

(CBGS)
(3 Hours)

QP Code : 31404

Total Marks: 80

5

- N.B.: (1) Question No. 1 is compulsory.
(2) Attempt any three out of remaining five questions.
(3) Figures to the right indicate full marks.
(4) Illustrate your answers with sketches wherever necessary.

- Q.1 (a) Explain in detail concept selection. 10
(b) Explain quality function deployment considering any one product of your choice. 10
- Q.2 (a) Explain ergonomic and aesthetic considerations in product design. 10
(b) Explain the different types of cost associated with product design and development. 10
- Q.3 (a) Explain product mix and product life cycle with an example. 10
(b) Explain the different types of creativity technique. 10
- Q.4 (a) What is product architecture? How product architecture is established? 10
(b) Explain design for manufacturing and assembly. 10
- Q.5 (a) Explain any one type of modern product development process. 10
(b) Explain in detail concept generation. 10
- Q.6 Write short notes on any four of the following :- 20
- (a) Design for maintainability
(b) Design of experiments
(c) Failure mode and effects analysis
(d) Reverse engineering
(e) Concurrent engineering