

Total No. of Questions : 6]

SEAT No. :

P1406

[Total No. of Pages : 2

BE/Insem./APR-175

B.E. (Mechanical Engineering)

PRODUCT DESIGN AND DEVELOPMENT

(2015 Course) (Semester - II) (Elective - IV) (402050C)

Time : 1 Hour]

[Max. Marks :30

Instructions to the candidates:

- 1) Answer Q1 or Q2, Q3 or Q4, Q5 or Q6.
- 2) Neat diagrams must be drawn wherever necessary.
- 3) Assume suitable data if necessary.

- Q1)** a) What is meant by Product design explain various phases of Product design. [6]
- b) Differentiate between product design and product development. [4]

OR

- Q2)** a) Which are the three “S” of product design and what are their advantages in product development process. [4]
- b) What is House of Quality, explain how it is used in the Product development process. [6]
- Q3)** a) Explain Basic method of mission statement and technical questioning in product development process with template and state its advantages.[6]
- b) Draw and explain Kano-Model for customer satisfaction with suitable example. [4]

OR

- Q4)** a) Explain the various phases of S-Curve used in technology forecasting.[5]
- b) Explain the concept of market segmentation and how it is useful in Product design. [5]

P.T.O.

- Q5)** a) List advantages and disadvantages of brainstorming methods for idea generation. [4]
- b) Which are the methods for product information gathering. [6]

OR

- Q6)** a) Explain FAST method for development of product function. [5]
- b) Explain concept selection process. [5]

