

Time: 3 hours

Total Marks: 80

- Note:**
1. Assume suitable data if necessary
 2. Figures to the right indicate full marks
 3. Question No. 1 is compulsory
 4. Solve any three out of the remaining five questions

Q1. Write short notes on following: (Any Four)

- | | | |
|---|--|----|
| A | Generic Product Development Process | 05 |
| B | Product Design | 05 |
| C | Product Development | 05 |
| D | Modern approaches to product Design and Development. | 05 |
| E | Advantages of Brainstorming | 05 |
| F | Product Architecture. | 05 |

Q2.

- | | | |
|---|---|----|
| A | Explain Customer Satisfaction with suitable example. | 05 |
| B | Discuss Quality Function Deployment (QFD). | 05 |
| C | What is a House of Quality? Explain its with diagram in detail. | 10 |

Q3.

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|---|--|----|
| A | What are the methods of creative thinking? | 05 |
| B | Discuss Generation Concept. | 05 |
| C | Explain Pugh's Concept. | 10 |

Q4.

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|---|--|----|
| A | Explain Gordon Technique. | 05 |
| B | What is Industrial Design? | 05 |
| C | Explain Design for Assembly in detail. | 10 |

Q5.

- | | | |
|---|---|----|
| A | Discuss Design for Environment | 05 |
| B | Describe Design for Serviceability. | 05 |
| C | What is mean by Human Factor in Design? | 10 |

Q 6.

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|---|--|----|
| A | Write about User Friendly Design. | 05 |
| B | Explain Design for Manufacturing. | 05 |
| C | Discuss guidelines of Design for Robustness. | 10 |
