

Total No. of Questions : 6]

SEAT No. :

P5015

[Total No. of Pages : 1

B.E. /Insem. - 22
B.E. (Mechanical Engineering)
PRODUCT DESIGN AND DEVELOPMENT
(2012 Pattern) (Semester - I) (Elective - II)

Time : 1 Hour]

[Max. Marks : 30

Instructions to the candidates:

- 1) *All questions are compulsory.*
- 2) *Figures to the right indicate full marks.*
- 3) *Use of non programmable calculator is allowed.*
- 4) *Assume suitable data, if necessary.*

- Q1)** a) Explain factors to be considered for product design. [5]
b) Differentiate between product verification and product validation. [5]

OR

- Q2)** a) Explain phases of product design. [5]
b) Explain product testing. [5]

- Q3)** a) Explain S Curve with suitable example. [5]
b) Explain market segmentation with suitable example. [5]

OR

- Q4)** a) Explain customer need with suitable example. [5]
b) Explain how will you carry out analysis of gathered information. [5]

- Q5)** a) Explain the concept of lateral thinking with suitable example. [5]
b) Explain subtract and operate procedure. [5]

OR

- Q6)** a) Explain, morphological analysis with suitable example. [5]
b) Explain Pugh's concept. [5]

