AMTE-20 INFORMATION TECHNOLOGY IN TEXTILE

UNIT-1 INTRODUCTION
1.1 Meaning of Information technology,
1.2 Historical perspective, IT revolution.

UNIT-2 GOALS OF IT DEPLOYMENT
2.1 Development of IT applications in business, Potential of IT in Textile Manufacturing, need and framework of IT use in textile.
2.2 Vision and Important areas, data versus information, information resources, Basic elements of IT in Textile mills, past and present IT in textile mills,
2.3 Elements of nonintegrated computer environment in manufacturing. Strategic planning, information resources management concept.

UNIT-3 ENTERPRISE IT INFRASTRUCTURE
3.1 Broad vision, Idea of architecture and standards, Inter and intra- enterprise integration, general areas of IT application-
3.2 Integrated product and process design, shop floor production, business practices,
3.3 New areas of IT applications- virtual factory, programmable and reconfigurable factory,
3.4 Net worked factory, micro factory etc,
3.5 Non-manufacturing areas- knowledge and information management,.
3.6 Planning the enterprise IT infrastructure.

UNIT-4 GETTING CONNECTED FOR IT
4.1 Telecommunications, LANs, WANs and Internets,
4.2 Information Super Highway and the Internet,
4.3 World Wide Web, Idea of Client server architecture.

UNIT-5. COMPUTER BASED INFORMATION SYSTEMS
5.1 Information management, manager and systems, , computer-based information systems, information services organization, justifying the CBIS, achieving the CBIS.;
5.2 a) Management information systems- concept of information subsystems,systems model of textile firms, system approach, modeling and simulation, perspective of MIS, problem solving;
5.3 b) Manufacturing information systems- model of manufacturing information system in textile. shop floor information systems and control of individual activities.;
5.4 c) Financial information systems- model of financial information systems, accounting information systems, fund management and forecasting subsystems, control subsystems.
5.5 d) Human resource information systems-model of human resource s information systems, human resource management subsystems.
5.6 e) Marketing information systems, model of marketing information systems, Electronic Commerce- strategy and methodology, EDI, E-commerce technology, use of internet.

5.7 f) Knowledge-based Systems: Decision support systems, artificial intelligence, expert system, knowledge base, fuzzy logic and Neural Networks.

5.8 g) Virtual Office: Office automation, virtual office, virtual office in textile arena.

UNIT-6 IT ENABLED ORGANIZATIONAL CHANGE

6.1 Approaches towards It implementation, types of changes related to IT implementation, other issues.

UNIT-7 SECURITY AND SOCIAL ISSUES

7.1 Ethics and information systems,

7.2 Information crimes,

7.3 Legislation, right to privacy.

Reference Books:

1. Information Technology for Manufacturing-A research Agenda, National Academy Press, Washinton DC, 1995;
2. Introduction to Information Systems by James A. O'Brien, McGrawhill, USA 1997,
3. Computer Systems Today by S.K. Basandra, Wheeler Publishing, New Delhi,1999,