

The Enclosed papers are to be included as IDS CAN course for S.Y.B.Sc.(Computer Science) along with the existing CAN courses. Students are supposed to select one IDS in 3rd semester and one in 4th semester.

**VEER NARMAD SOUTH GUJARAT UNIVERSITY –
SURAT**

S Y B. Sc. (Computer Science)

Syllabus for S. Y. B. Sc.(Computer Science) – CAN course.

Effective From: June-2018

Course: ID-01: E-Commerce and Cyber Security

Course Code	ID-01
Course Title	E-Commerce and Cyber Security
Credit	2
Teaching per Week	2 Hrs
Minimum weeks per Semester	15 (Including Class work, examination, preparation, holidays etc.)
Last Review / Revision	June, 2015
Purpose of Course	This course imparts the knowledge of Electronic commerce, online order processing concepts and related threats. The concepts of electronic transactions, e-commerce framework, related security issues and threats are covered in this course. It also highlights the issues related to cyber crime, types of possible cyber crimes and related issues. The course is aimed to give e-commerce related issues and concepts.
Course Objective	To make students understand concepts of e-commerce framework. To make students understand concepts of types of online transactions. To make students understand the basic concepts of security issues pertaining to e-commerce. To make students understand various possible cyber crimes and its related laws.
Pre-requisite	Concepts of electronic commerce and online transactions.
Course Out come	At the end of the course, student is expected to have clear concepts about the e-commerce, types of e-commerce, e-commerce framework, security issues pertaining to e-commerce, cyber crimes and related cyber laws.

Course Content

Unit-1:

1.1 Introduction to E-commerce

1.1.1 What is E-commerce

1.1.2 E-commerce frame work

1.2. E-commerce consumer applications

1.2.1 e-commerce organization applications

1.2.2 Network for E-commerce

1.2.3 what is information way

Unit-2:

2. E-commerce and World wide web

2.1 E-commerce application services

2.2 Consumer to Business Transaction

2.3 Business to Business Transaction

2.4 Security on the web

2.5 Categories of Internet data and transactions

Unit-3:

3. E-commerce security Issues

3.1 Secure Socket layer

3.2 Types of Electronic payment systems

3.2.1 E-cash

3.2.2 Electronic checks

3.2.3 Smart cards and electronic payment systems

3.2.4 Credit card and debit cards payment and their authentication

Unit-4:

4. Introduction to Cyber Crimes

4.1 Category of cyber crimes

4.2 Technical aspects of cyber crimes

4.2.1 Unauthorized access & Hacking

4.2.2 Trojan , virus and Worm attacks

4.3 E-mail & IRC related crimes

4.3.1 Email spoofing and Spamming

4.3.2 email bombing

4.3.2.1 sending threatening emails

4.3.2.2 Defamatory emails

4.3.2.3 email frauds , IRC related

4.3.2.4 denial of Service attacks

4.3.2.5 A distributed denial of service attack

Unit-5:

5 . Prohibited actions on Cyber

5.1 Pornography

5.2 IPR violation , software piracy , copyright infringement, trademarks violation

Theft of computer source code, patent violations

5.3 Cyber Squatting

5.4 Cyber terrorism:

5.5 Banking/Credit card related crimes

5.6 E-commerce/Investment Frauds

	<p>5.6.1 Sales and investment frauds</p> <p>5.7 Sales of Illegal articles</p> <p>5.8 defamation(Cyber smearing)</p> <p>5.9 cyber stalking</p>
Reference Books:	<ol style="list-style-type: none"> 1. E-commerce Strategies --- Charle s Trepper 2. E- Commerce an Indian Perspective—Joseph- PHI 3. Electronics Commerce : A Managerial Prespective – Efraim Turban, Jae Lee 4 Cyber Crime in India ---- Dr M Dasgupta 5 Cyber Law and Crimes – BarkhaU, Rama Mohan 6 Cyber Laws Law---Dr Sarla Gupta 7 Email Hacking - Ankit Fadia 8 Ethical hacking Guide to Corporate Security—Ankit Fadia
Teaching Methodology	Discussion, Independent study, Seminars and Assignment
Evaluation Method	30% Internal assessment is based on class attendance, participation, class test, quiz, assignment, seminar, internal examination etc. 70% assessment is based on end semester written examination

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S Y B. Sc. (Computer Science)

Syllabus for S. Y. B. Sc.(Computer Science) – CAN course.

Effective From: June-2018

Course: ID-02: COMPUTERISED ACCOUNTING

Course Code	ID-02
Course Title	Computerised Accounting
Credit	2
Teaching per Week	2 Hrs
Minimum weeks per Semester	15 (Including Class work, examination, preparation, holidays etc.)
Last Review / Revision	June, 2015
Purpose of Course	This course imparts the knowledge of Introduction to Accounting System, Accounting Concepts, Accounting Equation & Transaction Analysis, Concepts of Book-Keeping and accounting package. The course is aimed to give inner depth of Accounting and Book keeping concepts.
Course Objective	To make students understand concepts of Accounting system. To make students understand concepts of Book Keeping. To make students understand the basic concepts of Accounting Equations & Transaction Analysis. To make students understand computerized accounting package.
Pre-requisite	Concepts of Accounts and basic knowledge of computerized application package.
Course Out come	At the end of the course, student is expected to have clear concepts about the Accounting System, Accounting Concepts, Accounting Equation & Transaction Analysis, Concepts of Book-Keeping and accounting package. Students can apply Accounting and Book Keeping concepts which are to understand commercial accounting packages.

<p>Course Content</p>	<p>Unit-1:</p> <p>1.1.Introduction to Accounting System</p> <p>1.1.1 Meaning & Definition of Accounting</p> <p>1.1.2 Objectives of Accounting</p> <p>1.1.3 Concepts and Features of Book Keeping</p> <p>1.1.4 Branches of Accounting (Financial Management, Cust)</p> <p>1.1.5 Basis of Accounting (Accrual Bases, Cash Bases)</p> <p>1.2. Accounting Concepts</p> <p>1.2.1 Accounting Concept</p> <p>1.2.2 Accounting Equation Concept</p> <p>1.2.3 Accounting Period Concept</p> <p>1.2.4 Concept of Matching Realization Accrual</p> <p>Unit-2:</p> <p>2.1 Accounting Equation & Transaction Analysis</p> <p>2.1.1 Introduction to Assets, Liabilities, Equities</p> <p>2.1.2 Concepts of Transaction Analysis</p> <p>2.1.3 Classification of Accounts (Real Account, Personal Account, Nominal Account)</p> <p>2.2 Concepts of Book-Keeping</p> <p>2.2.1 Introduction of Single Entry System and its advantages/disadvantages</p> <p>2.2.2 Introduction of Double Entry System and its advantages</p> <p>2.2.3 Types of Business Transaction</p> <p>2.2.3.1 Cash Transaction</p> <p>2.2.3.2 Credit Transaction</p>

2.2.3.3 Barter Transaction

Unit-3:

3. Journal & Subsidiary Books (With Preliminary examples)

3.1 Meaning of Journal

3.2 Format of Journal

3.3 Concept and format of cash Book

3.4 Concept and format of Petty cash Book

Unit-4:

4. Concept of Accounting Mechanism

4.1 Meaning and Definition of Ledger

4.2 Types of Ledger

4.3 Concepts of posting Bank Reconciliation Statement

4.4 Trial Balance and its objectives

4.5 Concepts of Suspense Account

Unit-5:

5. Application of Accounting Using Accounting Package

5.1 Creation of Company

5.2 Voucher Printing Entry

5.3 Alteration, Deletion of Vouchers

5.4 Types of Voucher entry (Receipt, Payment, Contra, Purchase, Sales, Journal, Physical Stock, Reversing Journal)

5.5 Generating Trial Balance

5.6 Maintaining Account Books & Reports

5.6.1 Cash Book, Bank Book, Ledger

5.6.2 Sales Register, Purchase Register

	<p>5.6.3 Day Book, Inventory Book, Stock Summary</p> <p>5.6.4 Balance Sheet</p>
Reference Books:	<ol style="list-style-type: none"> 1. Accounting for Management – By Dr. Hawaharlal 2. Financial Management - By Dr. S.N. Maheshwari 3. Accounting for Management – By S.K. Bhattacharya & John Deardon 4. Advanced Accountancy – By S.P. Jain & K.I. Narang 5. Implementing Tally 6.3 – By K.K. Nathani – BPB Publication 6. Implementing Tally 7.2 – By A.K. Nathani & K.K. Nathani BPB Publication
Teaching Methodology	Discussion, Independent study, Seminars and Assignment
Evaluation Method	30% Internal assessment is based on class attendance, participation, class test, quiz, assignment, seminar, internal examination etc. 70% assessment is based on end semester written examination

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S Y B. Sc. (Computer Science)
Syllabus for S. Y. B. Sc.(Computer Science) – CAN course.
Effective From: June-2018
Course: ID-03: Business Systems

Course Code	ID-03
Course Title	Business Systems
Credit	2
Teaching per Week	2 Hrs
Minimum weeks per Semester	15 (Including Class work, examination, preparation, holidays etc.)
Last Review / Revision	-
Purpose of Course	This course imparts the knowledge of various business information systems needed to be model, design and program as software engineer.
Course Objective	To provide comprehensive knowledge of concepts related to various business information systems To provide basics for system and data modelling. To provide insight into business operations and their significance in information system
Pre-requisite	Concept of information system
Course Out come	At the end of the course, student will be able to 1. Understand business operations and related information systems. 2. Perform system and data modelling for given business information system
Course Content	Unit 1 Introduction 1.1 Introduction to Business Data Processing 1.2 Overview of Business systems

1.3 Management Functions, Levels of Management

1.4 Sources of Information, Applications like Payroll, Accounting, Inventory, MIS, DSS

2. Inventory Control System

2.1 Objectives of good inventory control system

2.2 Transaction for an inventory system (Purchase, Issue, Purchase Return and Issue Return)

2.3 Creation of transaction file, Item master file for purchase, issue, purchase return and sales return.

2.4 Consumption analysis, A B C analysis, Year-end processing and Periodic housekeeping

3. Payroll System

3.1 Objectives of payroll systems

3.2 Classification of employees based on payment of wages

3.2.1 Monthly dated employees

3.2.2 Daily rated employees (Time rated employees, Piece rate employees)

3.3 Leave entitlements, Overtime wages, bonus, provident fund contribution and other deductions

3.4 Computerizing a Payroll system: Case Study

4. Banking System

4.1 Objectives of banking systems

4.2 Present level of computerization

4.3 IT packages and services in India

4.4 Core modules and reports

4.5 Internet Banking

4.6 e-Banking in India

	<p>4.7 Business payment solutions</p> <p>5. Services Oriented Business System & ERP</p> <p>5.1 Service Definition, Types of Services</p> <p>5.2 Process of Services, Effects of Services, Software as a Service</p> <p>5.3 Evolution of ERP, Definition of ERP, Various Modules of ERP, Advantage of ERP.</p> <p>5.4 Case study based on ERP.</p>
Reference Books:	<ol style="list-style-type: none"> 1. Business applications using computers Ramachandran Nambissan T.M BPB publications 2. Enterprise resource planning Alexis Leon Tata McGrawhill 3. Services Marketing People, Technology, Strategy: Chrestopper Lovelock and Jochen Wirtz - Pearson Education. 4. Production And Operations Management: K. Aswathappa And Shrddhara Bhat, Himalaya Publishing House. 5. Retailing Management: Levy writz - TMH. 6. Logistics And Distributed Management: Alan Rushton, John Oxley Phil Croucher -Kogan Page.
Teaching Methodology	Discussion, Independent study, Seminars and Assignment
Evaluation Method	30% Internal assessment is based on class attendance, participation, class test, quiz, assignment, seminar, internal examination etc. 70% assessment is based on end semester written examination