PNS SCHOOL OF ENGINEERING & TECHNOLOGY, KENDRAPARA

LESSON PLAN
SUB: COMPUTER INTEGRATED MANUFACTURING
SESSION: 2005-26
4TH Semester,
Branch: Mechanical Engg.

Name of faculty: Dr. Smruti Ranjan Pradhan

Lecture No.	Chapter	Name of event
1	Ch.1.	Concept of Computer Integrated Manufacturing (CIM)
2		Basic components of CIM
3		Distributed database system
4		Distributed communication system
5		Computer networks for manufacturing
6		Computer networks for manufacturing
7		Future automated factory
8		Future automated factory
9		Social factors
10		Economic factors
11	Ch. 2.	Computer Aided Design (CAD) concepts
12		CAD hardware
13		CAD software
14		Product modelling
15		Product modelling
16		Automatic drafting
17		Engineering analysis
18		FEM design review
19		FEM design evaluation
20		Group Technology Centre
21	Ch. 3.	Computer Aided Manufacturing (CAM)
22		Computer assisted NC part programming for plain turning
23		Computer assisted NC part programming for step turning
24		Computer assisted robot programming
25		Computer aided process planning (CAPP)
26		Computer aided process planning (CAPP)
27		Computer aided material requirements planning (MRP)
28		Computer aided material requirements planning (MRP)
29	Ch. 4.	Computer aided production scheduling
30		Computer aided production scheduling
31		Computer aided inspection planning
32		Computer aided inspection planning
33		Computer aided inventory planning
34		Computer aided inventory planning
35		Flexible manufacturing system (FMS)
36		Flexible manufacturing system (FMS)
37		Concept of flexible manufacturing
38		Concept of flexible manufacturing
39	Ch. 5.	Integrating NC machines, robots, AGVs, and other NC equipment
40		Integrating NC machines, robots, AGVs, and other NC equipment
41		Computer aided quality control
42		Computer aided quality control
43		Business functions
44		Computer aided forecasting
45		Office automation
Reference Books		1. CAD, CAM, CIM by P. Radhakrishnan and S. Subramanyan, New Age IP
		2. Computer Integrated Manufacturing by Paul G. Rankey, Prentice Hall.
		3. Robotics Technology and Flexible Automation – S.R. Deb, TMH.