

JK Lakshmipat University Jaipur
INSTITUTE OF ENGINEERING AND TECHNOLOGY

End Term Examination, Dec 2023
B. Tech. (ME), Semester VII,

Roll No.....

ME1223: Product Design and Manufacturing

Time: 2:00 hrs

Max. Marks: 50

Instructions to students:

1. Do not write anything other than your roll number on question paper.
 2. Mention all the assumptions for your answers clearly.
-

- | | | |
|--------|--|----------------|
| Q. 1.1 | Define production consumption cycle. | 2.0
(CO 1) |
| Q. 1.2 | Explain the importance of Product development | 2.0
(CO 1) |
| Q. 1.3 | What are the methods used in industry to accomplish the assembly process? | 2.0
(CO1) |
| Q. 1.4 | What are the two ways in which transfer of work part takes place between workstations? | 2.0
(CO2) |
| Q.1.5 | What are the principles of material handling system? | 2.0
(CO 2) |
| | | |
| Q. 2.1 | Describe the seven stages of Product design morphology with example. | 10.0
(CO 2) |
| Q. 2.2 | Classify rapid prototyping process.
List out applications of rapid prototyping. | 10.0
(CO2) |
| Q. 3.1 | Select the suitable plant layout method for the chemical industry. Also, draw the flow chart for planning the industry in a coastal region. | 10.0
(CO1) |
| Q. 3.2 | Describe the seven major tools of SPC (Statistical Process Control). Select a suitable one and describe it in detail for the fasteners industry. | 10.0
(CO1) |

all the best!