

Gandhi Institute of Engineering and Technology University, Odisha, Gunupur
(GIET University)



B. Tech (Eighth Semester - Regular) Examinations, April - 2025

21BMEOE48011 -- Reverse Engineering
(Mechanical Engineering)

Time: 3 hrs

Maximum: 70 Marks

Answer ALL questions
(The figures in the right hand margin indicate marks)

PART – A

(2 x 5 = 10 Marks)

Q.1. Answer **ALL** questions

	CO #	Blooms Level
a. How do you create the Manufacturing Database?	CO1	K1
b. List the advantages and limitations of STL file format.	CO2	K1
c. Write few lines about Reverse Engineering Hardware.	CO3	K1
d. Name the equipment involved in the Reverse Engineering technique.	CO3	K1
e. Explain structured light range imaging.	CO4	K2

PART – B

(15 x 4 = 60 Marks)

Answer **all** the questions

	Marks	CO #	Blooms Level
2. a. Describe the fundamentals of manufacturing.	8	CO1	K2
b. Explain the types of production functions in Manufacturing.	7	CO1	K2
(OR)			
c. Explain the Applications of Computers for design	8	CO1	K2
d. Explain Database structure and content	7	CO1	K2
3.a. Explain current techniques and materials in Rapid Prototyping?	8	CO2	K2
b. Write about integrating formal and structured methods involved in the RE technique	7	CO2	K2
(OR)			
c. Integrating RE, Reuse and specification tool environments.	8	CO2	K2
d. Integrating formal and structured methods in RE.	7	CO2	K2
4.a. What do you understand by Domain Analysis? Explain.	8	CO3	K2
b. How do you integrate formal and structured methods in Reverse Engineering?	7	CO3	K2
(OR)			
c. Write about STL files: data generation	8	CO3	K3
d. Write about STL files: data manipulation	7	CO3	K2
5.a. Explain the basic process of Rapid Prototyping	8	CO4	K2
b. Explain the relationship between Reverse engineering and Rapid Prototyping	7	CO4	K2
(OR)			
c. Explain about interdisciplinary application of Reverse Engineering and Rapid Prototyping	8	CO4	K2
d. How do you integrate formal and structured methods in Reverse engineering?	7	CO4	K2

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