CET LIBRARY BANGALORE-49

CBCS SCHEME

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21ME744

Seventh Semester B.E./B.Tech. Degree Examination, June/July 2026

Product Design and Ergonomics

Time: 3 hrs. Max. Marks: 100

Note: ***Answer any FIVE full questions, choosing ONE full question from each module.***

Important Note : 1. On completing your answers, compulsorily draw diagonal cross lines on the remaining blank pages.
2. Any revealing of identification, appeal to evaluator and /or equations written eg, 42+8 = 50, will be treated as malpractice.

Module-1

1 a. Briefly enumerate the ASIMOW Model in Product Design. **(10 Marks)**

b. Explain the essential factors of the Product Design. **(10 Marks)**

OR

2 a. Explain with a neat sketch the Production Consumption Cycle with an example. **(10 Marks)**

b. Describe the Morphology of design in seven phases. **(10 Marks)**

Module-2

3 a. Explain man machine systems depending upon size and complexity. **(10 Marks)**

b. Briefly enumerate the workstation Design. **(10 Marks)**

OR

4 a. Define Anthropometry? Explain its importance for a Designer. **(10 Marks)**

b. List and explain the advantages of Ergonomics in Automated Systems **(10 Marks)**

Module-3

5 a. Explain the:
i) Concept of Unity
ii) Concept of Order with Variety
iii) Concept of purpose **(12 Marks)**

b. List and explain any Four components of style in Aesthetics. **(08 Marks)**

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OR

6	a.	Explain types of house style in Aesthetics.		**(10 Marks)**
	b.	Define Aesthetics? Explain the advantages and Disadvantages.		**(10 Marks)**

Module-4

7	a.	Explain the Mechanics of seeing with the eye.		**(10 Marks)**
	b.	Describe the general influences of line and form in seeing.		**(10 Marks)**

OR

8	a.	Explain the physiology of seeing in Ergonomics.		**(10 Marks)**
	b.	List and explain the types of lines and form in Ergonomics.		**(10 Marks)**

Module-5

9	a.	Explain how technology can be used Ergonomics management.		**(10 Marks)**
	b.	List and explain the benefit of Ergonomic safety.		**(10 Marks)**

OR

10	a.	Explain how the ergonomics can be used to improve the quality of life.		**(10 Marks)**
	b.	Enumerate the advantages of using ergonomics in office systems.		**(10 Marks)**

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