

Total No. of Questions : 4]

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SEAT No. :

[Total No. of Pages : 1

Oct-22/BE/Insem-62

B.E. (Mechanical Engineering)

PRODUCT DESIGN AND DEVELOPMENT

(2019 Pattern) (Semester-VII) (Elective - IV) (402045 A)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Figures to the right indicate full marks.
- 4) Use of electronic pocket calculator is allowed.
- 5) Assume suitable data, if necessary.

Q1) a) Explain product development process. [7]

b) Explain Morphology of product design by ASIMOW. [8]

OR

Q2) a) Write a short note on Product Life Cycle. [6]

b) Explain Engineering Design process. [5]

c) Explain the reasons for product failure in brief. [4]

Q3) a) Explain Technology of S Curve with suitable example. [7]

b) Explain QFD (Quality Function Deployment) approach of modern product development. [8]

OR

Q4) a) Explain Customer need Models in brief. [6]

b) Explain market segmentation in detail with suitable example. [5]

c) Illustrate the philosophy of TRIZ methodology. [4]

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