Hemchandracharya North Gujarat University, Patan

B.E. SEMESTER – III (IT)

IT305: BUSINESS INFORMATION SYSTEM

Teaching Scheme		Examination Scheme	
Theory	03 Hrs/Week	Theory	100 Marks
Tutorial	-	Practical	-
Practical	-	Term work	-
Total	03 Hrs/Week	Total	100 Marks

1. Business and Management Information: Business Organization –Business Work Area-Business Information-Levels of Information-Categories of Information-Quality of Information-Management Information –Management Reports-System Theory-Deterministic and Probabilistic Systems-Closed and Open Systems-Regulation in Systems Open-loop Systems-Data systems and Users-User requirements-User/D.P. staff cooperation- User knowledge and training – Personnel – Steering committees

2. Computer in Business : Development of Data Systems – Data transmission and real time D.P. – Minicomputers – Microcomputers – Software – Networks – Office automation – Future developments – Structure of computer – Multiprocessing – Backing storage – Terminals – Computer configurations – Reliability of computer configurations – Data representation - Minicomputers – Characteristics of minicomputers – Microcomputers – Memory – Processors – Backing storage – Visual display unit (VDU) – Printers – Programming – Operation systems – Software – Large microcomputers – Portable microcomputers –Distributed processing – Data switching –Fiber optics – Real time and on line systems – Office automation – Word Processing – Electronic Mail – Videotext – Electronics fund transfer (EFT)

3. Data Capture and Computer Input / Output Keyboards and Pointing Devices – Optical Character Recognition – Capturing Pictures, Sounds and Video – Storing and Retrieving Data – Paper and Micro graphics – Magnetic Tapes and Disks – Optical Disks – Flash Memory – Screen Outputs – Paper Outputs – Audio Outputs

4. Computer Files and Databases : Business Files – Data Storage Media – Direct Access File Organization – Data Modeling: Documenting Information Architecture – User's View of a Computerized Database – Database Management Systems (DBMS) – Text Database and Hypertext – Evaluating Information Used in Business Processes – Models as Components of Information Systems

5. Systems Investigation: General aspects – Planning the Systems Investigation – User's Information Requirements – Usage and Flow of Data – Current Activities – User Department Staffing – Current System Costs – Entity sets – Fact Finding Methods

6. Systems Design : Design Philosophy – Code Number Systems – Output Subsystem – Logical File Subsystem– Input Subsystem – System Architecture – Security and Audit – Computer Job Scheduling – Costs and Savings of New System – System Documentation

7. System Implementation : D.P. Staff – System Testing – Database Creation – Changeover Procedure – System presentation – System Appraisal and Maintenance – Data Processing Resources

8. Information System Security and Control: Threat of Project Failure – Threat of Accidents and Malfunctions – Threat of Computer Crime – Factors that Increase the Risks - Methods for Minimizing Risks

9. Communication, Decision Making and Different Types of Information System : Basic Communication Concepts - Personnel, Impersonal and Anonymous Communication-Time, place and Direction of Communication— Data Communication-Data Transmission-Types of Networks-Basic Decision Making Concepts-Steps for Decision Making Process-Transaction Processing System

10. Programming Intelligence into Machine: Introduction to: Natural Language Processing - Expert Systems-Neural Networks-Fuzzy Logic-Case Based Reasoning-Intelligent Agents.

11. Inventory Management (INMANS) System Design

12. Account Payable System (ACPAYS) Design

13. Payroll System (PAYSY) Design

Reference Books:

1. Business Data Systems – H. D. Clifton
2. Business Systems for Microcomputers – William D. Haueisen & James L. Camp
3. System Analysis and Design- James A Semm
4. SADSE with Solved Case Studies by S.Parthasarathy & B.W. Khalkar