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24B

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National Institute of Technology Hamirpur

End Semester Examination

Course Name : Product Design and Development (Open Elective)
Course Code : ME-371

Max. Marks: 50

Instructions:

1. Clearly mention the question number against each answer
2. Answer in brief and to the point.

- Q.1. For a mobile phone, provide (a) FRs and DPs, and (b) Contradiction table. 10
- Q.2. Provide and draw the functional and physical decomposition of a ball point pen having a spring arrangement. 10
- Q.3. Explain the "three levels of a product" comes in to play while finalizing a product for business or while analyzing a product. Also provide the suitable examples. 10
- Q.4. Draw and explain Boston Consulting Group's (BCG) Growth Share Matrix and provide two examples for each quadrant of the matrix. 10
- Q.5. Explain Suh's two conceptually simple design axioms. With the help of Pugh's concept selection method evaluate any two concepts of wired and Bluetooth earphones. 10