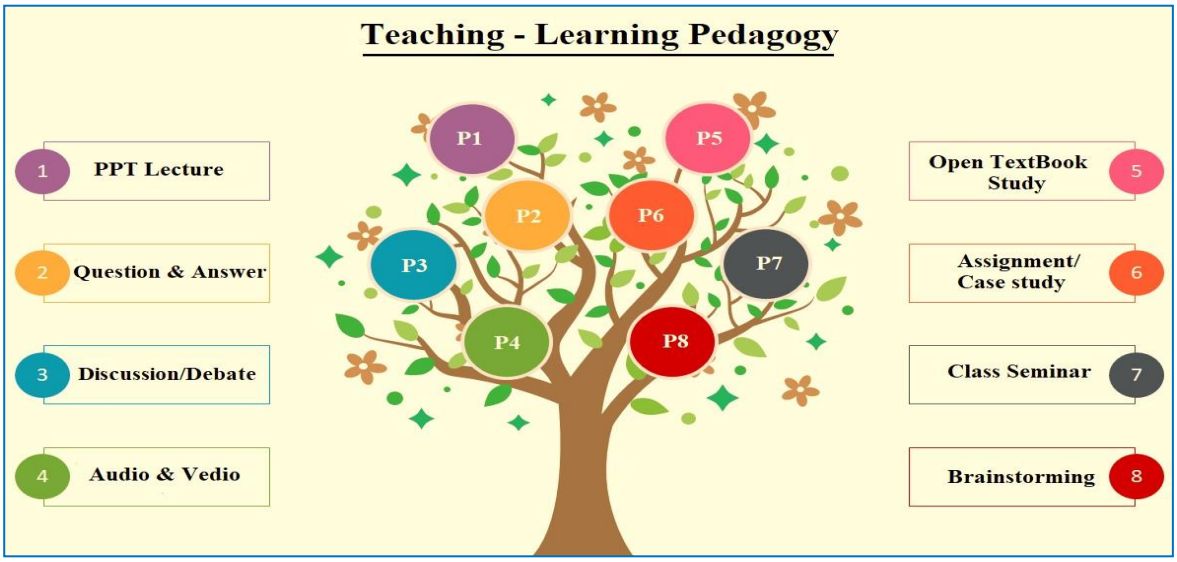
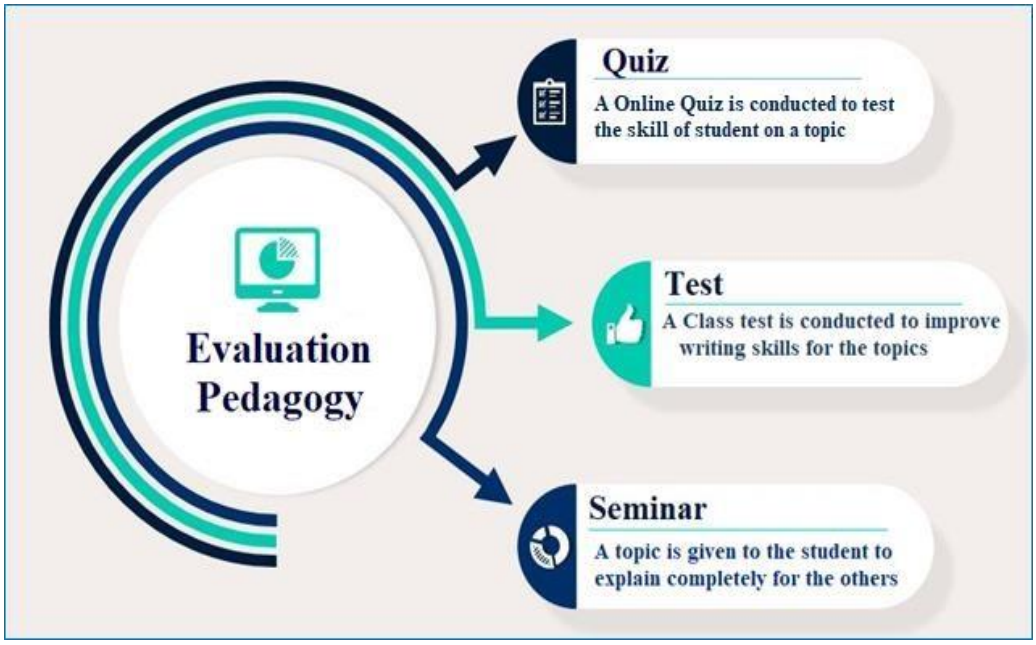
B.Com COMPUTER APPLICATIONS
Teaching Plan – 2022-2023





Course:B.Com(Voc)	Year:I	Semester:I
Subject	**1.1INFORMATIONTECHNOLOGY**	
Units	1. IntroductiontoComputer 2. MS-Word 3. MS-Excel 4. MS-PowerPoint 5. MS-Access	
Duration	**60hours**	
LearningObjectives	1. MS word creation of documents lettersinvitations etc., tables, mail merge, animations inword,formattingtext 2. MSExcelperformingdifferent formulas,creatingcharts,macros 3. MSpowerpointslidecreation,creationofanimation 4. MSAccesscreationofdatabase,formsandreports	

Units	U1	U2	U3	U4	U5
Hours Split:Total: 60	10	10	15	10	15
Internal valuation:30marks	5	10	5	5	5

Resource Material:	**StudyMaterial(Handouts):** http://www.mcrhrdi.gov.in/93fc/material/Computer%20Fundamentals%20&%20Office%20Applications.pdf **ReferenceBooks:** (1) P.Mohancomputerfundamentals-HimalayaPublications. (2) R.K.SharmaandShashiKGupta,ComputerFundamentals-KalyaniPublications (3) FundamentalsofComputersByBalagurusamy,McGrawHill (4) ComputerFundamentalsAnitaGoelPearsonIndia (5) IntroductiontoComputersPeterNorton (6) FundamentalsofComputersRajaramanVAdabalaN (7) Office2010All-in-One ForDummiesPeterWeverka (8) MS-OfficeS.S.Shrivastava (9) MS-OFFICE 2010 Training Guide Prof. Satish Jain, M.Geetha,KratikaBPBPublications **YouTubeLinks:** https://youtu.be/DzTCFsdxMP4 **PowerPointPresentations:** https://www.slideshare.net/VijayrajDaksh/a-presentation-on-ms-office **ModelQuestionpaper:** https://www.pdfquestion.in/3771.html **Articles:** https://www.investintech.com/resources/articles/beginnersmsoffice/

UNIT	DESCRIPTION	PEDAGOGY	INTERNAL EVALUATION
I	Computer Introduction - Characteristics and Limitations of Computer—Generations of Computer, Classification of Computers, Applications ofComputer, Basic Components of PC, Computer Architecture - Primary andSecondary Memories- Input and Output Devices- Operating System- Function ofOperatingSystem- TypesofOperatingSystem- LanguagesanditsTypes	P1,P2,P3	PQ,P6,PT
II	MSword: WordProcessing–Features- AdvantagesandApplications-PartsofWordWindow- Toolbar- Creating,Saving,Closing,OpeningandEditingofaDoc ument-MovingandCopingaText- FormattingofTextandParagraph-Bulletsand Numbering-Find and Replace - Insertion of objects- Headers and Footers-Page Formatting-AutoCorrect- SpellingandGrammar-MailMerge-Macros	P1,P2,P3,P5	P6,PT
III	MSExcel: Features – Spread Sheet-Workbook – Cell-Parts of awindow-Saving, Closing, Openingof a WorkBook –Editing–Advantages–Formulas-TypesofFunction- Templates–Macros– Sorting-Charts– Filtering	P1,P2,P3,P5	PQ,PT
IV	MSPowerpoint: Introduction – Starting – Parts-Creating of Tables- CreatePresentation – Templates-Auto Content Wizard-Slide Show-EditingofPresentation- InsertingObjectsandcharts	P1,P2,P4	PQ,P6,PT
V	MSAccess: OrientationtoMicrosoftAccess- CreateaSimpleAccessDatabase- WorkingwithTableData-ModifyTableData- SortandFilterRecords-QueryingaDatabase- CreateBasicQueries-SortandFilterData inaQuery- PerformCalculations in a Query - Create Basic Access Forms - Workwith Data on Access Forms - Create a Report - Add ControlstoaReport- FormatReports	PQ,P6,PT,**P8**	PQ,PT

Course: B.COM(VOC)	Year: I	Semester: II
Subject:	**Ecommerce and web designing**	
Units:	1. Introduction 2. E-payment System 3. On-line Business Transactions 4. Website designing 5. Security and Encryption	
Duration:	**hours**	
LearningObjectives	• To understand the complexity of e-commerce and its many facets. • Analyze the impact of E-commerce on business models and strategy. • To identity the impact of e-commerce and web designing • To recognize the benefits and limitations of e-commerce. • To use classification frame works for analyzing e-commerce. • Identify the key security threats in the E-commerce environment.	

Units	U1	U2	U3	U4	U5
HoursSplit:Total: 60	10	12	14	10	14
Internal valuation:40marks	8	8	8	8	8

Resource Material:	**StudyMaterial(Handouts):** https://masomomsingi.com/cict-notes-web-design-and-e-commerce-notes-pdf/ http://www.kartrocket.com **Reference Books:** **YouTube Links:** **https://www.youtube.com/watch?v=ojgjlotElbw** **Power Point Presentations:** **https://www.slideshare.net/aminindicsoft/ecommerce-website-development-proposal** http://www.e-commerceceo.com http://www.fastspring.com https://teamtreehouse.com/tracks/web-design

UNIT	DESCRIPTION	PEDAGOGY	INTERNAL EVALUATION
I	**Introduction:** Meaning, Nature, Concepts, Advantages, Disadvantages and reasons for Transacting Online, Types of E-Commerce, e-commerce Business Models (Introduction , Key Elements of a Business Model And Categorizing Major E-Commerce Business Models), Forces Behind e-commerce. Technology used in E-commerce: The dynamics of World Wide Web and Internet (Meaning, Evolution And Features); Designing, Building and Launching e-commerce website (A systematic approach involving decisions regarding selection of hardware, software, outsourcing Vs. in-house development of a website).	P1,P2,P3	PQ,P6,PT
II	**E-payment System:** Models and methods of e–payments (Debit Card, Credit Card, Smart Cards, emoney), Digital Signatures (Procedure, Working And Legal Position), Payment Gateways, Online Banking (Meaning, Concepts, Importance, Electronic Fund Transfer, Automated Clearing House, Automated Ledger Posting), Risks Involved in e-payments.	P1,P2,P5	P6,PT
III	**On-line Business Transactions**: Meaning, Purpose, Advantages and Disadvantages of Transacting Online, E- Commerce Applications in Various Industries Like {Banking, Insurance, Payment of Utility Bills, Online Marketing, E-Tailing (Popularity, Benefits, Problems and Features), Online Services	P1,P3,P5	PQ,PT
IV	**Website designing:** Designing a home page, HTML document, Anchor tag Hyperlinks, Head and body section, Header Section, Title, Prologue, Links, Colorful Pages, Comment, Body Section, Heading Horizontal Ruler, Paragraph, Tabs, Images And Pictures, Lists and Their Types, Nested Lists, Table Handling. Frames: Frameset Definition, Frame Definition, Nested Framesets, Forms and Form Elements. DHTML and Style Sheets: Defining Styles, elements of Styles, linking a style sheet to a HTML Document, Inline Styles, External Style Sheets, Internal Style Sheets & Multiple Style Sheets.	P1,P2,P4	PQ,P6,PT

Course: B.Com	Year:II	Semester:IV
Subject:	**Programming with C & C++**	
Units:	1. Introduction and Control Structures 2. Loops And Arrays 3. Strings and Functions 4. Classes and Objects Introduction to OOP and its basic features 5. Inheritance andTypes of Inheritance	
Duration:	**60hours**	
LearningObjectives	• Develop a C program • Control the sequence of the program and give logical outputs • Implement strings in your C program • To understand how C++ improves C with object-oriented features. • To learn how to write inline functions for efficiency and performance. • To learn the syntax and semantics of the C++ programming language.	

Units	U1	U2	U3	U4	U5
Hours Split:Total: 60	10	12	14	10	14
Internal valuation:40marks	8	8	8	8	8

Resource Material:	**StudyMaterial(Handouts):** https://www.unf.edu/~wkloster/2220/ppts/cprogramming_tutorial.pdf https://www.tutorialspoint.com/cplusplus/cpp_tutorial.pdf **Reference Books:** 1. Introduction to C programming by REEMA THAREJA from OXFORD UNIVERSITY PRESS 2. E Balagurusamy: ―COMPUTING FUNDAMENTALS & C PROGRAMMING – Tata McGraw-Hill, Second Reprint 2008, ISBN 978-0-07-066909-3. 3. Ashok N Kamthane: Programming with ANSI and Turbo C, Pearson Edition Publ, 2002. 4. Henry Mullish&HuubertL.Cooper: The Spirit of C An Introduction to modern Programming, Jaico Pub. House,1996. 5. The C++ Programming Language (4th Edition) By BjarneStroustrup 6. C++ Primer (5th Edition) By Stanley B. Lippman, JoseeLajoie, and Barbara E Moo **YouTube Links:** https://youtu.be/8PopR3x-VMY https://www.youtube.com/watch?v=vLnPwxZdW4Y **Power Point Presentations:** https://www.slideshare.net/gauravjuneja11/c-language-ppt https://www.slideshare.net/THOOYAVANV/c-overview-ppt-72294760 **QuestionBank:** https://www.acsce.edu.in/acsce/wp-content/uploads/2020/03/Module-wise-Question-Bank-CPS.pdf

UNIT	DESCRIPTION	PEDAGOGY	INTERNAL EVALUATION
I	Introduction and Control Structures: History of 'C' - Structure of C program – C character set, Tokens, Constants, Variables, Keywords, Identifiers – C data types - C operators - Standard I/O in C - Applying if and Switch Statements	P1,P2,P3	PQ,P6,PT
II	Loops And Arrays: Use of While, Do While and For Loops - Use of Break and Continue Statements - Array Notation and Representation - Manipulating Array Elements - Using Multi Dimensional Arrays	P1,P2,P3,P5	P6,PT
III	Strings and Functions: Declaration and Initialization of String Variables - String Handling Functions -Defining Functions - Function Call - Call By Value, Call By Reference – Recursion	P1,P2,P3,P5	PQ,PT
IV	Classes and Objects Introduction to OOP and its basic features - C++ program structure - Classes and objects - Friend Functions-Constructor – Types of constructors – Destructors.	P1,P2,P4	PQ,P6,PT
V	Inheritance: Inheritance - Types of Inheritance -Types of derivation- Public – Private - Protected Hierarchical Inheritance - Multilevel Inheritance – Multiple Inheritance - Hybrid Inheritance	PQ,P6,PT,**P8**	PQ,PT

Course: B.COM(VOC)	Year:II	Semester:III
Subject:	**Data Base Management System**	
Units:	1.Overview of Database Management System 2.Entity-Relationship Model 3.Relational Model 4.Structured Query Language 5.PL/SQL	
Duration:	**60hours**	
LearningObjectives	1.GainknowledgeofDatabaseandDBMS. 2.UnderstandthefundamentalconceptsofDBMSwithspecialemphasison relationaldatamodel. 3.Demonstrateanunderstandingofnormalizationtheoryandapplysuchknowledgetothenormalization ofadatabase 4.ModeldatabaseusingERDiagramsanddesigndatabaseschemasbasedonthemodel. 5.Createasmall databaseusingSQL. 6.Store,Retrievedataindatabase.	

Units	U1	U2	U3	U4	U5
Hours Split:Total: 60	10	12	14	10	14
Internal valuation:40marks	8	8	8	8	8

Resource Material:	**StudyMaterial(Handouts):** https://sircrrengg.ac.in/images/CSEMATERIALS/R19_DBMS_MATERIAL.pdf **Reference Books:** 1.DatabaseSystemConceptsbyAbrahamSilberschatz,HenryKorth,andS.Sudarshan,McGrawhill 2.DatabaseManagementSystemsbyRaghuRamakrishnan,McGrawhill 3.Principlesof DatabaseSystems byJ. D. Ullman 4.FundamentalsofDatabaseSystems byR.ElmasriandS.Navathe 5.SQL:TheUltimateBeginnersGuide bySteveTale. **YouTube Links:** https://www.youtube.com/watch?v=c5HAwKX-suM **Power Point Presentations:** https://www.slideshare.net/OECLIBOdishaElectron/database-management-system-ppt **QuestionBank:** https://blog.oureducation.in/sample-paper-for-dbmsdata-base-management-system/

UNIT	DESCRIPTION	PEDAGOGY	INTERNAL EVALUATION
I	**Overview of Database Management System:** Introduction, file-based system, Drawbacks of file-Based System ,Data and information, Database, Database management System, Objectives of DBMS, Evaluation of Database management System, Classification of Database Management System, DBMS Approach, advantages of DBMS, Anis/spark Data Model, data models, Components and Interfaces of Database Management System. Database Architecture, Situations where DBMS is not Necessary, DBMS Vendors and Their Products.	P1,P2,P3	PQ,P6,PT
II	**Entity-Relationship Model**: Introduction, the building blocks of an entity relationship diagram, classification of entity sets, attribute classification, relationship degree, relationship classification, reducing ER diagram to tables, enhanced entity-relationship model (EER model), generalization and specialization, **IS A** relationship and attribute inheritance, multiple inheritance, constraints on specialization and generalization, aggregation and composition, entity clusters, connection types, advantages of ER modeling.	P1,P2,P4,P5	P6,PT
III	**Relational Model:** Introduction, CODD Rules, relational data model, concept of key, relational integrity, relational algebra, relational algebra operations, advantages of relational algebra, limitations of relational algebra, relational calculus, tuple relational calculus,domain relational Calculus (DRC). QBE	P1,P2,P3	PQ,PT
IV	**Structured Query Language:** Introduction, History of SQL Standard, Commands in SQL, Data Types in SQL, Data Definition Language, Selection Operation, Projection Operation, Aggregate functions, Data Manipulation Language, Table Modification Commands, Table Truncation, Imposition of Constraints, Join Operation, Set Operation, View, Sub Query, Embedded SQL,	P1,P2,P4,P5	PQ,P6,PT
V	**PL/SQL:** Introduction, Shortcoming in SQL, Structure of PL/SQL, PL/SQL Language Elements, Data Types, Operators Precedence, Control Structure, Steps to Create a PL/SQL, Program, Iterative Control, Cursors, Steps to create a Cursors, Procedure, Function, Packages, Exceptions Handling, Database Triggers, Types of Triggers.	PQ,P6,PT	PQ,PT

Course: B.Com (voc)	Year: III	Semester: V
Subject:	**Ecommerce Application Development**	
Units:	6. **Introduction to e-commerce** 7. **Bussiness Models of e-commerce** 8. **Electronic data interchange** 9. **Html basics , java script basics , PHP basics** 10. **Logging on to our Word press Website**	
Duration:	**60hours**	
LearningObjectives	**1.To apply in an integrative and summative fashion the students' knowledge in allfieldsof business studies bydraftingawebsitepresenceplan.** **2.Tounderstandthefactorsneededin ordertobeasuccessfulin ecommerce** **3.To gain the skills to bring together knowledge gathered about the differentcomponentsof buildingaweb presence** **4.Tocriticallythinkaboutproblemsand issues thatmight popup duringtheestablishmentofthe webpresence** **5.To apply Word Press as a content management system (CMS), Plan theirwebsite bychoosingcolour schemes, fonts, layouts, and more**	

Units	U1	U2	U3	U4	U5
HoursSplit:Total: 60	10	12	14	10	14
Internal valuation:40marks	8	8	8	8	8

Resource Material:	**StudyMaterial(Handouts):** https://masomomsingi.com/cict-notes-web-design-and-e-commerce-notes-pdf/ http://www.kartrocket.com https://www.tutorialspoint.com/wordpress/ https://www.javascripttutorial.net/ **Reference Books:** 1. Elias.M.Awad,“ElectronicCommerce",Prentice-Hallof IndiaPvt Ltd. 2. RaviKalakota,AndrewB.Whinston,"ElectronicCommerce-AManager'sguide",Addison-Wesley 3. https://w3cschools.com 4. DavidWhiteley,E-Commerce:Strategy,TechnologiesandApplications,TataMcGrawHill. **YouTube Links:** **https://www.youtube.com/watch?v=ojgjlotElbw** **Power Point Presentations:** **https://www.slideshare.net/aminindicsoft/ecommerce-website-development-proposal** http://www.e-commerceceo.com http://www.fastspring.com https://teamtreehouse.com/tracks/web-design

UNIT	DESCRIPTION	PEDAGOGY	INTERNAL EVALUATION
I	IntroductiontoE–commerce: Meaningandconcept–E– commerce E–commercev/sTraditionalCommerce E–Business&E–Commerce– Historyof E–Commerce EDI–Importance, features&benefits ofE–Commerce Impacts,Challenges &LimitationsofE–Commerce	P1,P2,P3	PQ,P6,PT
II	BusinessmodelsofE–Commerce:BusinesstoBusiness BusinesstoGovernment BusinesstoEmployee Influencingfactorsof successfulE–Commerce ArchitecturalframeworkofElectronicCommerce WebbasedECommerceArchitecture. InternetCommerce.	P1,P2,P3	P6,PT
III	ElectronicdataInterchange EDITechnology EDl-Communications EDIAgreements E–Commercepaymentsystem. DigitalEconomy	P1,P2,P3,P5	PQ,PT
IV	APageonthe web- HTMLBasics ClientSidescripting-JAVASCRIPTbasics ServersideScripting-PHPbasics.	P1,P2,Px	PQ,P6,PT
V	LoggingintoYour Word pressSite wordpressdashboard creatingyourfirstpost addingphotos and images creatinghyperlink addingcategoriesand tags	P1,P2,Px	PQ,PT