M.E. Second Semester (Mechanical Engineering (Adv. Manu. & Mech. Sys. Desig.)) (New-CGS)

13476 : Elective-II : 4) Computer Assisted Production Management : 2 MMD 5

P. Pages : 2 | **AW - 3834**

Time : Three Hours | Max. Marks : 80

Notes :
1. All question carry equal marks.
2. Answer **three** question from Section A and **three** question from Section B.
3. Assume suitable data wherever necessary.
4. Illustrate your answer necessary with the help of neat sketches.
5. Use of pen Blue/Black ink/refill only for writing the answer book.

SECTION - A

1.	a)	Explain the criteria for selecting CAPP system.	**6**
	b)	What factors can be increased in industry with the use of CAPP.	**7**
2.	a)	Explain briefly optical inspection methods.	**6**
	b)	Explain benefits of automated inspection methods.	**7**
3.	a)	How product mix is related to capacity utilization decision?	**7**
	b)	What factors affect short range capacity planning.	**6**
4.	a)	Explain the working of touch trigger probes used in CMM.	**7**
	b)	Classify the sensors used in automated inspection?	**6**
5.	a)	Capacity will be modified in response to demand. Demand will be modified in response to capacity. Which of these statement is correct? Why?	**7**
	b)	What is quality function deployment.	**7**

SECTION - B

6.	a)	JIT aims to Eliminate work Explain this with respect to Shingo's seven waste.	**7**
	b)	What is KANBAN? Explain various types of KANBAN used in JIT.	**6**
7.	a)	Explain the role of master production schedule and how it related to other element of MRP.	**7**
	b)	Explain the meaning of Bill of material in context of MRP?	**6**
8.	a)	What do you mean by uniform load scheduling? How it is compatible with KANBAN and JIT.	**7**
	b)	Which type of work layout is more suitable in pull system.	**6**

9. a) Explain the following term. 6

i) Computer Aided material management

ii) Computer integrated material management

iii) Computer Aided inventory management

b) Explain the steps in modeling methodology for situations. Why the understanding of this methodology is important for computer aided inventory control? 7

10. A departmental store keeps stock of Brand 'X'. the daily demand pattern for the brand with associated probabilities is given below. 14

Demand (Daily)	0	10	20	30	40	50
Probability	0.01	0.20	0.15	0.50	0.12	0.02

Using the following sequence of random numbers, simulate the demand for the next 10 days. Also find average daily demand for the brand 'X'.
The Random numbers are.
40, 19, 87, 83, 73, 84, 29, 09, 02, 20.

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