

Question Bank

- 1.Explain the concept of prototyping in product development. Discuss its significance and various types of prototypes used in the design and manufacturing processes
- 2.Contrast traditional prototyping methods with rapid prototyping techniques.Connect at least three different 3D scanning digitization techniques
- 3.Discuss the challenges and obstacles that engineers and designers may encounter during the reverse engineering process.
- 4.Compare the advantages and disadvantages of each approach in terms of time, cost, and design flexibility. Provide real-world examples to support your arguments.
- 5.Distinguish the step-by-step process of reverse engineering, including the initial data acquisition, data processing, and model reconstruction phases. Provide examples to illustrate each step.
- 6.Examine the advantages and disadvantages of traditional prototyping methods with rapid prototyping techniques in terms of time, cost, and design flexibility. Provide real-world examples to support your arguments.
- 7.Compare the key criteria of rapid manufacturing processes. Provide specific examples for each category and discuss their applications in modern manufacturing.
- 8.Prepare a case studies or examples of how reverse engineering has led to product improvement or innovation in these fields.
- 9.Categorize the challenges and obstacles that engineers and designers may encounter during the reverse engineering process.
- 10.Choose the importance of materials selection in rapid manufacturing processes
- 11.Distinguish the step-by-step process of reverse engineering, including the initial data acquisition, data processing, and model reconstruction phases. Provide examples to illustrate each step.