix and Airbnb used Design Thinking to solve their business problems.	05	L2	CO3
	b.	Explain the 2030 Agenda for Sustainable Development and discuss how Design Thinking and the circular economy support it.	05	L2	CO2

-*****-