aktuonline.com

U-0488/1700

Printed Pages : 2 TME-026

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 0488 Roll No.

B. Tech.

(SEM. VIII) EXAMINATION, 2007-08

CONCURRENT ENGINEERING

Time : 3 Hours] *[Total Marks : 100*

Note : (1) Attempt **all** the questions.
(2) All questions carry **equal** marks.
(3) Be precise in your answer.
(4) No second answer book will be provided.

1 Attempt any **two** parts of the following : **10×2=20**

(a) Explain the basic concept of concurrent engineering with proper examples. Describe with suitable example, the basic steps to be followed in concurrent engineering.

(b) Discuss with suitable example the challenges faced by modern production environment.

(c) With the help of neat sketch, explain organizational structure with reference to concurrent engineering. Also discuss the activities and duties of team.

2 Write short notes on any **two** of the following : **10×2=20**

(a) Quality Function Deployment (QFD)
(b) Life Cycle Costing (LCC)
(c) Modelling of CE design.

aktuonline.com

3 Attempt any **two** parts of the following : **10×2=20**

(a) Discuss with suitable example, the role of DFM in concurrent engineering. Also discuss DFM guidelines.

(b) Explain the computer methods for design for manufacture (DFM) and design for assembly (DFA). Also discuss the DFM/DFA software.

(c) Explain with suitable example, the difference between conventional quality and Taguchi's quality. Also discuss Taguchi's design method.

4 Attempt any **two** parts of the following : **10×2=20**

(a) What do you understand by robust design? Also discuss cause and effect analysis.

(b) What do you understand by Taguchi's loss function? Also discuss the design and disturbance factors (noise) affecting the quality.

(c) Write short notes on :
(i) S/N Ratio
(ii) Tolerance design

5 Write short notes on any **two** : **10×2=20**

(a) Decomposition in concurrent design

(b) Causes of unreliability

(c) Some aspects of design for economics.