PARUL UNIVERSITY - Faculty of Engineering and Technology

Department of Computer Science & Engineering
SYLLABUS FOR 6th Sem BTech PROGRAMME
Business Information System (203108393)

Type of Course: BTech

Prerequisite:

Rationale:

Teaching and Examination Scheme:

Teaching Scheme			Credit	Examination Scheme					Total
Lect Hrs/	Tut Hrs/	Lab Hrs/		External		Internal			
				T	P	T	CE	P	
3	0	0	3	60	-	20	20	-	100

Lect - Lecture, **Tut** - Tutorial, **Lab** - Lab, **T** - Theory, **P** - Practical, **CE** - CE, **T** - Theory, **P** - Practical

Contents:

Sr.	Topic	Weightage	Teaching Hrs.
1	**Organization and Computing**: Introduction, Modern Organisation-IT enabled- Networked-Dispersed-Knowledge Organisation, Information Systems in Organisations- what are information systems?, Brief history of computing- ENIAC: Way to commercial computers- Advent of artificial intelligence- advent of personal computing-Free Software Movement- Advent of Internet, The role of internet- Internet and Web: they are different-the internet changes everything.	10%	4
2	**Managing Information Systems in Organizations**: Introduction, Managing in the Internet Era, Managing Information Systems in Organization-the IT interaction model, Challenges for the manager-what information to build?-how much to spend on information systems?-what level of capabilities should be created with information systems?-how centralized should the services be?-what security levels are required?-what is technology road map for the organization?	10%	6
3	**Data and Information**: Introduction, data and information- measuring data, information as a resource, information in organizational functions, types of information technology, types of information systems- transaction processing systems-management information systems.	5%	4
4	**Decision making and communication**: Introduction, Decision making with MIS-Tactical decisions-operational decisions-strategic decisions, communication in organisations- types of communication- examples of communications in organisations-decision making with communication technology.	15%	6

5	**Competing with IT**: Introduction, The competitive environment of business- partnering for mutual benefit- bargaining power of suppliers-bargaining power of buyers and customers-barriers to entry-threat of substitutes-industry regulations, Using IT for competing-competing on low cost-competing on differentiation.	15%	4
6	**IT strategy**: Introduction, Information goods-properties-technology lock-in and switching costs-network externalities-positive feedback-tippy markets, information systems and competitive strategy- value chain, the Role of CIO-information system's plan-vendor coordination-technology updates-return on investment on technology.	5%	4
7	**Business Process Integration with IT**: Introduction, Business Process Integration- Business processes-example of a complex process, Motivation for Enterprise Systems, Enterprise Resource Planning systems- finance and accounting module-human resource management module-manufacturing and operations module- sales and marketing module.	10%	6
8	**SCM, CRAM and International Systems**: Introduction, Supply Chain Management Systems, Customer Relationships Management Systems, Challenges of Enterprise Systems Implementations- Managing the implementation, International Information Systems-Outsourcing and off-shoring.	5%	3
9	**Electronic Commerce**: Introduction, E-commerce Technology, doing business over internet-networks-electronic data interchange (EDI)-online payment technology-Mobile commerce- ecommerce-portals- search engines-direct selling-auctions- aggregators, E-business.	10%	4
10	**Decision Support Systems**: Introduction, Understanding DSS- MIS and DSS-Decision making-types of decisions, Analytics and Business Intelligence- BI techniques.	5%	4
11	**Managing Data Resources**: Introduction , The Need for Data Management- History of data use, Challenges of Data Management- data independence- reduced data redundancy- data consistency- data access- data administration-managing concurrency-managing security- recovery from crashes-application development, Database Concepts- fields, records and files-basic architecture, Data Warehouses- data mining uses.	5%	4
12	**Ethical Issues**: Introduction, Key issues- Privacy-Workplace Monitoring- Power over users.	5%	4

*Continuous Evaluation:

It consists of Assignments/Seminars/Presentations/Quizzes/Surprise Tests (Summative/MCQ) etc.

Reference Books:

1. Business Information Systems
   Muneesh Kumar; Vikas Publishing House Pvt. Ltd; First Edition

2.   Business Data Systems
      H. D. Clifton