SUBJECT NO-IM60016, SUBJECT NAME- PRODUCTION DESIGN AND PROCESS PLANNING
LTP- 3-1-0,CRD- 4

SYLLABUS :-

Four plane concepts of manufacturing - planning, control, material flow, and manufacturing process. Control loop of a manufacturing system. Basic functions of a manufacturing facility for small and medium-size production runs. Functions of a computer in a manufacturing organization. Process planning and its manufacturing environment. Generative process planning, variant process planning and CAPP system. Computer-aided generation of process plans. Group technology: classification methods, Opitz classification system, CODE systems, and MICLASS system. Master production schedule. Materials requirement planning. Manufacturing resources planning - capacity requirements planning, order release planning and operation sequencing. Group scheduling in a manufacturing resource planning environment. Introduction to JIT technique.TextbookÃ¢ÂÂ¢Groover, M.P. and Zimmers, E.W. Jr., CAD/CAM: Computer-aided Design and Manufacturing, Prentice-Hall of India Private Ltd, New Delhi, ISBN 0-87692-402-10, 1986.References 1.Halevi, G., The Role of Computers in Manufacturing Processes, John Wiley.2.Orlicky, J., Material Requirements Planning, McGraw-Hill.3.Koren, Y., Computer Control of Manufacturing Systems, McGraw-Hill.4.Vail, P.S., Computer Integrated Manufacturing, PWS-KENT Publishing Co.5.Rembold,U., Blume, C. and Dillmann, R., Computer Integrated Manufacturing Technologyand Systems, Marcel Dekker.6.Hyde, W.F., Improving Productivity by Classification, Coding, and Database Standardization, Marcel Dekker.7.Noori, H., Managing the Dynamics of New Technology: Issues in Manufacturing Management, Prentice-Hall.