

माखनलाल चतुर्वेदी राष्ट्रीय पत्रकारिता एवं संचार विश्वविद्यालय

(मध्य प्रदेश विधानसभा के अधिनियम क्रमांक 15, 1990 द्वारा स्थापित)

MAKHANLAL CHATURVEDI NATIONAL UNIVERSITY OF JOURNALISM AND COMMUNICATION (Setup by Act No.15, 1990 of M.P. Legislative Assembly)

क्रं./अका./2024/ २०४९

भोपाल, दिनांक 0 5/02/2024

विश्वविद्यालय द्वारा अकादमिक सत्र 2020-21 से संचालित CBCS आधारित पाठ्यक्रम बी.सी.ए. के पष्टम सेमेस्टर में निम्नानुसार संशोधन किया जाता है।

Subject Code	Subject Name
6BCA1	Standard Mathematics
6BCA2 (A)	Computerrized Accounting with Tally * OR
6BCA2 (B)	Cloud Computing *
6BCA3	Project Work
6BCA4	Social Media Marketing *
6BCA5	Open Elective – 6
6BCA6	Computer Lab-6 is Based on above *Subjects (+Self Study Lab)

उक्त बी.सी.ए. पाठ्यक्रम का शेष सिलेबस यथावत रहेगा।

(वरिष्ठ स्तर से अनुमोदित)

आदेशानुसार

(प्रो. (डॉ.) अविनाश वाजपेयी) प्रभारी कुलसचिव

प्./क्र./अका./2024/ २०89

भोपाल, दिनांक 05/02/2024

प्रतिनिपि -

- निज सचिव कुलपित, निज सहायक कुलाधिसचिव/कुलसचिव को सूचनार्थ।
- 2. समस्त विभागाध्यक्षगण/परिसर प्रभारी खंडवा/रीवा/दतिया को सूचनार्थ।
- 3. निदेशक, संबंद अध्ययन संस्थाओं को सुचनार्थ।
- 4. परीक्षा नियंत्रक को सूचनार्थ।
- 5. आदेश पस्तिका।

OLD Scheme for BCA(CBCS) VI SEM-2020

Semester -VI

Subject	Subject Name	L	T	P	Load	Theory	Internal	Practical	Total
Code		(Credits/Hours			Marks	Marks	Marks	Marks
6BCA1	Cloud Computing*	4/4	0	2/4	6/8	80	20	0	100
6BCA2	Computerized Accounting with Tally *	4/4	0	2/4	6/8	80	20	0	100
6BCA3	Project Work	0	2/2	4/8	6/10	0	20	80	100
6BCA4	Social Media Marketing*	2/2	0	1/2	3/4	40	10	0	50
6BCA5	Open Elective –6	2/2	1/1	0	3/3	40	10	0	50
6BCA6	Computer Lab-6 is based on above * subjects (+Self Study Lab)	-	-	+0/2	+0/2	0	20	80	100
	Semester Totals	12/12	3/3	9/20	24/35	240	100	160	500

NEW Scheme for BCA(CBCS) VI SEM -2020

SEMESTER-VI

Subject	Subject Name	L	T	P	Load	Theor	Interna	Practi	Total
Code		Cred	its/Hou	:S		y	1	cal	Marks
						Mark	Marks	Marks	
						S			
6BCA1	Standard Mathematics	4/4	1/1	0	5/5	80	20	0	100
6BCA2(Computerized	4/4	0	2/4	6/8	80	20	0	100
A)	Accounting with Tally *								
	OR	4/4	0	2/4	6/8	80	20	0	100
	Cloud Computing*								
6BCA2(
B)									
6BCA3	Project Work	0	2/2	4/8	6/10	0	20	80	100
6BCA4	Social Media	2/2	0	1/2	3/4	40	10	0	50
	Marketing*								
6BCA5	Open Elective –6	2/2	1/1	0	3/3	40	10	0	50
6BCA6	Computer Lab-6 is	-	-	+0/	+0/2	0	20	80	100
	based on above			2					
	* subjects (+Self Study								
	Lab)								
		12/12	4/4	8/1	24/35	320	100	80	500
				8					

SEMESTERVI 6BCA1 -Standard Mathematics

Subject Code	Subject Name	Cred	L T P Credits/Hours		Load	Theor y Mark	Interna l Marks	Practi cal Marks	Total Marks
6BCA1	Standard Mathematics	4/4	1/1	0	5/5	80	20	0	100

Objectives

- This course is aimed to cover a variety of different problems in Graph Theory.
- Solve basic trigonometric equations.
- Solve basic vector function
- Solve basic Coordinate Geometry functions

Course Outcomes:

- Understand the application of various type of graphs in real life problem.
- Understand the applications of vector algebra.
- Understand and solve trigonometric equations.
- Understand basic vector functions and applications
- Understand Coordinate Geometry and its applications

Unit I : Trigonometry : Heights and distances, Solution of triangles ,Simple identities , General solutions of trigonometric equations.

UNIT II: Basic definitions of graphs and multigraphs, Matrix representation of graphs, adjacency matrices, Paths, cycles, Vertex degrees, and counting, incidence and degree, walks, paths, circuits, Connectedness, Eulerian and Hamiltonian graphs, Trees, basic properties of trees, Binary trees, Spanning and Minimal spanning trees, Connectivity and Separability, fundamental circuits, and cut sets, Isomorphism of graphs: 1 and 2-isomorphism.

UNIT III: Vectors, Scalar and vector products and their applications to simple geometrical problems, Position Vector, Addition and subtraction of vectors, Algebra, Fundamental operations in algebra, Arithmetic and Geometric progressions, Simultaneous linear /quadratic equations, Determinants and matrices

UNIT IV: Coordinate Geometry, Equations of a circle, Equation of a line, Rectangular Cartesian coordinates, Distance formulae, Intersection of lines, Pair of straight lines, Set Theory, Concept of sets – Union, Intersection, Cardinality, Elementary counting, Permutations and combinations

UNIT V : Probability and Statistics, Basic concepts of probability theory, Averages, Frequency distributions, Dependent and independent events, Measures of central tendencies.

Books and Reference

- 1. Malik and M. K. Sen: Discrete Mathematics, Cengage Learning India Pvt. Ltd.
- 2. Rosen Kenneth: Discrete mathematics and its applications. McGraw hill- New Delhi.
- 3. Basics of Mathematic by Dr. R.D. Sharma
- 4. Remedial Mathematic by Dr. D.C. Agarwal
- 5. Mathematic By R. S. Agarwal

	ProgramOutcomes(POs)													
COs	1	2 3 4 5 6 7 8 9 10 11 12												
1	3	2	1	1			1			1		1		
2	3	2	2							1		1		
3	3	2	2				1			1		1		
4	3	2	2	2	2							1		

5	3	3	3	2	2	2		2	1
6	3	2	2	2				1	1

6BCA2(A)-COMPUTERIZED ACCOUNTING WITH TALLY

L	T	P	С	Theory	Internal	Practical	Total
	Credits	s/Hour	s				Marks
4/4	0	2/4	6/8	80	20	0	100

Course Objectives: Students will try to learn:

- Basics of Tally Accounting software.
- ° Learn to create company, enter accounting voucher entries and create various type of books for the accounting purpose.
- ^o Learn to do reconcile bank statement, do accrual adjustments,
- ° Learn to prepare and print financial statements, etc.in Tally Accounting software.

Course Outcomes: Students will able to:

- Explain basics of Tally Accounting processes.
- Define key terms related to Tally Accounting software.
- ° CreateCompanyandenteraccountingvoucherentriesandcreatevarioustypeof books in the software.
- ° Do the reconcile bank statement and perform other accrual adjustments
- ° Prepareandprintfinancialstatements, etc.inTallyAccountingsoftware

Unit-wiseSyllabus

UNIT - I

Tally configuration & INI setup, data directory & folders configuration, single & multiple user, Tally screen components, mouse / keyboard conventions & key, combinations, switching between screen areas, quitting Tally. Maintaining company data, basic company details, create/alter/select/load/close a company, chart of accounts, company features, configuration.

UNIT-II

Create, Alter & Display Groups and Ledgers, All accounting voucher types and transactions, Create and Alter new Voucher type, Item and Account Invoice transactions, Excise Invoice, Export Invoice, Transactions using Bill-wise details Create, Alter & Display Cost Centre and Cost Categories, Cost centre& Cost Category allocation in voucher entry, Creating Cost centre Class, Invoice entry in a Class situation, Create, Alter & Delete Foreign Currencies, Voucherentryusingforeigncurrency, BankReconciliation, Interest calculations using simple & advance parameters, Interest calculations on outstanding balances & invoices, Use of voucher class, adjustment of interest, Creation of voucher class, Invoice entry in a class situation.

UNIT-III

Create, Alter & Delete Budgets for groups, ledgers & cost centres, Defining credit limit & credit period, Display Budgets & variances, Create, Alter & Delete a scenario. Enabling Job Costing in Tally, Master creation & configuration for Job costing, Creation of Voucher type & Voucher class for Stock Transactions, Creation of Transfer journal for transfer of stock between godowns, Consumption journal Transactions, payment voucher, Godown summary

Report, Job Work Analysis, Material consumption summary. Reports like balance sheet, Profit & Loss account, Ratio analysis, Trial Balance. Accounts books like cash/bank book, All ledgers, Group summary &vouchers, Sales, purchase& journal registers, Cost centre& category summary, Cost centre breakup, ledger& group breakup, outstanding receivables &payables, interestreceivable&payable, Statistics, Cash&Fundflow, Daybook, List of Accounts, Reversing Journals, optional vouchers, post-dated vouchers.

UNIT-IV

Create, Alter & Display Stock Groups and Stock Items, Stock item behavior using costing and market valuation method, other behavior like treating all sales as new manufacture, treating all purchases as consumed, treating all rejections inward as scrap, ignoring negative balances, Treating difference due to physical counting, Create, Alter & Display Stock categories, Create, Alter, Display simple & compound units of measures, Stock items using alternate units, Defining standard cost & selling price, Defining Rate of duty, Defining MRP, Create, Alter & Display Godowns, Allocation of items to the Godowns, All inventory voucher types and transactions, Inventory details in accounting vouchers, Defining re-order level, Transactions using tracking numbers, Use of batch-wise details in voucher, Additional cost details in vouchers, Creating Bill of material, Cost estimation, Creating Price list &defining Price levels, invoice using Price list, Zero valued entries, Transactions in case of Different actual & billed quantities. Reports like Stock summary, Inventory books like Stock item, Group summary, Stock transfers, Physical stock register, Movement analysis, Stock group & item analysis, stock category analysis, Ageing analysis, Sales order& Purchase order book, Statement of inventory related to Godowns, categories, stock query, Reorder status, Purchase & Sales order summary, Purchase & Sales bill pending, Exception reports like negative stock & ledger, overdue receivables& payables, memorandum vouchers, optional vouchers, post-dated vouchers, reversing journals.

UNIT-V

Cheque Printing, Common printing options, Different printing formats, Multi-Account printing, Dynamic- Report specific options. Creating Group Company, Use of Tally vault, Using Security control & defining different security levels, use of Tally Audit. Back-up & Restore, Splitting company data, Export & Data, ODBC compliance, use of E-mail, Internet publishing, Upload, web browser & online help, Re-write data.

References:

- ° ImplementingTally6.3byNadhani;BPBPublications,ISBN:817656494X
- ° BPBTally6.3byBPBEditorialBoard(Hindi)BPBPublications,ISBN81-7656-594-6

		Program Outcomes(POs)													
COs	1	2 3 4 5 6 7 8 9 10 11 12													
1	3	3	3	3	1	3	3	1	2	2	2	2			
2	3	2	2	1	1	2	1	1	1	1	2	2			
3	2	1		1	1		1	1	3	2	1	2			

6BCA2(B)-CLOUDCOMPUTING

L	T	P	С	Theory	Internal	Practical	Total
	Credits/Hours						Marks
4/4	0	2/4	6/8	80	20	0	100

Course Objectives:

- Basics of cloud computing.
- Key concepts of virtualization.
- Different Cloud Computing services
- Cloud Implementation and its tools
- Key components of Amazon Web Services
- ° Cloud Back up and solutions

Course Outcomes:

- ° DefineCloudComputingandmemorizethedifferentCloudserviceanddeployment models
- ° Describe importance of virtualization along with their technologies.
- Use and Examine different cloud computing services
- Analyze the components of Google Cloud platform
- Describe the key components of Amazon web Service
- ° Design &develop back up strategies for cloud data based on features.

Unit-wise Syllabus

Unit - I

Introduction to Computing Paradigms: High-Performance Computing, Parallel Computing, Distributed Computing, Cluster Computing, Grid Computing, Cloud Computing, Biocomputing, Mobile Computing, Quantum Computing, Optical Computing, Nano-computing, Network Computing. Cloud Computing Fundamentals: Motivation, Need, Definition of Cloud Computing. Principles of Cloud computing: Five Essential Characteristics, Four Cloud Deployment Models, Three Service Offering Models, Cloud Ecosystem, Requirements for Cloud Services. Cloud Computing Architecture: cloud Architecture, User/Client Layer, Network Layer, Cloud Management Layer, Hardware Resource Layer,, Network Connectivity in Cloud Computing, Public Cloud Access Networking, Private Cloud Access Networking.

UNIT-II

Cloud Computing Management: Cloud Application, Benefits and Drawbacks Applications on the Cloud, Managing the Cloud, Managing the Cloud Infrastructure, Managing the Cloud Application, Migrating Application to Cloud, Cloud Deployment Models: Private Cloud, Outsourced Private Cloud, Community Cloud, On-Premise Community Cloud, Hybrid Cloud. Cloud Service Models: Infrastructure as a Service, :Platform as a Service, Software as a Service, Introduction to Open Source Tools for IaaS, Paas & SaaS : Apache.

UNIT-III

Technological Drivers for Cloud Computing: SOA and Cloud, SOA and SOC, Benefits of SOA, Multi-core Technology: Multi-core Processors and VM Scalability, Memory and Storage Technologies, Cloud Storage Requirements, Networking Technologies, Web 2.0: Characteristics, Difference from Web 1.0, Applications, Social Media, Marketing, Education. Web 3.0:Components ,Semantic Web, Web Services, Characteristics, ConvergenceofCloudandWeb4.0,ConnectingInformation:Facebook.AgileSoftware

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Models: Agile SDLC for Cloud Computing, Features of Cloud SDLC, Agile Software Development Process, Advantages of Agile. Cloud Application Development Platforms: Windows Azure, Google App Engine, Force.com. IBM Cloud Computing API

UNIT-IV

Virtualization: Full Virtualization, Para virtualization, Hardware-Assisted Virtualization, Hypervisor, OS Virtualization, Server Virtualization, Memory Virtualization, Storage Virtualization, Network Virtualization, Application Virtualization, Processor Virtualization, Memory Virtualization, Storage Virtualization, Network Virtualization, Data Virtualization, Application Virtualization, Hypervisors, Types of Hypervisors, Security Issues and Recommendations, From Virtualization to Cloud Computing VMware. Microsoft Hyper-V.

UNIT-V

Cloud Service Providers; EMC, EMC IT, Captiva Cloud Toolkit, Google, Cloud Platform, Cloud Storage, Google Cloud Connect, Google Cloud Print, Google App Engine, Amazon Web Services, Amazon Elastic Compute Cloud, Amazon Simple Storage Service, Amazon Simple Queue Service, Microsoft Azure, Microsoft Assessment and Planning Toolkit, SharePoint, IBM Smart Cloud. Security in Cloud Computing, Cloud General Challenges,

Text Books:

- Essentials of Cloud Computing, K Chandrasekaran, CRCPress
 [ISBN:3:978--4822-0544-2]
- ° Raj Kumar Buyya, James Broberg and rezeiM. Goscinski, -Cloud Computing: Principles and Paradigms,-Wiley 2011.
- ° Srinivasan, J. Suresh, -Cloud Computing—a Practical Approach for Learning and Implementation, Pearson India, [ISBN 978131776513]
- TobyVelte, Anthony Velte, Robert Elsenpeter,-Cloud Computing, a Practical Approach -McGraw Hill, 2010 [ISBN: 0071626948]

References:

- OregSchulz-Cloud and Virtual Data StorageNetworking, Auerbach Publications [ISBN: 978-1439851739].
- ° Marty Poniatowski-Foundations of Green It-[ISBN:978-0137043750].
- ° Learning Spring Application Development, RaviKantSoni, PacktPublishing.
- MichaelMiller,Cloud Computing,2008.
- ° JudithHurwitz,RobinBllor,MarciaKaufman,FernHalper,CloudComputingfor Dummies, 2009.
- BorkoFurht, Armando Escalante (Editors), Handbook of Cloud Computing, Springer, 2010.

	ProgramOutcomes(POs)														
COs	1	2	3	4	5	6	7	8	9	10	11	12			
1	3	2	1	1			1			1		1			
2	3	2	2							1		1			
3	3	2	2				1			1		1			
4	3	2	2	2	2							1			
5	3	3	3	2	2		2				2	1			
6	3	2	2	2							1	1			

6BCA3-PROJECTWORK

L	T	P	C	Theory	Internal	Practical	Total
	Credits/Hours						Marks
0	0 2/2 4/8 6/10		80	20	0	100	

All the candidates of BCA are required to execute a Project and submit itsProject-Report. These projects are to be carried out on real life problems. The detailed guidelines related to project work is given in the last section in the curricula. Please read carefully and make your project accordingly.

6BCA4SOCIALMEDIAMARKETING

L	T	P	C	Theory	Internal	Practical	Total
Credits/Hours							Marks
2/2	0	1/2	3/4	40	10	0	50

Course Objectives:

- ° To understand about the Social Media and its importance for marketing success.
- ° To understand the process of integration of different digital media and create marketing content.
- ° To understand planning &control activities to effectively deliver goods and services.
- ° To learn principles of marketing, economics, accounting, operations management, and finance.
- ° TodevelopandimplementsocialmediastrategiesforB2BandB2Cmarketingfor penetration, growth, and development.

Course Outcomes:

- Identify importance of the social media marketing for marketing success
- Demonstrate to create a blog and a social media marketing plan for a new product or service.
- Explain about Social Media, its various channels of operations, and its role in marketing strategy
- Useprinciplesofconsumerandsocialpsychologytodevelopsocialmediacontent and campaigns that engage consumers
- Draw on knowledge about word-of-mouth marketing to develop effective approaches for propagating ideas, messages, products, and behaviors across social networks
- Measure the impact of a social media campaign in terms of a specific marketing objective.

Unit-Wise Syllabus

UNIT-I

Digital marketing overview-what is Digital Marketing, traditional marketing vs. Digital Marketing, understanding traffic, categorization of digital marketing for the business, Legal and Ethical issues, search engine optimization (SEO)- on page optimization, off page optimization. Goals: learn how to use dozens of proven digital marketing strategies.

UNIT-II

Social Media overview-Social Media features, social media tools and platforms, Social Media monitoring, <u>Hash tag</u>, viral content. **Social media marketing** –SMM vs. SMO benefits of using SMM social media strategy, Email marketing,

UNIT-III

Social media marketing - Facebook marketing-profiles and pages, business categories, Facebook page custom URL, invite page likes, scheduling posts, Facebook events, Facebook insights reports, competitor's Facebook page, connect with twitter. Facebook ad campaigns-ad objective, performance matrix, ad components, Facebook ad structure, Facebook insights, Facebook page promotion, video promotion. Goals: develop a Facebook campaign for the product concept.

UNIT-IV

Google Ads-Introduction to Ad words, keyword planner, Pay-Per-Click (PPC), PPC terminology, PPC AD on Google Facebook. Goals: Use social media to keep abreast of the latest trends in your industry.

UNIT-V

Content Marketing and security, Security for SMM, Social Media Privacy, Secure Payments and Website Encryption, Cookies, VPN, Digital Certificate, E-Governance, E-wallet, Goals: Understand security issues related to social media and digital marketing

Reference Books

- Ryan Deiss, Russ Henneberry(2017)Digital Marketing for Dummies, JohnWiley & Sons.
- ° AhujaVandana (2015)DigitalMarketing, Oxford University Press.
- ° IraKaufman, ChrisHorton (2014) Digital Marketing: Integrating Strategy and Tactics with Values, A Guidebook for Executives, Managers, and Students, Routledge,
- Matt Chiera(2018)Digital Marketers Sound Off: Tips, Tactics, Tools, and Predictions from 101 Digital Marketing Specialists, Matt Chiera,
- ° PuneetBhatia(2017)FundamentalsofDigitalMarketing,PearsonIndia,ISBN 9352861418, 9789352861415
- ° Dan Zarrella(2011)The Social Media Marketing Book,O'ReillyMedia.
- ° Krista Neher (2013) Visual Social Media Marketing: Harnessing Images, Instagram,I nfographics and Pinterest to Grow Your Business Online, Boot Camp Digital.

					Prog	ramOu	tcomes	(POs)				
COs	1	2	3	4	5	6	7	8	9	10	11	12
1	3	2	2	3	3	2	2	1	1	1	2	2
2	2	3	1	3	3	2	1	1	2	2	1	2
3	1	2	2	3	1	2	2	1	1	1	2	2
4	2	1	3	1	3	2	2	1	2	1	1	2
5	1	2	2	3	3	1	2	1	1	1	2	2
6	2	3	1	1	3	2	2	1	2	2	1	2

6BCA5 OPENELECTIVE -6

6BCA5(A)-VBA PROGRAMMING

L	T	P	C	Theory	Internal	Practical	Total	
	Credits/Hours					Marks		
2/2	1/1	0	3/3	40	10	0	50	

CourseObjectives:

- ° To Know the powers of Visual Basic for Applications (VBA, Macros)
- Understand the use of automate common and repetitive key strokes
- Build powerful automated business tools quickly using VBA
- ° Speedupyourproductionandreducethetimeyouhavetospendstaringatanelectronic spreadsheet each day.

Course Outcomes:

- ° Createsimplemacrosusingthemacrorecorderandrunthemfromshortcutsorbuttons on the ribbon
- Ouse the VBA Editor to navigate projects and explore object properties. Create, copy and import/export modules
- Ouse the VBA Editor to navigate projects and explore object properties. Create, copy and import/export modules
- ° Exploreavarietyofwaysourcodecanmanipulatedatawithincells,createand navigate around worksheets and workbooks
- Our Using decision making and looping structures to control the way your program works

Unit-Wise syllabus

UNIT - I

IntroductiontoVBA-introductiontoexcel,introductiontoprogramming,VBAoverview and the IDE, quick review of macros, working with macros, how to use visual basic editor (programming environment), advantages of VBA. Understanding the VBA editor, module & procedures - the visual basic editor, parts of the VBA editor, modules and macros, about VBA forms, sub procedures & modules, creating forms, using controls and their properties, running VBA forms in excel.VBA syntax & grammar - objects - the grammar, using properties and methods, understanding parameters, the object browser, understanding object hierarchy, tools for better coding, moving to other cells, editing specific cells.

UNIT-II

Variables, arrays & constant - using the immediate window, gaining greater control through the immediate window, formatting cells, using variables, constants, object variables, dimensioning and usage of variables, displaying data and obtaining data from the user. Storing data in variables - how and when to declare variables, selecting data types, fixed and dynamicarrays,constants.ControlStructure&programFlow-IF(ElseIf,Else),SelectCase(), For Next Loop, For Each Loop(), Do Until Loop and Do While Loop, With, End With, Nesting Code.

UNIT-III

Building Procedures - Creating Sub and Function procedures, Calling procedures, Passing arguments to procedures, Building intuitive user interface - Communicating with the user through the message box, Gathering user information with the input box, Utilizing the File Dialog object and Dialogs collections, Creating Customized Dialog Boxes with User Form Objects - Command buttons, List and Combo boxes, Labels, Option buttons, Check boxes, Text boxes, Frames, Adding more functionality with advanced ActiveX control. Fonts & Backgrounds - Using Font Property in cells, Using Various Background Properties in Excel VBA, Creating a Counter, String Handling, Using Left, Right,Mid and Len Functions in VBA, Range Selection and Manipulation.

UNIT-IV

Objects& Collections –Workbook and Worksheet Object, Range Object and Cell Properties, Methods and Properties, Assigning Objects, Using Name Arguments. **Array** -What is Array& why use array, Declaring an Array, Sorting Data in Array, 2-Dimention Array, Dynamic Array, UBourd, Storing Data in a range of an Array Elements, Using various array functions.

UNIT-V

Functions -using excel worksheet functions in VBA, VBA functions, user-defined functions, adding help to user defined functions, declaring variables in user defined functions, using ranges in user defined functions, creating and managing an add-in for user defined functions, **internet& excel** – copy hyperlinks and text from a web page to spreadsheet, **interaction with other office packages** -communicating with word and powerpoint using excel VBA. **Modifying menus & toolbars** -simplifying user interaction with the command bar object, adding and removing command bar control objects.

References:

- OuaneBirnbaum, Microsoft Excel VBA Programming for the Absolute Beginner Second Edition, Thomson, Course Technology
- OhnGreen, StephenBullen, RobBovey, Michael Alexander, Excel 2007 VBA Programmer's Reference, Wrox Publishers
- Dr.LiewVoonKiong, ExcelVBA MadeEasye book

					Prog	ramOu	tcomes	(POs)				
COs	1	2	3	4	5	6	7	8	9	10	11	12
1	3	2	1	2	1	2	2	1	2	1	1	1
2	3	3	2	1	1	1	2	2	2	2	2	1
3	3	3	3	3	2	1	1	2	2	1	1	1
4	3	3	3	2	2	2	1	1	2	2	2	1

6BCA5(B)-VIDEOEDITINGWITHOPENSHOT

L	T	P	С	Theory	Internal	Practical	Total	
	Credits	s/Hour	S				Marks	
2/2	1/1	0	3/3	40	10	0	50	

CourseObjectives:

- To learn principles of editing
- ° To acquire skill of video editing techniques using Openshot
- ° To gain theoretical knowledge of video editing
- ° To produce good quality edited video content for the Web.

CourseOutcomes:

- ° Understand techniques of editing.
- ° Use Openshot video editing's of the ware applications.
- Obemonstrate the theoretical and practical knowledge of video editing.
- Edit videos of different genres.
- ° Preparea movie, collect digital video, and upload digital video on web.

Unit-Wise syllabus

UNIT-I

Introduction-OpenShot Video Editor, Features, System Requirements, License, Download and install openshort, Keyboard Shortcuts.

UNIT-II

Workspaceandprofiles-MainToolbar-buttonstoopen, save, and export your video project.

Timeline, Tracks & Layers, Profiles- Project Profile, Export Profile, Custom Profile.

UNIT-III

Working with Files- Files- Import Files, File Menu, Add File to Timeline, File Properties, Split Clip.

UNIT-IV

Clips-Cutting&Slicing,PresetMenu,Transform,Digitalvideoeffects,Addingtextand titles Effects

UNIT- V

TransitionsandAnimation-Audioeffects,audiomixingandediting,Animation,Key Frames, Bézier Presets for Animation, Import & Export.

References:

Jesse Russell, Ronald Cohn "Openshot Video Editor" Publisher- "Book on Demand",
 2012 ISBN 5512282816, 9785512282816

E-Resource

• http://www.openshot.org/static/files/user-guide/introduction.html

					Prog	ramOu	tcomes	(POs)				
Cos	1	2	3	4	5	6	7	8	9	10	11	12
1	3	1	2	3			2		1	3	2	1
2	2	2	1	2			1		1	2	3	2
3	2	1	1	2			2		2	2	2	1
4	3	1	1	1		1	3	1	1	3	1	1
5	3	2	3	1	1	1	2		1	3	2	1

6BCA6COMPUTERLAB-6

L	T	P	C	Theory	Internal	Practical	Total
	Credits/Hours					Marks	
-	_	+0/2	+0/2	0	20	80	100

PRACTICALLISTONTALLY

Practical Assignment-1

- 1. Create a Company as "Sagar Industries Ltd." in Tally with inventory management.
- 2. Pass the following Entries:-
- (i) Sagarstarted "SagarIndustriesLtd." by bringing Capital Rs. 3,00,000/-Cash.
- (ii) HedepositedRs.1,00,000/-cash at ICICIbank.
- (iii) Hepaid electricity bill for Rs.1, 200/- by cash.
- (iv) HewithdrawnRs.10,000/-cash for his personal use.
- (v) HepurchasedthefollowingitemfromComputerLab.Ltd.oncreditwith4%Vat rate.
- (a) Computer-10 Nos.- @20000/-each
- (vi) He sold the following item to somnath Tradersincashwith 4% Vatrate.
- (a) Computer-5 Nos.- @27500/-each
- (vii) HereceivedRs.6,000/-as commission from Rohit by cash.
- (viii) Hepaid House Rent forRs.5, 000/-by cash.
- (ix) HewithdrawnRs.25,000/-cash from ICICI Bank.
- (x) HepurchasedfurnitureforRs.25, 000/-by cash for office use.
- 3. Show the Trial Balance and Balance Sheet of "Sagar Industries Ltd."
- 4. Show the Vat Computationre port of the above company.
- 5. Show the Cash Book &Bank Book of the company.
- 6. Show the DayBook.

Practical Assignment-2

- 1. Jyoti Printers over took all the printing Expenses of Rs. 1500/-
- 2. Underpacking Expense& from Hariom packinglmt.Rs.5000/-
- 3. Kashav&brother'shelpinfuelingofRs.300/-
- 4. Com. Openin Bankof India, anaccountwithRs.100,000./-
- 5. From Ramlal & son's 4000/-is to betaken of previous year.
- 6. UnderMedicalexpenseswepurchaseRs.750/-Medical from Mahima Medical.
- 7. OneNANOcarofRS.1,25,000/-fromTATA Moter's.
- 8. From M/sR.K.Investment'swepurchaseshare'sofSAMSUNG.ofRs.7500.
- 9. From Soni Brother's Gold@35,000/-is purchased.
- 10. FromXYZ&son'sRs.5000/-is due of previous year.
- 11. PaymentisdonetoHariompackinglmt.ofRs.3500/-.
- 12. PaymenttoKulvinder&Son'sisdoneofRs.2700/-
- 13. Payment to TATA Moter's is done by D.D.Rs 1,25,000/-which is 1500/-bank commission paid by us. 14. From Arjun Ltd. 7000/- is to be taken of previous year.
- 15. Payment to Soni Brother's has done by cheque of Rs. 35,000/-
- 16. From XYZ &son's were received Rs. 5000/-
- 17. Payment to Jyoti Printer's has been done by cheque.
- 18. Payment to Hariom packing lmt. we paid his whole amount by cheque

Practical Assignment-3 Payment & Receipts Voucher

- 1. Com.hasopeningcashRs.100000/-
- 2. Mr.Rajendra is the owner of the company his opening capital Rs.2,00,000/-
- 3. Com. Has to received from previous year.{1}VIKASNAGAR-75,000/-{2} HARISH KUMAR 75,000/-
- 4. Com.paidforfullchargesRs.500/-incash.5.Com.purchasechairsincashRs. 2,000/.
- 5. Com.ReceivedfromHarishKumarRs.25,000/-incash.

- 6. Com. Purchase packing material of Rs.5000/-
- 7. PaidtoVivekworker25,000/-as a loan.
- 8. CompaidtoVivekworkerRs.2,000/-in cash salary.
- 9. Com.ReceivedfromVikasNagar35,000/-incash.
- 10. Com.PurchasesharesofTataofRs.16,000/-in cash.
- 11. Com. paid Building RentRs. 35,000/-in cash.
- 12. Com. Sales in cash Shares of TataRs.26,000/-inc ash.
- 13. Paid Mobile billofRs.1250/-in cash.
- 14. Com. paid water bill Rs. 750/-&Electricity bill Rs. 4500/-in cash.
- 15. Com.ReceivedfromVivekWorkerRs.25,000/-in cash

Practical Assignment-4

- (1) Mr. RAJENDRAKUMAR is owner of the company his Capital opening balance is Rs. -25, 24, 125/-
- (2). Company has taken Loan previous year, the reopening Balance is(a). ICICI Bank-5,67,124/- (b). HDFC Bank 2,15,724/-
- (3). Com. Has toPay of previous year-(a). Kelash Chand&Com. -5,00,000/-(b).

Sunjay Singh & Com. - 2,25,000/- (c). Singh & Com. - 2,25,000/-

- (4). Company has OpeningStock:- ITEM NAME Qun. Rate Unit 1. Ashirwad Aata(5kg) 49050/-Pkt.2.AshirwadAata(10kg)51395/-Pkt.3.SwastikAata(5kg)12351/-Pkt.4. Swastik Aata (10kg) 50 95/- Pkt.
- 1. MadhushreeTea(50gm)5007/-Pkt.
- 2. MadhushreeTea(100gm) 1000 13.50/-Pkt.
- 3. MadhushreeTea(250gm)70031/-Pkt.8.MadhushreeTea(500gm)425 60/-Pkt.
- 9.MadhushreeTea(1Kg) 20095/-Pkt.10.TataTea(100gm.)100013/-Pkt
- 11. TataTea(500gm.)100075/-Pkt.
- 12. Zotex(100ml.)2000110/-Nos.
- 13. SpicyCool(100ml)30085/-Nos.
- 14. Zotex(200ml.)500195/-Nos.
- 15. Java(50ml.)20045/-Nos.16.Java(100ml.)30060/-Nos.
- 17.Axe(100ml.)500125/-Nos.18.Axe(200ml.)200210/-Nos.
- 19. Rexsona(100ml.)1000135/- Nos.
- 20. Rexsona(200ml.)500225/-Nos.
- 21. LuxSoap(75gm.)25009.75/-Nos.
- 22. LuxSoap(100gm.)150014.13/-Nos.
- 23. LuxSoap(125gm.)100015.50/-Nos.
- 24. Breez(100gm.)50006.00/-Nos.
- 25. DoveSoap(100gm.)50021/- Nos.
- 26. DoveSoap(200gm.)50040/- Nos.
- 27. PearsSoap(100gm.)22525/- Nos.
- 28. Ni,aSoap(100gm.)2006.50/- Nos.
- 29. DabaurAwala(100ml.)25017/- Nos.
- 30. DabaurAwala(200ml.)25031/- Nos.
- 31. ParacuteOil(100ml.)50015/-Nos.
- 32. ParacuteOil(200ml.)60025/-Nos.
- 33. ShantiAwala(100ml.)50015/-Nos.
- 34. VatikaHair Oil(100ml.)25061/-Nos.
- 35. SunsilkShempoo(100ml.)5020/- Nos.
- 36. SunsilkShempoo(200ml.)5051/- Nos.
- 37. ClinicPlus(100ml.)10030/-Nos.Cont15
- 38. ClinicAllClear(100ml.)10035/- Nos.
- 39. ClinicAllClear(200ml.)10060/- Nos.
- 40. ChikShempoo(100ml.)2525/- Nos.
- 41. ChikShempoo(50ml.)50013/-Nos.
- 42. AyurShempoo(50ml.)50015/-Nos.

- 43. AyurShempoo(100ml.)50028/-Nos.
- 44. VatikaShempoo(100ml.)20040/- Nos.
- 45. VatikaShempoo(200ml.)10070/- Nos.
- 46. Parle-G(100gm.)50003.88/- Pkt.
- 47. Parle-G(250gm.)200012/-Pkt.
- 48. KrackJack(100gm.)10005.00/-Pkt.
- 49. KrackJack(250gm.)50012/-Pkt.
- 50. Fair&Lovely(50gm.)25022/- Pkt.
- 51. AyurColdCreem(50gm.)20030/-Pkt.(5).Com.hassomefixedAssets,thereOpening balance:-
 - (i) MarutiSwift-2,13,232/-
 - (ii) Lang& Building-13, 52,232/-
 - (iii) Furniture-5,00,000/-

PRACTICAL LIST ON CLOUD COMPUTING

SuggestedPracticalfordevelopmentofapplicationsforfollowingtasks/tools:

- 1. Any one Tool for IaaS
- 2. Any one Tool for PaaS
- 3. Any one Tool for SaaS
- 4. Any one Tool for Virtualization(VMware or Microsoft Hyper-V.)
- 5. Any one Tool forCloudService(Amazon WebServicesor Microsoft Azure)

PRACTICALLISTONSOCIALMEDIAMARKETING

- 1. Create and Promote Your Page on Facebook also add a Facebook Page Link to Your Important Contact Areas.
- 2. Create a Facebook Fan Pageora Group on Facebook for a hypothetical company.
- 3. Create a marketing plan driven by social media tools for a company of their choice. Within the plan, the student should decide what social media platform should be used, what content will be shared, and how much time should be allocated to each activity. Have students present their marketing plans to the class, including specific metricsthey hope to achieve.
- 4. Each student should create a hypothetical business and design a landing page for the business's website. The landing page should have forms, graphics, and content that target a specific business objective. In a presentation, students should discuss how an individual would find this landing page, and why his or her landing page is optimized for conversion.
- 5. Email Marketing- Student Activity- Design Email Campaigns That Target Different Stages of the Sales Cycle.
- 6. Group Discussion-Website Ranking by Keyword in Google.

PROJECTWORKGUIDELINES

L	T	P	C	Theory	Internal	Practical	Total
	Credits	s/Hour	S				Marks
0	2/2	4/8	6/10	0	20	80	100

Guide lines forBCA Project

The Bachelor of Computer Applications (BCA) programme is designed with the objective to prepare the students to take up positions in it industries as programmer, systems designers, software engineers, etc. The curricula are designed to provide students comprehensive knowledge covering the skills and core areas of computer science in theory and practical's. With the same objective six months major project is part of curricula in last semester of BCA. In the major project students are supposed to develop quality software solutions by applying theoretical and practical knowledge of various courses learnt.

Objectives

The objective of the project is to help the student develop the ability to apply theoretical and practical tools / techniques to solve real life problems related to industry, academic institutions and research laboratories. After completion of this project work, the student should be able to describe the Systems Development Life Cycle (SDLC) related to their project:

- Evaluate systems requirements.
- Evaluate a problem definition.
- Collect in formation to determine requirements.
- Perform and evaluate feasibility studies like cost-benefit analysis, technical feasibility, time feasibility and operational feasibility for the project.
 Work on data collection methods for fact finding.
- Construct and evaluate data flow diagrams.
- Constructandevaluatedatadictionaries/decisiontrees/decisiontable.
- Createandevaluategraphicaltoolsassystemsflowcharts, entity-relationship(er) diagrams state transition diagrams. and
- Software Preparation of Requirement **Specifications** (SRS)and hardware specifications.
- Plan the systems design phase of the SDLC.
- Identification of Functional & Non-functional design requirements.
- Design and evaluate system outputs.
- Design and evaluate systems inputs.
- Design and evaluate validity checks for input data.
- Design and evaluate user interfaces.
- Perform coding for the project.
- Prepare documentation of project
- Perform various testing techniques/strategies.
- Be able to generate various reports in project.
- Able to deploy the project on machine/lab/real time environment
- Identification of the maintenance procedures.
- To decide the future scope and further enhancement of the system.
- Plan for appendices(ifany)tobeplacedinsupportwiththeprojectreportdocumentation.

Types of Project

The majority of the students are expected to work on real-life project preferably in some industry/ research and development laboratories / educational institution / software company. However, it is not mandatory for a student to work on a real-life project. The student can formulate a project problem with the help of her/his supervisor and if approved, the student commences working on it.

Project Synopsis Format

The project proposal should be prepared in consultation with supervisor. Approval of the project proposal is mandatory to continue and submit the project work. The project proposal should clearly state the project objectives and the environment of the proposed project to be undertaken.

The project proposal should contain complete details in the following form:

- Title of the project
- Name of the supervisor(external supervisor(company) from /internal supervisor (teacher of the BCA))
- Introduction and objectives of the project
- Analysis(DFDs,ERdiagrams,classdiagrams,timelineetc.Aspertheprojectrequirements).
- A complete structure which includes:
- Name of modules and their description
- Database/data structures description
- Process logic of each module(flow chart)
- Reports generation.(repot format)
- Tools/platform, hardware and soft ware requirement specifications
- Organization/companydetailswithprofileofsupervisor(ifprojectiscarriedout outside the department)

Project Work Guidelines

The project work should normally include software development.

Not more than two students are permitted to work on a project.

The project maybe done in the university campus/concern study instituteorin an approved sponsoring organization in view of the proposed topic.

Acandidateisrequiredtopresenttheprogressoftheprojectworkduringthesemesteras per the schedule.

Project Report Preparation

GoodqualitywhiteA4sizepapershouldbeusedforprintingandduplication.Careshould be taken to avoid smudging pages while duplicating the copies.

PageSize-A4(21 cmx29.7cm)-Orientation-Portrait

PageMargins-LeftMargin-3.0cm,Right Margin-2.0cm,TopMargin2.54cm,Bottom Margin 2.54 cm, Line Spacing—single, Font Name-Times New Roman/ Bookman Old Style

FontSize–12 for normal text, 14forheadings, 16forchapterheading,

PageNumbers-alltextpagesaswellasprogramsourcecodelistingshouldbenumberedat the bottom of the pages.

Software Used-MS-WordorOpen Office or any other OpenSource software.

The project report should contain the following:

- 1. Frontpage–Blackcolor with golden or white text.
- 2. Certificate from the super visor with her/his signature and date.
- 3. Certificate from company/industry in their letter head (if project is carried out outside the department)

- 4. Certificate of originality/ self-certificate
- 5. The project report documentation should include the following topics (as perthe project requirements).
- 6. Acknowledgements
- 7. Table of contents /index with page numbering
- 8. Introduction/objectives of the project
- 9. System analysis
- 10. Feasibility study
- 11. Software and hard ware requirement specifications
- 12. System design
- 13. Coding
- 14. Validation checks
- 15. Testing (testing techniques and testing strategies used along with the test data and the errors listed for each test case).
- 16. Reports, tables figures should be properly numbered/labeled
- 17. Screen shots of projects
- 18. Implementation and maintenance
- 19. Conclusion
- 20. Futures and further enhancement of the project
- 21. Bibliography/references
- 22. Appendices(if required)

A properly labeled and signed CD which contains the soft-copy of all the program's source code and executables, databases, reports, screenshots and documentation in MS Word / Libre & PDF format should be in a kept in a thick envelope and must be pasted inside of the back cover of the project report.

Two copies of the original project report in bound form are to be submitted. Each group is required to prepare individual copy of project report in CD and submit along with his/her project report in MS Word / Libre as well as PDF. The same must contain thereport, results, screenshots, errors, databases, source codes (wherever it is not feasible explicit approval from the supervisor must be obtained).

Project Evaluation

Internal evaluation is done on the basis of flowing

- Project analysis &planning
- Project design &development
- Project testing &validation
- Project documentation
- Project presentation &viva

To fulfill the above three presentation must be carried out phase wise in the whole semester for internal assessment of the project.

The standard formats of the title cover of the project reports and other standard certificates are given ahead. All students are advised to use these formats to present their reports.

PROJECTREPORTON

.....TITLEOFTHEPROJECT

${\bf Submitted in partial fulfill ment of the requirement for th}$ eawardofthedegree **BachelorofComputerApplications(BCA)**

SESSION:20XX-20YY

ProjectGuidedBy:	SubmittedBy:
ExternalGuide(ifany):	NameofStudentEnroll
	mentNo.RollNo.
InternalGuide:	StudyInstitutecodeNo.
(BCAFaculty)	
	NameofStudentsEnrol
	lmentNo.
	RollNo.
	StudyInstitutecodeNo.

Submittedto



Makhanlal Chaturve di National University of Journalism and Communication, Bhopal <NameofStudyInstitute>



PROJECTCERTIFICATE

Inisistocertifythattneprojectrepoi	tentitiea	
	submitted to MakhanlalC	Chaturvedi Nationa
Universityof Journalism & Communica	ation, in partial fulfillment of the	requirement for the
award of the degree of Bachelor of Con	nputer Applications(BCA), is orig	ginal work carried ou
bymyselfMr/ Ms	with enrolment no.	under
theSupervisionofProf./Dr./Mr./Ms		The matter
embodied in this project is genuine work	done by myself and has not been	submitted whether to
this University or to any other Universit course of study.	y / Institute for the fulfillment of tl	ne requirement of any
Date:		
	Name&Signatureofthe Student	
	ContactDetails(Email,Phone&	Address) Verified
	by the Supervisor	
	Name&SignatureoftheSupervis	sor/s
	Date:	

 $Bachelor of Computer Applications (BCA) \hbox{-} 2020$

ACKNOWLEDGEMENT

This Major Project is the result of contribution of	many min	d. I would l	ike to acknowledge and
thank my project guide	(Faculty	Name)for	his/hervaluablesupport
andguidance. He/she guided me through the proce	ess from co	onception an	d till the completion of
thisproject.I wouldalsoliketothanksmyclassteacher	/institutedia	rector	and
myallmyfacultiesIthanktolabstaffmemb	pers		. andothernon-teaching
members.			
I am very thankful for the open-handed support ex	tended by	many people	e. While no list wouldbe

I am very thankful for the open-handed support extended by many people. While no list wouldbe complete, it is my pleasure to acknowledge the assistance of my friends who provided encouragement, knowledge and constructive suggestions.

SignatureofStudent
(Name of student)
(Roll No-----)
(EnrollmentNo-----)

SELF-CERTIFICATE

ThisistocertifythattheMajor Projectreport entitled"	·,"
is done by me, and it is authentic work carried out for the partial fulfillment of the	
for the award of the degree of Bachelor of Computer Application(BCA)unde	r the guidance
of(Faculty name). The matter and software embodies in this project	et has not been
submitted earlier for award of any degree or diploma to the best of my knowledge	and believes.
Signa	ntureofStudent
(Name	eof student)
(Roll 1	No)
(Enrollm	nentNo)

 $Bachelor of Computer Applications (BCA) \hbox{-} 2020$

CERTIFICATEFROMPROJECTGUIDE

This is certify that this Major Project entitled ""submitted
in partial fulfillment of the requirements for the award of the degree of Bachelor of Computer
Application (BCA) in session (years 20to 20) to the Makhanlal Chaturvedi National
UniversityofJournalism&Communication,Bhopal,doneby
(student name) is an authentic work carried out by his/ them at
" "(study centre name /department name) (Place) under
my guidance. The matter and software embodied in this project work has not been submitted
earlier for the award of any degree or diploma to the best of my knowledge and belief.
SignatureofBCATeacher
(Project Guide)

 $Bachelor of Computer Applications (BCA) \hbox{-} 2020$