

BACHELOR OF TECHNOLOGY (C.B.C.S.) (2014 COURSE)

B.Tech.Sem - VIII MECHANICAL :SUMMER- 2022

SUBJECT : INDUSTRIAL PRODUCT DESIGN

Day : Thursday

Time : 02:30 PM-05:30 PM

Date : 16-06-2022

S-13465-2022

Max. Marks : 60

N.B.:

- 1) All questions are **COMPULSORY**.
 - 2) Figures to the right indicate **FULL** marks.
 - 3) Draw neat sketch **WHEREVER** necessary.
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Q.1 What is product architecture? Explain its importance in product design and development. [10]

OR

Q.1 Explain detailed block diagram for generic product development with respect to marketing, design, manufacturing and other functions aspects. [10]

Q.2 With suitable example explain weighted objective method in designing product, also gives its limitations. [10]

OR

Q.2 What is function analysis method? Explain with suitable example function analysis method in designing product, also gives its limitations. [10]

Q.3 Explain with suitable example step set ideal and marginally acceptable target values for establishing target specifications. [10]

OR

Q.3 What is process of screening the concept? Explain process of screening the concept with industrial example. [10]

Q.4 Explain the sources from where design resources are been generated. [10]

OR

Q.4 Explain with neat sketch fused modelling deposition method with its working principles, advantages, disadvantages and applications. [10]

Q.5 What are the guidelines given under ISO 14000 system with reference to industrial product design? [10]

OR

Q.5 Define ergonomics. Explain man machine system and its relevance. [10]

Q.6 Explain the impact of design for manufacturing on Innovation, value and aesthetics of products with suitable example. [10]

OR

Q.6 What is DFMA? Explain with suitable example how DFMA helps in optimizing development cost. [10]

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