

Total No. of Questions : 10]

SEAT No. :

P4430

[4859]-1022

[Total No. of Pages : 2

B.E. (Mechanical)

PRODUCT DESIGN AND DEVELOPMENT

(2012 Pattern) (Semester - I)

Time : 2½ Hours]

[Max. Marks : 70

Instructions to the candidates:

- 1) Answer in only one answer books.*
- 2) Neat diagrams must be drawn wherever necessary.*
- 3) Figures to the right side indicate full marks.*
- 4) Assume suitable data if necessary.*

Q1) Discuss Mission Statement and Technical Questioning in the context of Product. Design with suitable cases study. **[10]**

OR

Q2) Discuss the various roles of Product Design Team in detail. **[10]**

Q3) Explain how Standardization, Simplification and specialization help in better product design. **[10]**

OR

Q4) What is Product Life Cycle? Elaborate the life cycle phases for Bajaj Scooter and Tata Nano. **[10]**

Q5) Explain the procedure for Product Tear Down in detail. Discuss Force Flow Diagram and Subtract and Operate procedure with suitable example. **[18]**

OR

Q6) Elaborate the concept of Product Life Cycle Management in Detail. Discuss various phases of Product Life Cycle and corresponding technologies. **[18]**

Q7) a) Discuss Function Form Diagram with suitable example. **[8]**

b) What are local and regional issues for Environment? Elaborate. **[8]**

P.T.O.

OR

Q8) a) Explain any two Product Portfolios with suitable examples. [8]

b) Discuss the stepwise procedure for Benchmarking. [8]

Q9) a) Explain the role of vendors and customers in PLM Implementation. [8]

b) Explain Weighed Sum Assessment method with suitable example. [8]

OR

Q10) Explain the guidelines for Design for Manufacture. Design for Assemble and Design for 'Environment in detail'. [16]

