DEPARTMENT OF COMMERCE WITH COMPUTER APPLICATIONS

ABOUT THE DEPARTMENT

The Department of Commerce with Computer Applications had its inception in the academic year 2001-2002. The Department prepares students, with sound commerce background knowledge along with the skills in the operation of computers, to carry out all the computerized work in different areas of trading and manufacturing organizations, to make their career choices and to make them responsible citizens. The Department of Commerce with Computer Applications Additional Section was established in the Academic Year 2006-2007, 2007-2008 and now two batches (2020-2021). This Department was exclusively established for maintaining the effective quality of education in this currently viable course of B.Com with Computer Applications. Since the present scenario is concerned with imbibing the advanced Computer Applications in the field of Commerce, the Department shows keen interest by inculcating the commerce based computer knowledge and thereby taking its students to achieve the vision.

PRINCIPAL

Dr. P. Balagurusamy, M.A., M.Phil., M.Ed., P.G.D.C.A., Ph.D.,

STAFF MEMBERS

1	Dr.J.Murugapandi, M.Com., M.B.A., M.Phil., PGDCA., Ph.D.,	Assistant Professor& Head
2	Dr.V.Mani Maheswaran , M.Com., M.Phil., PGDCA., MBA., ICWA (Inter)., Ph.E	.,Assistant Professor
3	Dr.B.Rekha, M.Com., M.Phil., PGDCA., Ph.D.,	Assistant Professor
4	Mrs.D.Pradeepa, M.Com., M.Phil., SET.,	Assistant Professor
5	Miss.P.Arulmoli, M.Com. M.Phil. SET.,	Assistant Professor
6	Dr.A.Babitha Basheer, M.A., B.Ed., M.B.A., M.Phil., M.A., Ph.D.,	Assistant Professor
7	Mrs.V.Gayathri, M.C.A., M.Phil., B.Ed., (Ph.D)	Assistant Professor
8	Mrs.G.Balasaranya, M.Sc., M.Phil ., M.C.A.,	Assistant Professor
9	Mr.L.Soosai Suresh, M.C.A., M.Phil.,	Assistant Professor
10	Mrs.T.Priyadharshini, M.Sc (IT)., M.Phil., B.Ed., (Ph.D)	Assistant Professor
11	Mr.S.Sacrates., B.A.B.L.,	Part-time Lawyer

PROGRAMME SPECIFIC OUTCOMES (PSO)

On successful completion of the B.Com CA programme, the student will be able to

- PSO1: To build a strong knowledge in the area of commerce and computer industries.
- PSO2 : Apply the knowledge of Taxation, Laws, Statistics, and Mathematics and Computer Applications to solve problems.
- PSO3 : Become a proficient in using Information and Communication and Technology and accounting tools in decision making process.
- PSO4 : To get employability in banking sectors, auditing, companies, software field, BPOs, KPOs & Government sectors and to become an entrepreneur.
- PSO5 : Empower the students with necessary competencies and decision making skills to faster the innovative thinking to become an Entrepreneur.
- PSO6 : Recognize the need and have the ability to engage in independent learning for continual development as a responsible citizen.
- PSO7: Able to work constructively, cooperatively, effectively and respectfully as part of a team
- PSO8 : Relate wide variety of specialisation options, interactive learning experiences and strong Commercial grounding with their business.
- PSO9:To develop communicative skills grounding in various commercial aspects and recent information technology.
- PSO10: Nurture the students in intellectual, personal, interpersonal and social skills with a focus on relevant professional carrier particularly to maximized professional growth.
- PSO11: Make use of ethical principles for society development on environmental context, demonstrate the knowledge and need for sustainable development.
- PSO12: Able to think logically, creatively, posses intellectual curiosity and to apply in day to day life.

Under Choice Based Credit System (CBCS)

Under Graduate Courses

G.T.N. Arts College (Autonomous), a pioneer in higher education institution in India, strives to work towards the academic excellence. The new Outcome Based Education (OBE) system allows enhanced academic mobility and enriched employability for the students. At the same time this system preserves the identity, autonomy and uniqueness of every department and reinforces their efforts to be student centric curriculum designing and skill imparting. This new system will work concertedly to achieve and accomplish the following objectives:

- 1. Optimal utilization of resources both human and material for the academic flexibility leading to exemplary outcome.
- 2. Students experience or enjoy their choice of courses and credits for their horizontal mobility.
- The existing curricular structure as specified by TANSCHE and other higher educational institutions
 facilitate the Credit-Transfer Across the Disciplines (CTAD) a uniqueness of the Choice Based Credit
 System.

Course Pattern for B.Com CA

The Under graduate degree course consists of five vital components. They are as follows:

Part I Language (Tamil / French)

Part II English

Part III Core Course (Theory, Practical, Electives, Allied, Project and Internship).

Part IV Skill Based, Non Major Electives, Environmental Studies, Value Education and Self Study

Part V Physical Education (Non Semester) and Extension Activities.

Objectives

The Syllabus for **B.Com CA** Programme under semester system has been designed on the basis of Choice Based Credit System (CBCS), which would focus on job oriented programmes and value added education. It will come into effect from June 2020 onwards.

Eligibility

Candidates should have passed the Higher Secondary Examination, Government of Tamil Nadu or any other examination accepted by the syndicate of Madurai Kamaraj University as equivalent there to.

Duration of the Course

The students who join the **B.Com CA** Programme shall undergo a study period of three academic years – Six semesters.

SUMMARY OF HOURS AND CREDITS UG COURSES

Part	Semester	Specification	No. of Course	Hrs	Credit	Total credits
I	I-II	Languages (Tamil / French)	2	8	6	6
П	I-II	English	2	12	6	6
Ш	I-VI	Core Courses Theory Practicals On the Job Training Project	14 5 1	110	90	114
	V-VI	Core Elective Courses	2	10	8	
	III-VI	Allied Courses	4	24	16	
	III-VI	Skill Based Courses	4	8	8	
IV	III & IV	Self Study Courses 1. Soft Skills 1 2. Soft Skills II	2	*	4	20
	I & II	Non -Major Electives	2	4	4	
	I&II	Value Education Environment and Gender Studies	2	4	4	
v	I-IV	Physical Education Practical (Non-Semester Course)	1	§.	2	4
		Extension Activities	1	-	2	10,000.00
		Total		180	150	150

Allied Courses

There will be FOUR Allied courses to fulfill the B.COM CA programme during three years.

Subject	Maximum Marks	Year of Study	
Business Statistics	100	П	
Business Mathematics	100	H	
Research Methodology	100	Ш	
Business Economics	100	III	

The Syllabus for the Allied Courses can be obtained from the Allied Department of Maths and **Economics**.

Allied Courses Offered by the Department of Commerce with CA to Department of Computer Application

Sem	Part	Study Component	Course Code	Course Title	Hrs	Credit
ш	ш	Allied Course I	20UCCA31	Computer Based Financial Accounting	4	4
IV	111	Allied Course II	20UCCA41	Cost and Management Accounting	4	4

Extra Credit Value Added Courses

The Department of Commerce with Computer Application has offered the following Value Added Courses for UG students.

- (i) Advertising and Sale Promotion
- (ii) Industrial Organization
- (iii) Business Ethics
- (iv) Interview Techniques

Extra Credit Self Paced Courses for Advanced Learners

The Department of Commerce with Computer Application has offered the following Extra Credit Self Paced Courses to enlighten the advanced learners. The department persuades the students to take virtual courses on MOOCS, SWAYAM and NPTEL.

- a. Tally ERP 9
- b. Trading skills
- c. Consumer Rights

DEPARTMENT OF COMMERCE WITH COMPUTER APPLICATION Course Pattern – from 2020-2021

Sem	Part	Study Component	Course Code	Course Title	Hours	Credit
	1	Tamil-I	20UCCL11/ 20UCOL11	fhg;gPL	4	3
	п	English - I	20UENL11	English Language through Literature I	6	3
		Core Course I	20UCCC11/ 20UCOC11	Principles of Accounting	6	5
1	Ш	Core Course II	20UCCC12	Information Technology for Business Process	.5	4
		Core Practical I	20UCCC1P	Business Application Lab	5	4
	IV	Non Major Elective Course I	20UCCN11/ 20UCON11	Business Organisation	2	2
		Value Education	20UVEV11	Value Education	2	2
				TOTAL	30	23
ĝ	I	Tamil-II	20UCCL21/ 20UCOL21	epWkr;rl;lq;fs;	4	3
	п	English-II	20UENL21	English Language through Literature - II	6	3
		Core Course III	20UCCC21/ 20UC0C21	Financial Accounting	6	5
П	ш	Core Course IV	20UCCC22	Object Oriented Programming with C++	.5	4
		Core Practical II	20UCCC2P	Object Oriented Programming with C++ Lab	.5	4
	IV	Non Major Elective Course II	20UCCN21/ 20UCON21	Modern Banking	2	2
		Environment & Gender Studies	20UEGS21	Environment & Gender Studies	2	2
	V	Extension Activity	20UPEV2P	Physical Education – Practical (Non Semester Course)	8	2
			**********	TOTAL	30	25
		Core Course V	20UCCC31/ 20UCCC31	Business Accounting	6	5
		Core Course VI	20UCCC32	Multimedia	.5	4
	ш	Core Practical III	20UCCC3P	Multimedia Lab	5	4
	72225	Core Course VII	20UCCC33/ 20UCOC33	Costing	6	5
Ш		Allied Course I	20UCCA31/ 20UCOA31	Business Statistics	6	4
	IV	Skill Based Course I	20UCCS31	Business Communication	2	2
	1.V	Self Study Course I	20USSS31	Soft Skill I		2
				TOTAL	30	26

		Overall	Total for All VI	Semesters	180	150
				TOTAL	30	24
	IV	Skill Based Course IV	20UCCS61	Introduction to Cloud Computing	2	2
		Allied Course IV	20UCCA61	Business Economics	6	4
		Course II	20UCCE63	Computer Networks		
¥.1		Core Elective	20UCCE62	Software Project Management	5	4
VI			20UCCE61	Operating System	1	
	ш	On the Job Training Project	20UCCC6P	On the Job Training Project	5	5
		Core Course XIV	20UCCC62/ 20UCOC63	Industrial Law	6	4
		Core Course XIII	20UCCC61/ 20UCOC62	Income Tax Law and Practices - II	6	5
				TOTAL	30	24
V	IV	Skill Based Course III	20UCCS51/ 20UCOS51	Elements of E-Commerce	2	2
		Allied Course III	20UCCA51	Research Methods in Commerce	6	4
		Course I	20UCCE53	Python		
		Core Elective	20UCCE52	Java	5	4
	111		20UCCE51	Visual Basic .Net	WE	32.
	ш	Core Practical V	20UCCC5P	VB.Net/Java/Python Lab	5	4
		Core Course XII	20UCCC52/	Business Law	6	4
		Core Course XI	20UCCC51/ 20UCOC52	Income Tax Law and Practices - I	6	5
				TOTAL	30	28
	V	Extension Activities		Extension Activities	÷	2
	IV	Self Study Course II	20USSS41	Soft Skill II	5	2
	TVZ	Skill Based Course II	20UCCS41	Elements of Tally ERP 9	2	2
		Allied Course II	20UCCA41/ 20UCOA41	Business Mathematics	6	4
V		Core Practical IV	20UCCC4P	Relational Database Management System Lab	5	4
	ш	Core Course X	20UCCC43	Relational Database Management System	5	4
		Core Course IX	20UCCC42	Banking Theory Law and Practices	6	5
		Core Course VIII	20UCCC41/ 20UCOC41	Partnership Accounting	6	5

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCCL11/ 20UCOL11	Number of Hours/Cycle	4
Semester	I	Max. Marks	100
Part	I	Credit	3
Course Title		காப்ப ீ டு	
Cognitive level	Up to K3		

முகப்புரை

மாணவர்களுக்கு காப்பீடு பற்றிய அடிப்படை கூற்றுகளை கற்றுத் தருவது மற்றும் காப்பீட்டின் பல்வேறு வகைகளை விளக்குவது

அலகு 1

12 மணிகள்

காப்பீடு — பொருள் - இலக்கணம் - கோட்பாடுகள் - முக்கிய வழி கூறுகள் - பணிகள் -முக்கியத்துவமும், காப்பீட்டு ஒப்பந்தம் - தனிநபருக்குகான - சமூகத்திற்கான - வியாபாரத்திற்கான — அரசுக்கானவை.

அலகு 2

10 மணிகள்

ஆயுள் காப்பீடு பொருள் - ஆயுள் காப்பீடு ஒப்பந்தத்தின் அடிப்படை கூறுகள் - வகைகள் -நன்மைகள் - கோட்பாடுகள் - ஆயுள் காப்பீடு செய்வதற்கான வழிமுளைகள் - முனைமம் செலுத்துதல் -இடர்பாடுகளை தோவு செய்தல் மற்றும் கலைதல் சலுகை நாட்கள் - பிரதி நியமனம் - ஒப்படைப்பு தவறிய பத்திரம் - இழப்பீட்டு காப்பீட்டுத் தொகை வழங்குதல் - முகவர் அறிக்கை - பத்திரம் உரிமை இழப்பு, உரிமை மீட்பு — சரண் மதிப்பு — காப்பீட்டு பத்திரத்தின மூலம் கடன் பெறுதல்

அலகு 3 தீ காப்பீடு பொருள் - இலக்கணம் - இயல்புகள் - பல்வகையான காப்பீட்டு பத்திரங்கள் -

ஒப்பந்தத்தின் நிபந்தனைகள் - இழப்பீட்டுத் தொகை வழங்குதல் - இரட்டை காப்பீடு — மறு காப்பீடு — நடைமுறைகள்

அலகு 4

12 மணிகள்

கடல் காப்பீடு - பொருள் - இலக்கணம் - பயன்பாடு - ஒப்பந்தத்தின் தன்மை - பிரிவுகள் -பத்திர வகைகள் - முனைமம் கணக்கிகடுதல் - நட்டத்தின் வகைகள் - கடல்சார் இடர்பாடுகள் -இழப்பீட்டுத் தொகை வழங்குதல் - இந்தியாவில் கடல் காப்பீட்டு தொழில் நடைமுறைகள் அலகு 5

தனி நபர் விபத்து காப்பீட்டு — வாகன காப்பீடு — திருட்டு காப்பீடு — சமூகபாதுகாப்பு காப்பீடு-பல்வேறு காப்பீட்டு படிவங்கள் - கிறாமபுற காப்பீடு - இந்தியாவில் விவசாய காப்பீட்டு விவரங்கள் — மருத்துவ காப்பீடு — பொறுப்பு காப்பீடு — வங்கித்துறையில் காப்பீட்டின் பங்கு

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity.

பாட நூல்

- 1. **பீ**ர முகம்மது், (2015), "காப்பீடு கோட்பாடுகளும் நெறிமுறைகளும்", பாஸ் பபளிகேஷன்ஸ;, மதுரை. **பரிந்துரைக்கப்படும் புத்தகங்கள்**
- 1. இராமலிங்கம்,டு.P, செல்வகுமார், வு.,(2013) , "காப்பீடு கோட்பாடுகளும் நெறிமுறைகளும் மெரிட் இண்டியா பப்ளிகெஷன்
- 2. ரங்கராசன்.டு., (2006), "காப்பீடு கோட்பாடுகளும் நெறிமுறைகளும், Srirenga Publications, Rajapalayam
- 3. Murthy.A., (2017) Principles and Practice of Insurance, Margham Publishers, Chennai
- 4. Krishnaswamy .G A Text book on Principles and Practice of Life Insurance, Excel Books New Delhi First Edition 2012
- 5. Periasamy P. Principles and Practice of Life Insurance, Himalaya Publishing house 2017 E-Resources
 - https://www.licindia.in
 - https://gicofindia.com

COURSE OUTCOME:

இந்தப்பாடததிட்டத்ததை முடித்தப் பிறகு மாணவர்களால்

CO 1	காப்பீட்டின் பணிகள் இன்றியமையாமை மற்றும் அவற்றின் ஒப்பந்தத்தை அறிந்து கொள்ள இயலும்
CO 2	ஆயுள் காப்பீட்டின் நடைமுறைகளை தெரிந்து கொள்ள இயலும்
CO 3	தீ காப்பீட்டின் ஒப்பந்த்தின் நடைமுறைகளை புரிந்து கொள்ள இயலும்
CO 4	கடல் காப்பீட்டு ஒப்பந்த்தின் நடைமுறைகளை புரிந்து கொள்ள இயலும்
CO 5	பொதுக் காப்பீட்டின் பல்வேறு வகைகளையும் அதன் செயல்பாடுகளையும் பயன்படுத்துதல் முறைப்படுத்துதல்.

Mapping of Course Outcomes with Programme Specific outcomes

	PS01	PSO2	PSO3	PSO4	PSOS	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3	2	3	1	2	3	1	2	0	1	2	0
CO2	2	1	2	1	. 3	3	2	0	0	2	1	3
CO3	3		1	2	1	2	3	0	2	1	0	2
CO4	2	1	1	0	2	1	0	2	3	2	2	1
CO5	3	2	2	1	0	3	1	1	0	2	1	3

^{3.} High; 2. Moderate; 1. Low

Articulation Mapping -K Levels with Course Outcomes (COs)

			Secti	ion A	Section B	Section C
Units	COs	K-Level	МС	CQs	Either/ or Choice	Either / or Choice
			No. Of Questions	K-Level	No. Of Question	
1	CO1	Up to K2	4	K1 & K2	2(K1& K1)	2(K2& K2)
2	CO2	Up to K2	4	K1 & K2	2(K2& K2)	2(K2& K2)
3	CO3	Up to K3	4	K1 & K2	2(K3& K3)	2(K3& K3)
4	CO4	Up to K2	4	K1 & K2	2(K2& K2)	2(K2& K2)
5	CO5	Up to K3	4	K1 & K2	2(K2& K2)	2(K3& K3)
No of C	Questions	s to be asked	20		10	10
No of	Questions	s to be answered	20		5	5
Makes	For each	n Question	1		6	10
Total N	larks for	each Section	20		30	50

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers
- K3 Application oriented Solving problems
- K4 Examining, analyzing, presentation and make inferences with evidences

Distribution of Section - Wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
K1	10	12	-,	22	12.22	12
K2	10	36	60	106	58.89	59
K3		12	40	52	28.89	29
Total Marks	20	60	100	180		100

பாடத்திட்டம் அலகு பாடத்திட்டம் மணித்துளிகள் கற்ப்பிக்கும் வழிமுறைக்ள அலகு - 1 காப்பீடு 3 வகுப்பு நடத்துதல் பணிகள் 3 PPT முறையில் முக்கியத்துவமும் நடத்துதல் 6 குழு விவாதம் **அ**லகு - 2 ஆயுள் காப்பீடு பொருள் 2 வகுப்பு நடத்துதல் ஆயுள் காப்பீடு - வகைகள் 2 PPT முறையில் ஆயுள் காப்பீடு செய்வதற்கான நடத்துதல் 2 (முறைகள் குழு விவாதம முகவர் அறிக்கை 1 ஆயுள் காப்பீடு - பத்திரம் 3 **அலகு** - 3 தீ காப்பீடு பொருள் 3 வகுப்பு நடத்துதல் பல்வகையான காப்பீட்டு பத்திரங்கள் 5 PPT முறையில் ஒப்பந்தத்தின் நிபந்தனைகள் 3 நடத்துதல் இரட்டை காப்பீடு 3 குழு விவாதம அலகு - 4 கடல் காப்பீடு பொருள் 2 வகுப்பு நடத்துதல் ஒப்பந்தத்தின் தன்மை 2 PPT முறையில் பிரிவுகள் 2 நடத்துதல் பத்திர வகைகள் 2 குழு விவாதம கடல்சார் இடர்பாடுகள் 2 இந்தியாவில் கடல் காப்பீட்டு தொழில் 2 நடைமுறைகள் தனிநபர் விபத்துகாப்பீட்டு 2 அலகு - 5 வகுப்பு நடத்துதல் வாகனகாப்பீடு 1 PPT முறையில் திருட்டுகாப்**பீ**டு 1 நடத்துதல் சமூக பாதுகாப்பு காப்பீடு 1 குழு விவாதம பல்வேறு காப்பீட் டுபடிவங்கள 1 கிராமபுற காப்பீடு 2 மருத்துவ காப்பீட<u>ு</u> 2 பொறுப்பு காப்பீடு 1

Course designed by: Dr.M.Muruganandam, Dr. G. Muthukumar A. Babitha

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCOC11/ 20UCCC11	Number of Hours/Cycle	6
Semester	I	Max. Marks	100
Part	Ш	Credit	-5
Course Title	Cor	e Course I Principles of Accounting	
Cognitive Level		Up to K4	

Student can understand the basic concepts of accounting, recording of transactions, can have the knowledge of errors, Bank Reconciliation Statement, and depreciation and can have the working knowledge in the preparation of Final accounts of sole trading concerns and non-trading concerns

Unit I Introduction to Accounting

19 Hour

Book-keeping — Meaning, Definition, Objectives, Advantages and Limitations - Accounting — Meaning, Definition, Objectives, Limitations, Difference between Book-keeping and Accounting — Types - Important Accounting Terminologies — Accounting Concepts and Conventions — Users of Accounting Information - Recording of Business Transactions - Journal — Ledger — Subsidiary books — Trial balance.

Unit II Rectification of Errors and Bank Reconciliation Statement

14 Hours

Rectification of Errors - Meaning - Types - Errors disclosed and not disclosed by trial balance - Accounting treatment - Preparation of Suspense account - Bank Reconciliation Statement - Meaning, Reasons for difference in Bank pass book and cash book balances - Preparation of BRS when causes of differences are given

Unit III Preparation of Final Accounts

21 Hours

Final Accounts of Sole trading concerns (with adjustments) - Trading and Profit and Loss Account - Balance Sheet - Provisions & Reserves - Capital & Revenue transactions

Unit IV Depreciation

17 Hours

Depreciation –Meaning, Need and Causes – Methods of maintaining accounts - provision for depreciation A/c is not maintained and Provision for depreciation A/c is maintained - Different methods of providing depreciation – Straight Line Method – Diminishing Balance Method – Annuity Method - Sinking Fund Method.

Unit V Accounts of Non Trading concerns

19 Hour

Introduction – Special items pertaining to non-trading concerns- Capital and Revenue items – Meaning and differences - Receipt and Payments A/c and Income and Expenditure A/c – Meaning and Differences - Preparation of Final Accounts – When Receipts and Payments A/c is given - When Income and Expenditure Account is given (Simple Problem Only).

Pedagogy

Class Room Lectures, Power point presentation, Quiz, Assignments and Practice paper Text Book

 Jain, S.P. & Narang, K.L. (2019) Advanced Accounting, Volume –I, Kalyani Publishers, New Delhi, 18th Revised Edition.

Reference Books

- Shukla, M.C, Grewal. T.S. and Gupta, S.C.(2013), Advanced Accounts, Sultan & Chand Publications, New Delhi.
- 2. Tulsian, P.C (2013), Financial Accounting, Pearson Education (Singapore) Pte. Ltd
- Gupta. R.L. and Radhasamy, (2013), Advanced Accounting, S.Chand& Company Ltd., New Delhi, edition (2018).
- Arulanandam. M. and A,Raman, K.S. (2017), Advanced Accountancy, Himalaya Publications, New Delhi
- Reddy. T.S. and Dr. Murthy. A (2019), Financial Accounting, Margham Publications, Chennai– 600 017.

E-resources

- https://guides.baker.edu
- https://www.tutorials.com

- https://www.investopedia.com
- https://study.com
- https://www.accountingdetails.com

Course Outcome

After completion of this course, the students will be able to:

COI	Describe the meaning, objectives and limitations of book keeping and accounting, their differences, concept and conventions and prepare the journal, ledger, subsidiary books and trial balance.
CO2	Identify and rectify different types of accounting errors, prepare suspense accounts, identify the reasons for the difference between cash book and pass book balance and prepare bank reconciliation statement.
CO3	Prepare Final accounts of sole trading concerns with adjustments.
CO4	Describe the concept, need and causes of Depreciation and practice various methods of depreciation
CO5	Prepare the final accounts of non-trading concerns.

Mapping of Programme Specific outcomes with Course Outcomes

	PSOI	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3	0	2	2	0	0	0	2	0	0	0	2
CO2	3	0	2	1	0	0	1	2	0	0	0	3
CO3	3	0	3	3	0	0	0	2	0	0	0	2
CO4	2	0	0	0	0	0	1	1	0	0	0	2
C05	2	0	1	2	0	2	2	2	0	0	0	1

^{3.} High; 2. Moderate; 1. Low

Articulation Mapping -K Levels with Course Outcomes (COs)

Units	COs	K-Level	Section A		Section B	Section C	
			MCQs		Either/ or Choice	Open Choice	
			No. Of Questions	K-Level	No. Of Question		
1	CO1	Up to K2	2	K1 & K2	2(K1& K1)	1(K2)	
2	CO2	Up to K3	2	K1 & K2	2(K2& K2)	1(K1)	
3	CO3	Up to K4	2	K1 & K2	2(K4&K4)	1(K1)	
4	CO4	Up to K4	2	K1 & K2	2(K3& K3)	1(K4)	
5	CO5	Up to K4	2	K1 & K2	2(K2& K2)	1(K3)	
No of	Question	ns to be asked	10		10	5	
No of	Question	ns to be answered	10		5	3	
Makes	For ea	ch Question	1		4	10	
Total Marks for each Section		10		20	30		

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers
- K3 Application oriented Solving problems
- K4 Examining, analyzing, presentation and make inferences with evidences

Distribution of Section - Wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
Kl	10	12	40	62	34.44	34%
K2	10	24	20	54	30.00	30%
K3		12	20	32	17.78	18%
K4		12	20	32	17.78	18%
Total Marks	20	60	100	180		100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I -	a.Book-keeping and Accounting	4	Class Room Lectures
Introduction to Accounting	 b.AccountingTypes, Principle and Terminologies. 	3	PPT Presentation Assignments
5	c. Recording - Journal , Ledger.	5	Group Discussion
	d. Subsidiary books	4	
	e. Trial balance.	3	
Unit II- Rectification	a.Rectification of Errors	4	Class Room Lectures
of Errors and	b.Errors disclosed and not disclosed by trial balance	2	PPT Presentation
Bank	c,Reason forDifference in Bank pass	3	Assignments Group Discussion
Reconciliation	book andcash book	3	Group Discussion
Statement	d.Preparation of BRS.	5	
Unit III-	a.Meaning and importance of sole	2	Class Room Lectures
Preparation of	trading concern		PPT Presentation
Final	b.Provisions & Reserves	2	Assignments
Accounts	c.Capital & Revenues	2	1793
	d.Preparation Final Accounts of Sole trading concerns (with adjustments)	15	
Unit IV-	a. Need and causes of Depreciation	2	Class Room Lectures
Depreciation	b.Provision for Depreciation	3	PPT Presentation
1100	c.Different methods of depreciation	12	Assignments
Unit V-	a.Introduction - Non-trading	3	Class Room Lectures
Accounts of	b.Special items pertaining to non-		PPT Presentation
Non Trading	trading concerns	5	Group Discussion
concerns	c.Preparation of Final Accounts of Non trading concern	11	Assignments

Course Designed By: 1.Dr. B.Rekha 2.Miss.P.Arulmoli

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCCC12	Number of Hours/Cycle	4
Semester	I	Max. Marks	100
Part	ш	Credit	4
		Core Course II	WH
Course Title	Info	rmation Technology for Business	Process
Cognitive Level	Up to K3		

It equips students with fundamental knowledge in Information Technology and its applications in modern enterprises. It also enables students to apply Information Technology in business environments and develop end-user computing skills.

UNIT I Information Technology

11 Hours

Introduction- Information Systems- Organization Management- Management levelsorganizational functions- Types of information systems- Revolution in User Interface Design- Business computing.

UNIT II Information Technology for Decision Making

11 Hours

Excel based Decision models – Introduction - MS Excel - Screen Elements - Moving around worksheet -Selecting Cell and range of cells – Formulas - Auto sum – Calculate – average -Sorting and filtering - Creating and managing charts - Working with multiple worksheets- Protecting data – If function - Pivot tables to describe data.

UNIT III Access Database System

14 Hours

Introduction - Data Processing - Data organization - File management system - File organization - Creating and managing databases using MS Access - creating databases - Managing Database Records: Sorting Records - Selecting records

Creating Reports - Formatting Reports , Comparing Reports - Creating Forms, Bounded Forms, Unbounded Forms.

UNIT IV E - Business Models

12 Hours

Introduction - Concepts of E - Business and E - Commerce - Goals of E Business - Characteristics of E- Business-Categories of E-Business-Building E-Business Models-E Business Security issues-E-Business strategy.

UNIT V Integrated Enterprise System

12 Hours

Introduction - Integrated Information system - ERP - ERP Components - Characteristics of an ERP - Advantages and Disadvantages - Implementing ERP System. Decision Support System - Introduction - Decision making - Approaches to decision making- Artificial Intelligence - Business Intelligence.

Pedagogy

Class Room Lectures, Chart preparation, Power point presentation, Group Discussion, Seminar, Quiz and Assignments.

Text Books:

 Ramesh Behl, (2016), Information Technology for Management, Tata McGraw Hill Education Private Limited, 2nd Edition, New Delhi.

Reference books:

- Paramesswaran R, (2014), A Text Book of Information Technology, S.Chand&Company Pvt.Ltd, New Delhi.
- James A. Senn, (2012) Information Technology in Business: Principles, Practices, and Opportunities", , Pearson, 2nd edition, New Delhi.
- Joseph PT(2015), E-commerce An Indian perspective, Margham Publications, 5th Edition, New Delhi.
- Curtis Frye, Joan Lambert, Joyce Cox, (2008), Microsoft Office System Step by Step, Edition, Pearson Education, Chennai.

E-Resources:

- https://www.guru99.com/excel-tutorials.html
- · https://www.tutorialspoint.com/ms_access/index.htm
- · https://www.tutorialspoint.com/e_commerce/index.html
- https://www.athabascau.ca/syllabi/cmis/cmis351.php
- https://edu.gcfglobal.org/en/excelxp

Course Outcomes

After the completion of the course, students will be able to

CO1	Outline the concepts and applications of Information Technology in business environments.
CO2	Apply formulas and functions to inference with records in Excel
CO3	Construct the data and records in the Access to use in business
CO4	Summarize the various aspects of E-Commerce and its applications
CO5	Infer ERP concepts and Decision support systems

Mapping of Programme Specific outcomes with Course Outcomes

PSO/CO	PSO1	PSO2	PSO3	PSO4	PSOS	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	2	0	0	0	0	0	0	1	0	0	0	2
CO2	2	3	2	3	0	0	0	0	0	0	0	3
CO3	2	3	2	3	0	0	0	0	0	0	0	3
CO4	2	0	0	0	0	0	0	3	0	0	0	2
CO5	2	0	3	0	0	0	2	0	0	0	0	2

^{3.} High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

		815	Secti	on A	Section B	Section C
Units COs	K -	МС	Qs	Either/or Choice	Either/or Choice	
	Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
16	CO1	Up to K2	4	K1 & K1	2(K1&K1)	2(K2&K2)
2	CO2	Up to K3	4	K1 & K2	2(K3&K3)	2(K3&K3)
3	CO3	Up to K3	4	K1 & K1	2(K2&K2)	2(K3&K3)
4	CO4	Up to K2	4	K1 & K1	2(K1&K1)	2(K2&K2)
5	CO5	Up to K2	4	K1 & K1	2(K1&K1)	2(K2&K2)
No of Qu	estions to	be asked	20	4	10	10
No of Quanswered	estions to	o be	20		5	5
Marks fo	r each Qu	estion	1		6	10
Total Ma	rks for ea	ch Section	20	-	30	50

K1 - Remembering and recalling facts with specific answers

K2 - Basic understanding of facts and stating main ideas with general answers

K3 - Application oriented - Solving problems

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	16	36		52	28.88	29%
K2	4	12	60	76	42.22	42%
К3		12	40	52	28.88	29%
Total Marks	20	60	100	180		100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I-	a)Introduction- Information Systems-	3	PPT slides
Information	b) Organization Management- Management		Assignment
Technology	levels- organizational functions-	4	
	c) Types of information systems- Revolution		
	in User Interface Design- Business	4	
	computing.		
Unit II-	a) Excel based Decision models - Introduction	4	PPT slides
Information	- MS Excel - Screen Elements - Moving		Lab Demo
Technology for	around worksheet -Selecting Cell and range of		
Decision	cells		
Making	b) Formulas - Auto sum - Calculate - average	4	
	-Sorting and filtering - Creating and managing		
	charts		
	c) Working with multiple worksheets-	3	
	Protecting data - If function - Pivot tables to		
	describe data.		
Unit III -	a) Introduction - Data Processing - Data	4	PPT slides
Access	organization		Lab Demo
Database	b) File management system – File	COLO	
System	organization - Creating and managing	5	
	databases using MS Access - creating		
	databases	300	
	 c) Managing Database Records: Sorting 	5	
	Records - Selecting records.		
Unit IV-E-	a) Introduction - Concepts of E - Business	3	PPT slides
Business	and E -Commerce		Assignment
Models	b) Goals of E Business - Characteristics of E-	3	
	Business.		
	 c) Categories of E-Business-Building. E- 	3	
	Business Models.		
	d) E Business Security issues-E- Business	3	
	strategy.		
Unit V-	a) Introduction - Integrated Information	3	PPT slides
Integrated	system - ERP - ERP Components		Assignment
Enterprise	b) Characteristics of an ERP - Advantages	620	
System	and Disadvantages - Implementing ERP	3	
	System. c) Decision Support System -	720	
	Introduction - Decision making - Approaches	3	
	to decision making	620	
	d) Artificial Intelligence - Business	3	
	Intelligence.		

Course Designed By: 1.Mrs.G.Balasaranya 2. Mrs.V.Gayathri

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCCC1P	Number of Hours / Cycle	5
Semester	I	Max. Marks	100
Part	ш	Credit	4
	Core (Course III - Practical	
Course Title	BUSIN	ESS APPLICATION LAB	
Cognitive Level	Up to K4		

To give hands on training in basic computer applications. To inculcate programming ability to compute data. To aim at making experts in the most widely used application packages

MS - WORD

- 1. Type a paragraph and Perform:
 - a. Font size, font style, line spacing etc.
 - b. Insert page numbers at the bottom right alignment
 - c. Insert paragraph border.
 - d. Change the paragraph into two or three columns
 - e. Check the spelling and grammar
 - f. Use bullets and numbering
 - g. Use drop cap
 - h. Find and replace a word
- Prepare a calendar using table option and merging cells. Inserting the table, Data Entry, Alignment of Rows and Columns, Inserting and Deleting the Rows and Columns and Change of Table Format
- 3. Prepare an application for a job with the bio-data using auto text.
- 4. Prepare a college day invitation using borders and shading option, word art and pictures.
- Using mail merge, draft a letter informing the change of address of your company to the 5 customers.

MS - EXCEL

- 6. Prepare a employee payroll
 - a. Employee ID
 - b. Name
 - c. Designation
 - d. Basic Pay
 - e. DA
 - f. HRA
 - g. TA
 - h. TAX
 - i. PF
 - GP
 - k. NP

Perform the following:

- a) Change font as bold
- b) Arrange the alignment as center
- c) Rename the sheet
- d) Insert a new sheet
- e) Move a sheet
- f) Sort name by order
- g) Calculate GP and NP
- 7. Draw different graphs Column Chart, Line Chart, Pie Chart, Bar Chart, for a student data.

- Calculate Simple and Compound Interest. Prepare a statement of Bank customers' account showing simple and compound interest calculations for 10 different customers using mathematical and logical functions
- 9. Prepare a depreciation sheet for 5 years of a product value with bar chart.

10. Filter: Number and Text Filters, Date Filters, Advanced Filter, Data Form, Remove Duplicates, Outlining Data.

MS - POWERPOINT

- Design presentation slides for a product advertisement of your choice. The slides must include name, brand name, type of product, characteristics, special features, price, special offer etc
- 12. Design presentation slides for different payment modes by using organization chart.
- 13. Design slides for electronic fund transfer. The Presentation Should contain the following transactions: Top down, Bottom up, Zoom in and Zoom out. The presentation should work in custom mode.
- 14. Design presentation slides about an organization and perform frame movement by interesting clip arts to illustrate running of an image automatically with animations.
- 15. Design presentation slides for the Seminar/Lecture Presentation using animation effects and perform the following operations: Creation of different slides, changing background color, font color using word art

MS - ACCESS

Design a student database

Prepare a report for student database.

Pedagogy

Demonstration through System, Demonstration through Projector.

Programme	B.Com CA	Programme Code	UCC	
Course Code	20UCON11/ 20UCCN11	Number of Hours / Cycle	2	
Semester	I	Max. Marks	100	
Part	IV	Credit	2	
	NO	N MAJOR ELECTIVE - I	at.	
Course Title	Business Organisation			
Cognitive Level	Up to K2			

Facilitate the students to have knowledge in various forms of business organisation

Unit I Overview of Business

6 Hours

Business -Meaning - Definition - Features - Qualities of a good business man - forms of organisation.

Unit II Sole Trading Concern

5 Hours

Sole Trading concern - Meaning - Definition - Features - Advantages - Disadvantages

Unit III Partnership

8 Hours

Partnership - Meaning - Definition - Features - Merits and Demerits - Kinds of Partners - Partnership Deed - Contents of Partnership Deed - Limited Liability Partnership(LLP)

Unit IV Joint stock company

6 Hours

Joint stock Company - Meaning - Definition - Features - Types - Difference between Partnership and Company - Formation of a company

Unit V Co-operative Organization

5 Hours

Co-operative Organization - Features - Merits and Demerits - Types of Co-operative - Tamilnadu State Co-operatives (TNSC)- District Central Co-operatives(DCCB)- Primary Agricultural Co-operative Bank (PACB)

Pedagogy

Class Room Lectures, Quiz and Assignments.

Text Book

 Bhusan .Y.K., (2016), Fundamentals of Business Organization and Management, Sultan Chand and Sons. Delhi.

Reference Books

- Shukla.M.C., (2019) Business Organization and Management, Chand and Company Ltd., Delhi.
 Sherlekar&Sherlekar., (2018) Modern Business Organisation and Management, Himalaya Publishing House Pvt. Ltd. Mumbai.
- 3. Balaji C.D & Prasad (2016), Business Organization., Margham Publication, Chennai.

E-resources

https://www.toppr.com

Course outcomes:

At the end of the course, students would be able to

CO 1	Explain meaning, definition, features and different forms of organisation, qualities of good businessman.
CO 2	Outline the meaning, definition, features, advantages and disadvantages of sole trading concerns
соз	Determine the meaning, definition, features, merits and demerits of partnership; explain different kinds of partners, contents of partnership deed.
CO 4	Explain meaning, definition, features and types of joint stock company, Identify the difference between partnership and company and formation.
CO 5	Identify the basic outline about co-operative organization

On the successful completion of the course the students will be able to have a fair knowledge about various business organisations which persuades them to go for their higher education in commerce studies

Articulation Mapping - K Levels with Course Outcomes (COs)

			Secti	on A	Section B	Section C
Units COs	K – Level	MCQs		Either/or Choice	Either/or Choice	
	5500	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
1	CO1	Up to K2	4	K1 & K2	2(KI&K1)	2(KI&K1)
2	CO2	Up to K2	4	K1 & K2	2(K1&K1)	2(K1&K1)
3	CO3	Up to K2	4	K1 & K2	2(K2&K2)	2(K2&K2)
4	CO4	Up to K2	4	K1 & K2	2(K2&K2)	2(K1&K1)
5	CO5	Up to K2	4	K1 & K2	2(K2&K2)	2(K2&K2)
No of Q	uestions t	o be asked	20		10	10
No of Questions to be answered		20		5	5	
Marks for each Question		1		6	10	
Total M	larks for e	ach Section	20		30	50

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10	24	60	94	52.22	52%
K2	10	36	40	86	47.77	48%
Total Marks	20	60	100	180		100%

K2 - Basic understanding of facts and stating main ideas with general answers

K3 - Application oriented - Solving problems

K4 - Examining, analyzing, presentation and make inferences with evidences

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I -	aIntroduction to Business organisation.	ì	Class Room
Overview of	bMeaning and Definition of Business	1	Lectures PPT
Business	organisation.	2	Presentation
	c. Features of Business organisation.d. Qualities of a good business man and forms of organisation.	2	
Unit II - Sole	a.Introduction to Sole Trading concern	1	Text book
Trading Concern	b. Meaning & Features of Sole Trading concern	2	assignments PPT Presentation
Province of the Province	c.Advantages - Disadvantages of Sole Trading concern	2	The state of the s
Unit III -	a.Introduction to Partnership	1	Text book
Partnership	b. Meaning , Definition and Features of Partnership	1	assignments PPT Presentation
	c. Merits and Demerits of Partnership	2	TTT Tresentation
	d. Kinds of Partners	2	
	e. Partnership Deed and Contents of	2	
	Partnership Deed & LLP	2	
Unit IV - Joint	a.Introduction to Joint stock Company and	1	Class Room
stock company	b. Meaning ,Definition &Features of Joint		Lectures PPT
å 5	stock Company	2	Presentation
	c.Types and Difference between		
	Partnership and Company ,Formation of		
	company	3	
Unit V - Co-	a. Introduction to Co-operative Organization	1	Text book
operative	and Features		assignments
Organization	b.Merits and Demerits of Co-operative		(42)
1955	Organization	1	Quiz
	c. Types of Co-operative and Tamilnadu		43E
	State Co-operatives	1	
	d.District Central Co-operatives and		
	Primary Agricultural Credit Society (PACS)		
	E2 82 17	2	

Course Designed

By: 1.Dr. A.Babitha Basheer

Programme	B.Com CA	Programme Code	UCC	
Course Code	20UCCL21/ 20UCOL21	Number of Hours/Cycle	4	
Semester	II	Max. Marks	100	
Part	1	Credit	3	
Course Title		நிறுமச்சட்டங்கள்		
Cognitive level		Up to K3		

முகப்புரை:

பங்கு முலதனம்இ கடனீட்டு வகைகள்இ மாணவர்களுக்கு நிறுமத்தை பற்றியும்இ அதன் கலைப்பு தீர்மானங்கள்இ நிறும மற்றம் பத்திரங்கள் அதன் வகைகள் பற்றியும்இ கூட்டங்கள் ஆகியவற்றை பற்றி விளக்குவது. 12 மணிகள்

அலகு 1 - கூட்டு பங்கு நிறுமம்

பொருள் - நிறுமத்தின் வகைகள் - (தனியார் நிறுமம் பொது நிறுமம் - தனிஆள் சிறு நிறுமம் -- செயலற்ற நிறுமம் சம்மந்தப்பட்ட சிறப்பு விதிமுறைகள்) பொது நிறும அமைப்பு — அமைப்பு முறையேடு பொதுநிலை அறிக்கை — உள்ளீடுகள் - " பிற பொருள் " மீதான கட்டுப்பாடு சட்ட அறிக்கை — உள்ளீடுகள் - திட்ட விளக்கக் குறிப்பு — உள்ளீடுகள் வகைகள் - உறுதிமொழி — மின்னனு ஏந்நம்.

அலகு 2 - பங்கு மூலதனம் மற்றும் கடனீட்டுப் பத்திரங்கள்

14 மணிகள்

முனைமத்தில் பங்கு பொருள் - பங்குகளின் வகைகள் - வாக்களிக்கும் உரிமை – வெளியிடுதல் - தள்ளுபடியில் பங்கு வெளியிடுதல் - இணாம்பங்குகள்- உரிமை பங்குகள் - உழைப்பு சாதாரண பங்குகள் (ளுறநயவ நுஙரவைல ளுாயசநள)் கடனீட்டுப் பத்திரங்கள் - பொருள் - வகைகள்.

அலகு 3 - நிர்வாக பணியாளர்கள்

10 மணிகள்

இயக்குநர்கள் பெண் இயக்குநர்கள் தற்சார்பு இயக்குநர்கள் (ஐனெநிநனெநவெ னுசைநஉவழசள) - இயக்குநர் அடையாள எண் - பிற முக்கிய நிர்வாகப் பணியாளர்கள் தொடர்புடைய இதர நடவடிக்கைகள்

அலகு 4 - கூட்டங்கள் மற்றும் தீர்மானங்கள்

12 மணிகள்

பொருள். - சட்ட ரீதியான கூட்டம் - வருடாந்திர பொதுக் கூட்டம் - அசாதாரண பொதுக் கூட்டம் - கூட்ட அறிவிப்பு — நிறைவெண் (ஞரழசரஅ)- பதிலி (சழஒல) - இயக்குநர்கள் குழுமம் - பொருள் -செயற்குழு - வகைகள் - – தணிக்கை செயற்குழு – பங்குதாரர் உறவுக் குழு – நிற்ம சமூக பொறுப்பு குழு — தீர்மானங்கள் - சாதாரண தீர்மானம் - சிறப்புத் தீர்மானம். — சிறப்பு அறிவிப்பு தேவைப்படும் தீர்மானம்.

அலகு 5 — நிறுமக் கலைப்பு

12 மணிகள்

கலைப்பின் முறைகள் - நீதிமன்றத்தினால் கலைப்பு — தன்னார்வக் கலைப்பு — வகைகள் -உறுப்பினா்கள் தன்னாா்வக் கலைப்பு - கடனீந்தோர் தன்னார்வக் கலைப்பு — தேசிய நிறும சட்டம் -நீதிமன்ற தீர்ப்பாயம்.

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity.

பாட நூல்

- ShriPathiRajan Publishers, Eighth Edition 1. Jayarajan.P.R., (2018) "நிறுமச்சட்டம" இ பரிந்துரைக்கப்படும் புத்தகங்கள்
- 1; 2. Kapoor. N.D., (2019) Elements of Company law, Sultan Chand & Sons Publications, New Delhi. 29th Edition.
- 2. Taxman.S (2020) Elements of Company Act 2013 with rules, Taxman Publication (P) Ltd.
- 2. Bagaril .C.L., Asok. K (2013) Company Law, Vikas Publishing Hous, 12th Edition

E-Resources:

- https://www.jidal.in
- https://nalsar.com
- https://opjindal.in
- https://jstor.in

COURSE OUTCOME

இந்தப்பாடத்திட்டத்ததை முடித்தப் பிறகு மாணவர்களால்

	கூட்டு பங்கு நிறுமத்தின் வகைகளஇ நிறும அமைப்பு பொதுநிலை அறிக்கை அறிந்து					
CO 1	கூட்டு பங்கு நிறுமத்தின் வகைகளஇ நிறும் அமைப்பு பொதுந்கை உற					
COT	கொள்ள இபலும்.					
	பங்கு மூலகனம் மற்றும் கடவீட்டுப் பத்திரங்களின் பொருள் பட்டும் கூட தெரிந்து					
CO 2	- வாக்களிக்கும் உரிமை — பங்கு வெளியிடும் முறை ஆகியவற்றை தொற்று					
	கொள்ள முடியும்					
CO 2	ி நிர்வாக பணியாளர்கள் - இயக்குநர்கள் மற்றும் இ					
CO 3	பணியாளர்கள் - பற்றியும் அறிந்து கொள்ள இயலும்.					
60.4	கூட்டங்களின் வகைகள்இ நிறைவெண் - பதிலி ஆகியவற்றை பற்றி தெரிந்து					
CO 4	கொள்ள இயலும்					
60.5	நிறுமத்தை கலைக்கும் முறைகள் - தேசிய நிறும சட்டம் - நீதிமன்ற தீர்ப்பாயம்.					
CO 5	அறிந்து கொள்ள இயலும்					

Mapping of Course Outcomes with Programme Specific outcomes

	PS01	PS02	PS03	PSO4	PSO5	PS06	PSO7	PSO8	60SA	PSO10	PS011	PSO12
CO1	2	0	0	2	0	0	0	2	0	0	0	1
CO2	3	0	1	0	0	0	0	3	0	0	0	1
CO3	2	0	2	1	0	0	0	2	0	0	0	2
CO4	3	0	2	0	0	0	0	1	0	0	0	,2
CO5	2	0	1	0	0	0	0	2	0	0	0	1

3. High; 2. Moderate; 1. Low

Articulation Mapping -K Levels with Course Outcomes (COs)

			Section A MCQs		Section B	Section C
Units	COs	K-Level			Either/ or Choice	Either / or Choice
			No. Of Questions	K-Level	No. Of Question	
1	CO1	Up to K2	4	K1 & K2	2(K1& K1)	2(K2& K2)
2	CO2	Up to K3	4	K1 & K2	2(K3& K3)	2(K3& K3)
3	CO3	Up to K3	4	K1 & K2	2(K3& K3)	2(K3& K3)
4	CO4	Up to K2	4	K1 & K2	2(K2& K2)	2(K2& K2)
5	CO5	Up to K2	4	K1 & K2	2(K2& K2)	2(K2& K2)
No of	Ouestions	to be asked	20		10	10
No of	No of Questions to be answered		20		5	5
Makes For each Question		1		6	10	
Total Marks for each Section		20		30	50	

K1 - Remembering and recalling facts with specific answers

K2 – Basic understanding of facts and stating main ideas with general answers

K3 – Application oriented – Solving problems

K4 – Examining, analyzing, presentation and make inferences with evidences

Distribution of Section - Wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
K1	10	12	-	22	12.22	12%
K2	10	24	60	94	52.22	52%
K3		24	40	64	35.55	36%
Total Marks	20	60	100	180		100%

பாடத்திட்டம்						
அலகு	பாடத்திட்டம்	மணித்துளிகள்	கற்ப்பிக்கும் வழிமுறைகள்			
அலகு–1	நிறுமத்தின் வகைகள்	3	வகுப்புநடத்துதல்			
நிறுமத்தின் வகைகள்	பொது நிறுமஅமைப்பு	2	PPT முறையில் நடத்துதல் குழு விவாதம்			
020000011	்திட்ட விளக்கக் குறிப்பு	2	_ வினாடி வினா			
	உறுதி மொழி	3	_ பணி ஒப்படைப்பு			
	மின்னனு ஏற்றம்.	2				
அலகு- 2 பங்குகளின்	பங்குகளின் வகைகள்	3	வகுப்புநடத்துதல் PPT முறையில் நடத்துதல்			
ഖകെക്ക	்வாக்களிக்கும் உரிமை	4	குழு விவாதம்			
<u></u>	பங்கு வெளியிடுதல்	4	வினாடி வினா			
	கட ீ ட்டுப் பத்திரங்கள்	3	பணி ஒப்படைப்பு			
அலகு- 3	இயக்குநர்கள்	3	வகுப்புநடத்துதல்			
இயக்குநர்கள்	இயக்குநர் அடையாள எண்	3	PPT முறையில் நடத்துதல்			
	பிற முக்கிய நிர்வாகப் பணியாளர்கள்	3	– குழு விவாதம் வினாடி வினா			
	இதர நடவடிக்கைகள்	1	_ பணி ஒப்படைப்பு			
அலகு – 4	கூட்டத்தின் வகைகள்	2	வகுப்புநடத்துதல்			
கூட்டத்தின்	கூட்ட அறிவிப்பு	2	PPT முறையில் நடத்துதல்			
வகைகள்	நிறைவெண்	2	குழு விவாதம்			
	പളി <mark>രി</mark>	2	வினாடி வினா			
	இயக்குநர்கள் குழுமம்	2	பணி ஒப்படைப்பு			
	செயற் குழு தீர்மானங்கள்	2				
அலகு - 5	கலைப்பின் முறைகள்	5	வகுப்புநடத்துதல்			
கலைப்பின்	தேசிய நிறும சட்டம்	4	PPT முறையில் நடத்துதல்			
முறைகள	நீதிமன்ற தீர்ப்பாயம்	3	குழு விவாதம் வினாடி வினா			
			பணி ஒப்படைப்பு			

Course designed by Dr.M. Muruganandham ,Dr. N. Dharani and Mrs.D.Pradeepa

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCOC21/ 20UCCC21	Number of Hours/Cycle	6
Semester	II	Max. Marks	100
Part	Ш	Credit	5
	#	Core Course IV	01
Course Title	FINANCIAL ACCOUNTING		
Cognitive Level	Up to K4		

Provide working knowledge of average due date and account current, procedures to prepare accounts form of a incomplete records, steps to be followed for calculating insurance claim for loss of stock and loss of profit, accounting treatment for consignment and know the objectives and list of accounting standards in India

Unit - I Averages Due Date & Account Current

18 Hours

Average Due Date - Meaning - Calculation of average due date - Amount lent in different installments and single installment - Calculation of interest - Account Current - Methods of Preparation of Account Current - Product Method - Red Ink Interest - Interest Table - Daily Balance - Epoque Method.

Unit – II Accounts From Incomplete Records

18 Hours

Accounts from Incomplete records – Meaning - Single Entry - Salient Features – Limitation – Difference between Single & Double entry system – Ascertainment of Profit – Net worth Method (Statement of Affairs) - Difference between Balance Sheet and Statement of Affairs – Conversion Method.

Unit – III Consignment

22 Hours

Meaning and Definition of Consignment – Difference between Consignment and Sales – Important terms – Recurring and Non-recurring expenses – Account sales – Commission – Delcredere Commission – Overriding Commission – Preparation of Account sales – Valuation of Stock – Accounting treatment in the books of Consignor & Consignee – Cost and Invoice Price Methods – Normal Loss and Abnormal Loss

Unit – IV Insurance Claim

18 Hour

Insurance claim - Meaning and need Computation of claim for loss of stock by fire - Application of average clause - Computation of claim for loss of profit

Unit - V Accounting Standards

14 Hours

Accounting Standards - Objectives - Benefits and Limitations - Overview of Accounting Standards in India - AS 1 to AS 10 (Theory Only) - Introduction to IndAS

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz and Assignments

Text Book

 Jain. S.P. & Narang. K.L. (2019), Advanced Accounting Volume – I", Kalyani Publishers, New Delhi, , 18th Revised Edition.

Reference Books

- Shukla, M.C., Grewal. T.S. and Gupta, S.C. (2013), Advanced accounts, Sultan & Chand Publications, New Delhi.
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- Arulanandam. M. and A,Raman.K.S.(2017), Advanced Accountancy, Himalaya Publications, New Delhi.
- Reddy. T.S. and Dr. Murthy. A (2019), Financial Accounting, Margham Publications, Chennai—600 017.

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- https://study.com
- · https://www.accounting details.com
- nptel.ac.in.courses

Course Outcome

After completion of this course, the students will be able to

CO1	Calculate interest by preparing Account Current and determine the average due date.
CO2	Prepare final accounts from incomplete records by using Net worth method and conversion method
CO3	Explain the concept of consignment and prepare Account Sales and ledger accounts in the books of consignor and consignee under cost and invoice price methods
CO4	Describe Insurance claim and compute insurance claim for Loss of stock and Loss of Profit and apply Average clause
CO5	Summarize accounting standards AS1 to AS10 in India and outline Indian Accounting Standards

Mapping of Programme Specific outcomes with Course Outcomes

	PSO1	PSO2	PSO3	PSO4	PSO5	PS06	PSO7	PSO8	PS09	PSO10	PSO11	PSO12
CO1	3	1.	0	0	0	0	0	3	0	0	0	3
CO2	3	0	0	0	1	0	0	2	0	0	0	2
CO3	3	0	2	0	2	0	0	2	0	0	0	2
CO4	3	2	0	0	0	2	0	2	0	0	0	2
CO5	3	0	0	0	0	0	0	3	0	0	0	2

^{3.} High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Section	on A	Section B	Section C
Units COs	TZ TELESCOT	MC	Qs	Either/or Choice	Either/or Choice	
	K – Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
1	CO1	Up to K4	4	K1 & K2	2(K1&K1)	2(K4&K4)
2	CO2	Up to K3	4	K1 & K2	2(K2&K2)	2(K3&K3)
3	CO3	Up to K3	4	K1 & K2	2(K2&K2)	2(K3&K3)
4	CO4	Up to K3	4	K1 & K2	2(K3&K3)	2(K2&K2)
5	CO5	Up to K2	4	K1 & K2	2(K1&K1)	2(K2&K2)
No of Q	uestions t	o be asked	20		10	10
No of Q	uestions t	o be answered	20		5	5
Marks for each Question		1		6	10	
Total Marks for each Section		20		30	50	

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers
 K3 Application oriented Solving problems
 K4 Examining, analyzing, presentation and make inferences with evidences

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10	24]	34	18.88	19%
K2	10	24	40	74	41.11	41%
K3		12	40	52	28.88	29%
K4			20	20	11.11	11%
Total Marks	20	60	100	180	1	100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE			
UNIT I – Average Due Date & Account	 a)Average Due Date - Meaning - Calculation of average due date - Amount lent in different installments 	3	Class Room Lectures, Power			
Current	b) Amount lent in single installment Calculation of interest	4	point presentation Seminar			
	c) Account Current - Methods of Preparation of Account Current - Product Method	5	Quiz Assignments			
	d)Red Ink Interest& Interest Table method	3				
	e) Daily Balance method- Epoque Method.	3				
UNIT II - Accounts From Incomplete	a) Accounts from Incomplete records – Meaning - Single Entry - Salient Features	5	Class Room Lectures Power point presentation			
Records	b) Limitation – Difference between Single & Double entry system Ascertainment of Profit – Net worth Method (Statement of Affairs)	5	Seminar Quiz Assignments			
	c) Difference between Balance Sheet and Statement of Affairs - Conversion Method.	8				
UNIT III - Consignment	a)Meaning and Definition of Consignment – Difference between Consignment and Sales	4	Class Room Lectures Power			
	b) Important terms – Recurring and Non- recurring expenses – Account sales – Seminar Commission - Del-credere Commission – Quiz Overriding Commission — Assignments					
	c) Preparation of Account sales – Valuation of Stock Accounting treatment in the books of Consignor & Consignee	5				
	d) Cost and Invoice Price Methods	5	5			
	e) Normal Loss and Abnormal Loss	4	i.			
UNIT IV- Insurance Claim	a)Insurance claim - Meaning and need	2	Class Room Lectures Power			
	b)Computation of claim for loss of stock by fire -Application of average clause	8	point presentation Seminar, Quiz Assignments			
	c) Computation of claim for loss of profit	6				
UNIT V - Accounting Standards	Accounting Standards – Objectives – Benefits and Limitations	3	Class Room Lectures Power point presentation			
	Overview of Accounting Standards in India	4	Seminar, Quiz Assignments			
	AS 1 to AS 10 (Theory Only) - Introduction to IndAS	7				

Course Designed By: 1.Dr.J.Murugapandi 2.Dr.V.Manimaheswaran

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCCC22	Number of Hours / Cycle	4
Semester	II	Max. Marks	100
Part	Ш	Credit	4
		Core Course V	-
Course Title	Ob	ject Oriented Programming w	vith C++
Cognitive Level	Up to K3		

To understand the basic concepts of object oriented programming and to develop the programming skills in C++ language.

UNIT I Introduction to OOPs

12 Hours

Basic Concepts of Objects Oriented Programming – Benefits of OOP – Applications of OOP –Beginning with C++ – What is C++ - Structure of C++ Program.

Tokens - Keywords - Identifiers- Basic and User Defined Data Types - Operators in C++ - Decision making and Branching statements - Looping Statements.

UNIT II Functions with Classes

12 Hours

Functions in C++ - The Main Function - Function Prototyping - Call by Value - Call by Reference.

Classes and Objects: Introduction – Specifying a Class – Usage of Access specifiers – Defining a Member Function- Nesting of member functions– Arrays of Objects – Objects as Function Arguments – Inline Function– Friend Function – Function overloading.

UNIT III Constructors and Operator Overloading

14 Hours

Constructors – Types of Constructors – Destructors – Operator Overloading: Defining Operator Overloading – Rules for overloading operators – Overloading Unary Operators – Overloading Binary operators.

UNIT IV Inheritance and Polymorphism

12 Hours

What is inheritance? Advantages of inheritance- Defining Derived Classes - Types of inheritance- Single Inheritance - Multiple Inheritance - Hierarchical Inheritance - Hybrid Inheritance - Virtual Base Classes - Virtual Functions - Pure Virtual Functions.

UNIT V Pointers and Files

10 Hours

Defining and accessing Pointers - Pointer to Objects - this Pointer.

Working With Files: File Stream Operations – Opening And Closing A File – Open() File Modes – File Pointers And Their Manipulation – Error Handling.

Pedagogy

Chalk and Talk Method / Demonstration / PowerPoint Presentation / Seminar / Quiz / Discussion / Assignment

Text Book

1. Balagurusamy.E., (2013) Object Oriented Programming With C++, Tata McGraw Hill, Six Edition, New Delhi.

Reference Books

- Bjarne Stroustrup., (2013) The C++ Programming Language, Addison Wesley publisher, Fourth Edition, US.
- Ravichandran.D., (2011) Programming with C++, Tata McGraw Hill Publishing Co. Ltd, Fifth Edition, New Delhi.
- 3. Venugopal K.R., Rajkumar, Ravishankar T., (2015) *Mastering C++*, McGraw Hill Publishing Co. Ltd, Fourth Edition, New Delhi.

E-Resources

- https://www.w3schools.com/cpp/
- 2 .https://www.tutorialspoint.com/cplusplus/index.htm
- https://www.geeksforgeeks.org/cpp-tutorial/
- https://www.cprogramming.com/tutorial/c++-tutorial.html
- https://beginnersbook.com/2017/08/c-plus-plus-tutorial-for-beginners/

Course Outcomes

After the completion of the course, students will be able to

CO1	Outline the OOP's Concepts using C++	
CO2	Explain classes and objects	
CO3	Make use of functions overloading and constructors.	
CO4	Apply inheritance for solving the problems	
CO5	Utilize Pointers and Files Streams	

Mapping of Programme Specific outcomes with Course Outcomes

PSO/C 0	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
COI	1	1	2	1	2	0	0	0	0	0	0	1
CO2	1	2	2	2	2	0	0	0	0	0	0	1
CO3	1	2	2	2	3	1	0	0	0	0	0	1
CO4	1	2	2	3	3	1	0	0	0	0	0	1
CO5	1	2	2	3	3	1	0	0	0	0	0	1

3. High; 2. Moderate; 1.Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Section	on A	Section B	Section C
Units COs	K – Level	MCQs		Either/or Choice	Either/or Choice	
	K – Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
1	CO1	Up to K2	4	K1 & K1	2(KI&K1)	2(K2&K2)
2	CO2	Up to K2	4	K1 & K1	2(K1&K1)	2(K2&K2)
3	CO3	Up to K3	-4	K1 & K1	2(K2&K2)	2(K3&K3)
4	CO4	Up to K3	4	K1 & K1	2(K2&K2)	2(K3&K3)
5	CO5	Up to K3	4	K1 & K1	2(K2&K2)	2(K3&K3)
No of Q	uestions to	be asked	20		10	10
No of Q	uestions to	be answered	20		5	5
Marks fo	or each Que	estion	1		6	10
Total Ma	arks for eac	h Section	20		30	50

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	20	24		44	24.44	25%
K2		36	40	76	42.22	42%
К3			60	60	33.33	33%
Total Marks	20	60	100	180	100	100%

 $K2-Basic\ understanding\ of\ facts\ and\ stating\ main\ ideas\ with\ general\ answers\ K3-Application\ oriented-Solving\ problems$

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
I Introduction to OOPs	a. Basic Concepts of Objects Oriented Programming – Benefits of OOPS –Applications	3	PPT Presentation
	of OOPs b. Beginning with C++ - What is C++ - Structure of C++ Program.	2	Lab Demo
	c. Tokens – Keywords – Identifiers – Basic and User Defined Data Types –	3	
	Operators in C++ d. Decision making and Branching statements – Looping Statements.	4	
II Functions with	a. Functions in C++ - The Main Function -	3	PPT
Classes	Function Prototyping - Call by Value - Call by		Presentation
	Reference.		Lab Demo
	b. Classes and Objects	4	
	Introduction - Specifying a Class - Usage of		
	Access specifiers – Defining a Member Function –		
	Nesting of member functions	_	
	c.Arrays of Objects - Objects as Function	3	
	Arguments.	:0	
	d. Inline Functions - Friend Function - Function	2	
III Constructors	overloading	6	PPT
and Operator	a.Constructors – Types of Constructors – Destructors	0	Presentation
overloading	b. Operator Overloading:	4	Lab Demo
overtoading	Defining Operator Overloading – Rules for		Lao Demo
	overloading operators –		
	c. Overloading Unary	4	
	Operators – Overloading Binary operators.		
IV Inheritance and	a. What is Inheritance? Advantages of inheritance-	2	PPT
Polymorphism	Defining Derived Classes		Presentation
-cultivations. A scenistre	b. Types of inheritance - Single Inheritance -		Lab demo
	Multilevel Inheritance – Multiple	3	
	Inheritance		
	c. Hierarchical Inheritance – Hybrid Inheritance	3	
	d. Virtual Base Classes –		
	Virtual Functions – Pure Virtual Functions.	4	
V Pointers and	 a.Defining and accessing Pointers – Pointer to Objects – this Pointer. 	3	PPT Presentation
Files	b). Working With Files: File Stream Operations –	4	Lab demo
	Opening And Closing A File – Open () FileModes c. File Pointers And Their Manipulation – Error	4	Lab demo
	Handling	3	

Course Designed By: 1. Mrs.T.Priyadharshini Rajakalyani

2. Mr.L.Soosai Suresh

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCCC2P	Number of Hours / Cycle	5
Semester	II	Max. Marks	100
Part	III	Credit	4
	W	Core Course VI	M
Course Title	Object	Oriented Programming w	ith C++ Lab
Cognitive Level	Up to K3		

List of Programs

- 1. Odd and Even series with classes and objects
- Find the factorial of a given number
- 3. Find the largest number from the given numbers.
- 4. Create banking account using member functions
- 5. Details of manager using array of objects
- 6. Calculate area of shapes using function overloading
- 7. Computation of mean values using friend function
- 8. Program for Constructor overloading
- Program to implement Destructor.
- 10. Perform unary operator overloading.
- 11. Perform binary operator overloading.
- 12. Simple and compound interest using Single Inheritance
- 13. Employee pay-bill calculations using multiple inheritances.
- 14. Student details using multilevel inheritance.
- 15. Program to use virtual functions.
- 16. Student details using files.

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCON21/ 20UCCN21	Number of Hours/Cycle	2
Semester	п	Max. Marks	100
Part	IV	Credit	2
	i i	Non Major Electiv	ve Course - II
Course Title		Modern I	Banking
Cognitive Level Up to		К3	

To familiarize the students with the various technologies in banking sector, enlighten them about modern banking services and make them understand about the application of Information technology in banking sector.

Unit –I 5 Hours

Origin of banking - Meaning and Definition - Functions - Structure of Banking

Origin of banking - Meaning and Definition - Functions - Structure of Banking

Banking Technology in India – Need for technology in Banking - Computerized Banking - E-Banking - Core banking - Automated teller Machine (ATM)

Unit -III 6 Hours

Internet Banking – Mobile Banking - Anywhere Banking – Anytime Banking – Home Banking – Online Enquiry and update facilities.

6 Hours

Unit -IV 5 Hours

Electronic Fund Transfer (EFT) Electronic clearing Service (ECS) – Credit clearing - Debit clearing - advantages – disadvantages .

Unit -V 8 Hours

Electronic Payment System - Electronic Cheques (E- Cheques) Electronic Cash (E-Cash) - Electronic Purse (E - Purse) - Electronic Cards (E- Cards) - SWIFT - RTGS - UPI - BHIM -

Pedagogy

Class Room Lectures, Group Discussion, Power point presentation Seminar, Quiz, Assignments,

Text Book

 Rama, A, & Arunadevi, A., (2012) Introduction to Banking Technology, New Century Book House Ltd, Chennai.

Reference Books

- Uppal R.K., Agrim Uppal., (2017) , Banking Services and Information Technology , Crescent Publishing House. New Delhi.
- 2. Khanna P.K., (2019), Technology in Banking, Himalaya Publishing House, Chennai.
- Rao, C.S., Arunajatesan, S, (2017), Technology in Banking, Margham Publications, Chennai.

E-resources

- www.forbes.com
- www.businessinsider.com
- www.atmmarketplace.com
- www.banktech.com

COURSE OUTCOMES

After completing this course, the students would be able to:

CO 1	Trace the origin and explain the functions of modern Banking
CO 2	Apply the concept of Banking Technology
CO 3	Apply the different types of modern Banking Technology in Practice
CO 4	Experiment with various mode of Technology
CO 5	Make use of different types of payment system

On the successful completion of the course the students will be able to have a fair knowledge about various Methods of modern banking technology and its application which persuades them to go for their higher education in Commerce studies.

Articulation Mapping - K Levels with Course Outcomes (COs)

Units			Secti	on A	Section B	Section C		
	Cos	K – Level	М	Qs	Either/or Choice	Either/or Choice		
			No. Of Questions	K-Level	No. Of Questions	No. Of Questions		
1	CO1	Up to K2	4	K1 & K2	2(K1&K1)	2(K2&K2)		
2	CO2	Up to K2	4 K1 & K2		4 K1 & K2	K1 & K2	2(K2&K2)	2(K2&K2)
3	CO3	Up to K3	4	K1 & K2	2(K2&K2)	2(K2&K2)		
4	CO4	Up to K3	4	K1 & K2	2(K2&K2)	2(K3&K3)		
5	CO5 Up to K3 4		Up to K3 4 K1 & K		2(K3&K3)	2(K3&K3)		
No of Questions to be asked		20		10	10			
No of Questions to be answered		20		5	5			
Marks for each Question		1		6	10			
Total Marks for each Section			20		30	50		

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers
- K3 Application oriented Solving problems
- K4 Examining, analyzing, presentation and make inferences with evidences

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10	12	0	22	12.22	12%
K2	10	36	60	106	58.88	59%
К3		12	40	52	28.88	29%
Total Marks	20	60	100	180		100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I Introduction	Introduction Modern Banking Functions of Banking Structure of Banking	2 1 1 1	Class Room Lectures Quiz, Assignments,
Unit II Banking Technology	Technology in Banking, Need Banking Technology in India & Existing Technology Computerised Banking – E- Banking, Core Banking, ATM Advantages and Disadvantages	1 2 3	Class Room Lectures, Quiz, Assignments
Unit III Internet Banking	Mobile Banking – Functions, Advantages and Disadvantages Internet Banking, Anywhere Banking Anytime Banking, Telebanking, Home Banking, Corporate Banking, Personal Banking Universal Banking, Advantages and Disadvantages	1 1 2 2	Class Room, Quiz, Assignments
Unit IV Electronic Clearing Service	Electronic Fund Transfer (EFT) – Steps, Need, Advantages and Disadvantages – NEFT – SWIFT Electronic Clearing Services (ECS) – Credit Clearing, Debit Clearing, Advantages and Disadvantages	3	Class Room Lectures, Power point presentation, , Quiz, Assignments
Unit V Electronic Payment System	Electronic Payment System (EPS)- Features, Process Electronic Cheque, Electronic Cash Electronic Purse - Electronic Cards – ATM, Debit card, Credit Card, etc. Advantages and Disadvantages SWIFT RTGS, UPI, BHIM	1 1 2 2 2 2	Class Room Lectures, Power point presentation, Quiz, Assignments

Course Designed By: Mrs.D.Pradeepa

Programme B.Com & B.Com C		Programme Code	UCO &UCC	
Course Code	20UCOC31/20UCCC31	Number of Hours/Cycle	6	
Semester	III	Max. Marks	100	
Part	III Credit		5	
	Core Cou	rse VII		
Course Title	Bu	usiness Accounting		
Cognitive Level	Up to K3			

This course gives in-depth knowledge in preparation of various business accounts such as Royalty, Branch, Hire Purchase, Insolvency accounts and Farm Accounting.

Unit I	Royalty Accounts	18 Hours			
	Meaning – Minimum rent – Short workings – Recoupment of short workings – Accounting records in the books of the lessor and lessee- Sub lease.				
Unit II	Branch Accounts	17 Hours			
	Branch accounts – Types of branches – Dependent branch – Debtors system-Stock and Debtors system (Excluding Foreign Branches) - Departmental Accounts – Allocation of expenses – Inter-department transfers.				
Unit III	Insolvency Accounts	20 Hours			
	Meaning – Insolvency Accounts - Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act- Insolvency of an individual – Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm).				
Unit IV	Hire Purchase and Instalment Systems				
	Hire purchase system — Features — Calculation of interest — Accounting treatment in the books of buyer and seller (excluding hire purchase trading accounts and stock and debtors system) — Default and repossession — Complete repossession — Partial repossession— Installment system — Difference between Hire purchase system and Installment system.				
Unit V	Farm Accounting	18 Hours			
	Meaning — Objectives of Farm Accounting — Special characteristics of Farm Accounting — Recording of farming transactions — Preparation of Final Accounts.	T-1			

Pedagogy

Class Room Lectures, Power point presentation, Quiz, Assignments and Practice paper

Text Book

 Jain. S.P. & Narang. K.L. (2019), Advanced Accounting, Volume –I, Kalyani Publishers, 18th Revised Edition. New Delhi.

Reference Books

- Shukla, M.C, Grewal. T.S. and Gupta, S.C.(2013), Advanced Accounts, Sultan & Chand Publications, New Delhi.
- 7. Tulsian, P.C (2013), Financial Accounting, Pearson Education Pvt. Ltd, New Delhi.
- Gupta. R.L. and Radhasamy, (2013), Advanced Accounting, S.Chand& Company Ltd., New Delhi.
- Arulanandam, M. and A,Raman,K.S.(2017), Advanced Accountancy, Himalaya Publications, edition (2018), New Delhi.
- Reddy. T.S. and Dr. Murthy. A (2019), Financial Accounting, Margham Publications, Chennai.

E-resources

- https://guides.baker.edu
- https://www.tutorials.com
- https://www.investopedia.com
- https://study.com
- · https://www.accountingdetails.com

Course Outcome

After completion of this course, the students will be able to

CO1	Solve problems relating to Royalty Accounts.
CO2	Understand the Final account System in Branch Accounts.
CO3	Prepare statement of affairs and deficiency account in case of insolvency of an individual.
CO4	Develop the skill in Hire purchaser and Hire Vendor, Default and Repossession, Hire Purchase Trading Account and Installment System.
CO5	Recording of farming transactions and Preparation of Final Accounts.

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PS0 1	PSO 2	PSO 3	PS O4	PS O5	PS O6	PS O7	PS O8	PS O9	PSO 10	PSO 11	PSO 12
CO1	3	2	3	1	2	3	1	2	0	0	0	0
CO2	2	1	2	1	3	3	2	0	0	0	0	3
CO3	3	0	1	2	1	2	3	0	0	0	0	2
CO4	2	1	1	0	2	1	0	2	0	0	0	1
C05	2	2	2	1	0	3	1	1	0	0	0	3

3. High; 2. Moderate; 1. Low

			Section	on A	Section B	Section C	
Units COs		K-Level	MC	Qs	Either/ or Choice	Open Choice	
			No. Of Questions	K-Level	No. Of Question	No. Of Question	
1	COI	Up to K3	2	K1&K2	2(K2&K2)	1 (K3)	
2	CO2	Up to K3	2	K1&K2	2(K2&K2)	1 (K3)	
3	CO3	Up to K3	2	K1&K2	2(K2&K2)	1 (K3)	
4	CO4	Up to K3	2	K1&K2	2(K2&K2)	1 (K3)	
5	CO5	Up to K2	2	K1&K2	2(K1&K1)	1(K2)	
No of Questions to be asked			10	*	10	5	
No of Questions to be answered			10	į.	5	3	
Marks for each Question			Ĭ		4	10	
Total Marks for each Section			10		20	30	

K1 - Remembering and recalling facts with specific answers

K2 – Basic understanding of facts and stating main ideas with general answers K3 – Application oriented – Solving problems

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks	Consolidated (Rounded off)
K1	5	32		37	37	37
K2	5	8	10	23	23	23
К3			40	40	40	40
Total Marks	10	40	50	100	100	100%

Lesson Plan

b. Minimum Rent, Short Workings c. Recoupment of Short Workings d. Accounting Records in the Books of the Lessor and Lessee. Unit Branch Accounts a. Meaning, Types of Branches, Dependant Branch b. Debtors System c. Department Accounts — Meaning, Definition d. Allocation Expenses e. Inter-department Transfers Unit Insolvency Accounts III Insolvency Accounts — Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system	2 4 3 10 Hours 4 5 3 3 Hours 3 4	Classroom Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignment Mode Classroom Lectures, Assignment			
b. Minimum Rent, Short Workings c. Recoupment of Short Workings d. Accounting Records in the Books of the Lessor and Lessee. Unit Branch Accounts a. Meaning, Types of Branches, Dependant Branch b. Debtors System c. Department Accounts — Meaning, Definition d. Allocation Expenses e. Inter-department Transfers Unit Insolvency Accounts a. Insolvency Accounts — Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system — Features — Calculation of	4 3 10 Hours 4 5 3 3 Hours 3	Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignment Assignment Mode Classroom Lectures, Assignments			
C. Recoupment of Short Workings d. Accounting Records in the Books of the Lessor and Lessee. Unit Branch Accounts a. Meaning, Types of Branches, Dependant Branch b. Debtors System c. Department Accounts — Meaning, Definition d. Allocation Expenses e. Inter-department Transfers Unit Insolvency Accounts III Insolvency Accounts — Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system - Features — Calculation of	3 10 Hours 4 5 3 3 Hours 3	Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignment Mode Classroom Lectures, Assignments			
d. Accounting Records in the Books of the Lessor and Lessee. Unit Branch Accounts a. Meaning , Types of Branches, Dependant Branch b. Debtors System c. Department Accounts - Meaning, Definition d. Allocation Expenses e. Inter-department Transfers 1	Hours 4 5 3 3 4 Hours 3	PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignment			
a. Meaning , Types of Branches, Dependant Branch b. Debtors System c. Department Accounts – Meaning, Definition d. Allocation Expenses e. Inter-department Transfers Unit Insolvency Accounts a. Insolvency Accounts - Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system - Features - Calculation of	4 5 3 3 3 3 4 Hours 3	Classroom Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments			
Branch b. Debtors System c. Department Accounts — Meaning, Definition d. Allocation Expenses e. Inter-department Transfers Unit Insolvency Accounts a. Insolvency Accounts - Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system - Features - Calculation of	5 3 3 3 Hours	Lectures, Assignments PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments			
c. Department Accounts – Meaning, Definition d. Allocation Expenses e. Inter-department Transfers Unit Insolvency Accounts a. Insolvency Accounts - Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system - Features - Calculation of	3 3 3 Hours 3	PPT Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments			
Definition d. Allocation Expenses e. Inter-department Transfers Unit Insolvency Accounts a. Insolvency Accounts - Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system - Features - Calculation of	3 3 Hours 3	Presentation Quiz, Seminar, Assignment Mode Classroom Lectures, Assignments			
e. Inter-department Transfers Insolvency Accounts a. Insolvency Accounts - Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system - Features - Calculation of	Hours	Seminar, Assignment Mode Classroom Lectures, Assignments			
Unit Insolvency Accounts a. Insolvency Accounts -Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system - Features - Calculation of	Hours 3	Assignment Mode Classroom Lectures, Assignments			
a. Insolvency Accounts -Meaning b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system – Features – Calculation of	3	Classroom Lectures, Assignments			
b. Preferential creditors under The Presidency towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system – Features – Calculation of		Lectures, Assignments			
towns Insolvency Act and Provincial Insolvency Act c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system – Features – Calculation of	4	Assignments			
c. Insolvency of an individual d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system – Features – Calculation of		DDT			
d. Preparation of statement of affairs and deficiency account (excluding insolvency of partnership firm). Unit Hire purchase system & Instalment system a. Hire purchase system – Features – Calculation of	2020				
unit Hire purchase system & Instalment system a. Hire purchase system – Features – Calculation of	5	Presentation			
IV a. Hire purchase system – Features – Calculation of	8	Quiz, Seminar, Assignment			
IV a. Hire purchase system – Features – Calculation of	Hours	Mode			
	3	Classroom Lectures,			
b. Accounting treatment in the books of buyer and seller (excluding hire purchase trading accounts and stock and debtors system)	4	Assignment PPT Presentation			
	5	Quiz, Seminar,			
d. Installment system	3	Assignment			
e. Difference between Hire purchase system and Installment system.	3				
	Hours	Mode			
V a. Farm Accounting-Meaning – Objectives of Farm Accounting	3	Classroom Lectures,			
	4	Assignments			
THE CHARLES AND THE COURT OF TH	4	PPT			
d. Preparation of Final Accounts.	4	Presentation Quiz, Seminar, Assignment			

Course designed by Dr.J.Murugapandi

B.Com CA	Programme Code	UCC
20UCCC32	Number of Hours/Cycle	5
Ш	Max. Marks	100
Ш	Credit	4
Core	e Course VIII	
	Multimedia	
Up to K3		
	20UCCC32 III III Core	20UCCC32 Number of Hours/Cycle III Max. Marks III Credit Core Course VIII Multimedia

It equips students with Software skills and hands-on work on digital media will also be emphasized. They will understand the technologies behind multimedia applications and master the skills for developing multimedia projects.

Unit I	Introduction to multimedia	12 Hours
	Multimedia basics - Multimedia applications - Multimedia system	
	architecture - Evolving technologies for multimedia - Usage of text	
	in Multimedia, Families and faces of fonts, outline fonts, bitmap	
	fonts-International character sets and hypertext, Digital fonts	
	techniques Defining objects for multimedia systems - Multimedia	
	data interface standards - Multimedia databases. Compression and	
	decompression - Data and file format standards - Multimedia I/O	
	technologies - Digital voice and audio - Video image and animation	
	 Full motion video – Storage and retrieval technologies. 	
Unit II	Introduction to Photoshop	16 Hours
	Introduction to Photoshop- Introduction -What's new in Photoshop-	
	Adjustment panel- Masks panel -Advanced compositing -Canvas	
	rotation -Smoother panning and zooming - Menu commands in	
	Photoshop -Using the start menu- Using shortcut Menu command-	
	Edit menu -File menu -Image menu -Layer menu -Select menu-	
	Filter menu- Analysis menu -3D menu -View menu- Help menu	
Unit III	Tools & colors of Photoshop	18 Hours
	Rectangular marquees- Move tool -Lasso tool -Magic tool -Cropping	
	tool- Slice tool- Brush tools -Clone stamp tool -History brush tool-	
	Eraser tool -Paint bucker tool- Dodge tool- Path component selection	
	tool- Type tool -Pen tool- Rectangular tool -Notes tool- Eyedropper	
	tool -Hand tool -Zoom tool -Rgb model -CYMK model -Color tools	
	-Color picker- The color Platte -The swatches Platte -Adding new	
	colors -Layers -Creating - Working with multiple layers -Merging	
	layers -Layers effects	
Unit IV	Getting started with CorelDraw	18 Hours
	Getting started with CorelDraw- screen and its elements- properties-	
	Tool box- project-working with objects and shapes- Adding effects	
	to objects.	
	Working with Text- Formatting Text- Text Tools- Images- Resizing,	
	Rotating, Skewing and Cropping images, Adding special effects-	
	Importing and Exporting Files- Publishing and printing image files-	
	Various Image Formats- Video Formats- Audio Formats	
Unit V	Introduction To Flash	18 Hours
	Introduction To Flash -Object based animation- Motion- Tween -	
	Presets- File menu- Edit menu- View menu- Insert menu- Modify	
	menu -Text menu -Commands menu- Control menu- Debug menu -	

Windows menu -Help menu- Tools of Flash -Free Transform tool-	
Lasoo tool -Pen tool- Pencil tool -Eye Droper tool- Hand tool- 3D	
Rotation tool- Text tool -Rectangle tool- Brush tool -Paint Bucket	
tool -Eraser tool- Magnifier tool -Working with Text in Flash-	
Creating Text with Text tool- Formatting the text - Text Drawing	
Object in Flash Drawing Lines- Editing Shapes- Using the Selection	
Tools -Creating Gradient tool -Adusting Colour - Drawing Modes -	
Using Sound in Flash -Filters and Blends -Using Tween and Action	
in Flash Creating a Motion - Creating a Simple Animation	

Pedagogy

Class Room Lectures, Chart preparation, Power point presentation, Group Discussion, Seminar, Quiz and Assignments.

Text Book

- Anil Sharma (2013), Multimedia Systems, Frank Brothers & Co. (Publishers) Limited, B-41, Sector-4, Noida.
 - 2.Ross Andrews(2013), Photoshop For Beginners, Imagine Publishing Limited.
- Corelpantent 2019, Coreldraw Graphics Suite 2019 Quick Start Guide For Window,
 Corel Publication Limited.
- Jay Armsgrong, Jen Dehann (2020 Ed), Macromedia Flash 8: A Tutorial Guide , Press Publication.

Reference Books

- 1.Li & Drew(2009), Fundamentals of Multimedia, Pearson Education, 2009.
- 2.Parekh Ranjan(2007), Principles of Multimedia, Tata McGraw-Hill
- 3.Rajneesh Aggarwal & B. B Tiwari, (2007) *Multimedia Systems*, Excel Publication, NewDelhi

E-resources

- https://helpx.adobe.com/in/photoshop/tutorials.html
- https://www.tutorialspoint.com/multimedia/multimedia_introduction.htm
- https://ebook.onlinefreetrial.xyz/book/show/1438397-FILE
- https://www.coreldraw.com/en/learn/tutorials/
- https://phlearn.com/photoshop-tutorials/

Course Outcome

After the completion of the course, students will be able to

CO1	Express the key concepts in current multimedia technology
CO2	Use various tools and modify using layers in photoshop
CO3	Manipulate multiple layers in photoshop
CO4	Construct the objects and images in coreldraw
CO5	Apply tools to create a simple animation in flash

Mapping of Programme Specific outcomes with Course Outcomes

PSO/C 0	PS01	PS02	PSO3	PS04	PSO5	90Sd	PSO7	PSO8	PS09	PSO10	PSO11	PSO12
CO1	2	11/	1	0	1	0	0	0	0	0	0	2
CO2	2	2	1	3	2	3	1	1	0	0	0	3
CO3	2	2	1	3	2	3	1	1	0	0	0	3
CO4	2	2	1	2	2	3	1	1	0	0	0	3
CO5	2	2	1	2	2	3	1	1	0	0	0	3

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

Units COs K-		7	Section A		Section B	Section C
		K-Level	MCQs		Either/ or Choice	Open Choice
			No. Of Questions	K-Level	No. Of Question	
1	CO1	Up to K2	2	K1&K2	2 (K1&K1)	1 (K2)
2	CO2	Up to K3	2	K1&K2	2 (K1&K1)	1 (K2)
3	CO3	Up toK3	2	K1&K2	2 (K2&K2)	1 (K3)
4	CO4	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
5	CO5 Up to K3		2	K1&K2	2 (K1&K1)	1 (K2)
No of Questions to be asked		10		10	5	
No of Questions to be answered		10		5	3	
Makes For each Question		1	4	4	10	
Total Marks for each Section			10		20	30

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers
- K3 Application oriented Solving problems

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks	Consolidated (Rounded off)
K1	5	24	33	29	29	29
K2	5	16	30	51	51	51
К3		,	20	20	20	20
Total Marks	10	40	50	100	100	100%

LESSON PLAN

	Introduction to multimedia	HOURS	MODE
	a)Multimedia basics- Multimedia applications – Multimedia system architecture – Evolving technologies for multimedia	3	PPT slides Assignment
	a) Usage of text in Multimedia, Families and faces of fonts, outline fonts, bitmap fonts-International character sets and hypertext, Digital fonts techniques Defining objects for multimedia systems	3	
	b) Multimedia data interface standards – Multimedia databases. Compression and decompression – Data and file format standards	3	
	 c) Multimedia I/O technologies – Digital voice and audio – Video image and animation –Full motion video – Storage and retrieval technologies. 	3	
Unit II	Introduction to Photoshop		
	a) Introduction to Photoshop- Introduction -What's new in Photoshop- Adjustment panel Masks panel	4	PPT slides Lab Demo
	b)Advanced compositing -Canvas rotation -Smoother panning and zooming - Menu commands in Photoshop - Using the start menu	4	
	c)Using shortcut Menu command- Edit menu -File menu -Image menu -Layer menu -Select menu- Filter menu	4	
	d)Analysis menu -3D menu -View menu- Help menu	4	
Unit III	Tools & colors of Photoshop		
	a)Rectangular marquees- Move tool -Lasso tool -Magic tool -Cropping tool- Slice tool- Brush tools -Clone stamp tool -History brush tool- Eraser tool -Paint bucker tool- Dodge tool- Path component selection tool	4	PPT slides Lab Demo, Seminar
	b)Type tool -Pen tool- Rectangular tool -Notes tool- Eyedropper tool -Hand tool -Zoom tool c)Rgb model -CYMK model -Color tools -Color picker-	4	
	The color Platte -The swatches Platte d)Adding new colors -Layers -Creating - Working with multiple layers -Merging layers -Layers effects	4	

Unit IV Getting started	 a) Getting started with CorelDraw- screen and its elements- properties- Tool box- project-working with objects and shapes- Adding effects to objects. 	5	PPT slides Assignment, quiz	
with CorelDraw	b) Working with Text- Formatting Text- Text Tools- Images- Resizing, Rotating, Skewing and Cropping images, Adding special effects- Importing and Exporting Files	5		
	c) Publishing and printing image files- Various Image Formats- Video Formats- Audio Formats	5		
Unit V	. Introduction To Flash			
	a) Introduction To Flash -Object based animation- Motion- Tween -Presets- File menu- Edit menu- View menu- Insert menu- Modify menu -Text menu -Commands menu- Control menu- Debug menu -Windows menu -Help menu- Tools of Flash -Free Transform tool- Lasoo tool -Pen tool	4	PPT slides Assignment, Seminar	
	b) Pencil tool -Eye Droper tool- Hand tool- 3D Rotation tool- Text tool -Rectangle tool- Brush tool -Paint Bucket tool -Eraser tool- Magnifier tool -Working with Text in Flash	4		
	 c) Creating Text with Text tool- Formatting the text - Text Drawing Object in Flash Drawing Lines- Editing Shapes- Using the Selection Tools -Creating Gradient tool 	4	→	
	d) Adusting Colour - Drawing Modes -Using Sound in Flash -Filters and Blends -Using Tween and Action in Flash Creating a Motion - Creating a Simple Animation	4		

Course Designed By: 1. Mrs. V. Gayathiri 2. Mr. L. Soosai Suresh

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCCC3P	Number of Hours/Cycle	5
Semester	Ш	Max. Marks	100
Part	Ш	Credit	4
	Co	re Course IX	W)
Course Title		Multimedia Lab	

Photoshop

- 1. Using brushes and creating multicolor real life images to Design Greetings for various occasions.
- 2. Cropping, rotating, overlapping, superimposing, pasting photos on a page.
- 3. Developing a commercial brochure with background tints.
- 4. Apply different filters to the images (Any 10 filters).
- 5. Design Product wrappers.
- 6. Design Monthly Calendar creating an image with multi-layers of images and texts to Design a colorful visiting card.
- 7. Design a digital banner of standard size 7'x5'x6'x4' with text and Photos with suitable effects.

Corel Draw

- 1. Design Sales Promotion Pamphlet.
- 2. Design Marriage invitation which contains the text both in English and Tamil.
- 3. Design a prospectus for your college.
- 4. Design a catalogue for a furniture shop.

Flash

- 1. Basic Drawing and Painting.
- 2. Working with Strokes and Fills.
- 3. Creating Custom Colors, Gradients, and Line Styles Transforming and Grouping Objects.
- 4. Creating and Managing Multiple Layers.
- 5. Converting Text into Shapes.
- 6. Animate using motion, shape, Tweening, and actions.

Programme	B.Com	Programme Code	UCO/UCC
Course Code	20UCOC33/ 20UCCC33	Number of Hours/Cycle	6
Semester	III	Max. Marks	100
Part	III	Credit	5
	Co	ore Course X	
Course Title		Costing	
Cognitive Level	Up to K3		

This course enables the students to understand the various cost accounting principles, computation of the elements of cost and operating or service costing.

Unit I	Introduction to Costing	16 Hours
	Meaning of Costing and Cost Accounting - Objectives - Advantages of Costing - Methods of Costing - Basic Cost Concepts - Cost Centre - Cost Unit - Elements of Cost - Classification of Cost - Preparation of Cost Sheet.	
Unit II	Material Control	18 Hours
	Meaning - Objectives of Material Control - Material Control Techniques - Economic Order Quantity (EOQ) - Bin Card Vs Stores Ledger - Preparation of Stores ledgers - Pricing of material issues under LIFO, FIFO, Simple Average, Weighted Average and Base Stock Methods - Merits and demerits of each method - ABC Analysis - VED Analysis, Continuous stock taking and Perpetual Inventory System.	
Unit III	Labour Cost, Remuneration and incentives	20 Hours
	Computation of labour cost - Labour Turnover - Meaning - Causes - Methods of Computation of Labour Turnover. Remuneration and Incentives: System of wage payment - Time Wage System - Piece Rate System - Merits and Demerits of each system - Essential features of a Good Wage System - Premium and Bonus Plans - Halsey Premium Plan - Rowan Premium Plan.	
Unit IV	Overheads	18 Hours
	Meaning - Classification of Overheads - Accounting for overheads - Allocation Vs Apportionment of Overheads - Bases of Apportionment-Primary Distribution and Secondary Distribution of Overheads: Repeated distribution, Simultaneous equation method - Absorption of overheads- Bases of absorption - Calculation of Machine Hour Rate.	
Unit V	Operating or Service Costing	18 Hours
	Meaning - Cost Unit - Characteristics - Transport Costing - Power House Costing - Hospital Costing - Canteen Costing. Process Costing: Meaning - Advantages - Losses and Gains in Process Costing (Excluding inter process profits and equivalent production).	

Pedagogy

Class Room Lectures, Power point presentation, Quiz and Assignments

Text Book

1. S.P.Jain and K.L. Narang, (2019) Cost Accounting, Kalyani Publishers, Ludhiana.

Reference Books

- R. S. N. Pillai and V. Bagavathi, (2019), Cost Accounting, Sultan Chand and Company Limited, New Delhi.
- A Murthy and S Gurusamy, (2019), Cost Accounting, Vijay Nicole Imprints Private Limited, Chennai

E-Resources

- https://www.tutorialspoint.com/accounting_basics/cost_accounting_introduction.htm
- https://www.accountingnotes.net/cost-accounting/materials-control/material-controlintro-need-essentials-advantages-and-materials-management/16838
- https://www.playaccounting.com/exp-ca/m-costing/contract-costing/

Course Outcome

After completion of this course, the students will be able to:

CO1	Explain the concepts and principles of costing and cost accounting
CO2	Summarize the various material control techniques.
CO3	Apply the labour cost and Remuneration under different methods
CO4	Identify the Allocation and Apportionment of Overheads
CO5	Extend the practical application of Operating and Process costing

Mapping of Course Outcomes (COs) withProgramme Specific Outcomes (Model)

	PS0 1	PSO 2	PS O3	PS O4	PS O5	PS O6	PS O7	PS O8	PS O9	PSO 10	PSO 11	PSO 12
CO1	3	2	3	1	2	3	1	2	0	0	0	0
CO2	2	1	2	1	3	3	2	0	0	0	0	3
CO3	3	0	1	2	1	2	3	0	0	0	0	2
CO4	2	1	1	0	2	1	0	2	0	0	0	1
C05	2	2	2	1	0	3	1	1	0	0	0	3

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs) (Model)

			Section	on A	Section B	Section C
Units	COs	K-Level	MC	Qs	Either/ or Choice	Open Choice
			No. Of Questions	K-Level	No. Of Question	
1	CO1	Up to K2	2	K1&K2	2 (K1&K1)	1 (K2)
2	CO2	Up to K3	2	K1&K2	2 (K1&K1)	1 (K2)
3	CO3	Up toK3	2	K1&K2	2 (K2&K2)	1 (K3)
4	CO4	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
5	CO5	Up to K3	2	K1&K2	2 (K1&K1)	1 (K2)
No o	of Questions	s to be asked	10		10	5
No of	Questions t	o be answered	10		5	3
Ma	kes For eac	ch Question	1	-	4	10
Tota	l Marks for	each Section	10		20	30

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open choice)	Total Marks	% of Marks	Consolidated (Rounded off)
K1	5	24		29	29	29
K2	5	16	30	51	51	51
К3			20	20	20	20
Total Marks	10	40	50	100	100	100%

Lesson Plan

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems

Unit	Introduction of Costing	Hours	Mode
1	a. Meaning of Costing and Cost Accounting - Objectives	2	Class room lectures,
	b. Advantages of Costing - Methods of Costing	3	PPT presentation,
	c. Basic cost concepts - Cost Centre - Cost Unit - Elements of Cost	2	Quiz,
	d. Classification of Cost	3	Assignments,
	e. Preparation of Cost Sheet.	6	Practice paper
Unit	Material Control	Hours	Mode
11	a.Meaning – Objectives of Material Control - Material Control Techniques – Economic Order Quantity (EOQ)	2	Class room lectures,
	b.Bin Card Vs Stores Ledger -Preparation of Stores ledgers	1	presentation, Quiz,
	c.Pricing of material issues under LIFO, FIFO, Simple Average, Weighted Average and Base Stock Methods – Merits and demerits of each method	6	Assignments,
	d.ABC Analysis - VED Analysis, Continuous stock taking and Perpetual Inventory SystemMaterial Control	4	
	e.Levels of material Control , Need for Material Control ,Purchasing of Materials	5	
Unit	Labour Cost	Hours	Mode
m	 a. Computation of labour cost - Labour Turnover - Meaning - Causes - Methods of Computation of Labour Turnover. 	4	Class room lectures,
	b.Remuneration and Incentives: System of wage payment – Time Wage System – Piece Rate System – Merits and Demerits of each system	4	presentation, Quiz,
	c.Essential features of a Good Wage System – Premium and Bonus Plans	2	Assignments,
	d.Halsey Premium Plan	5	
	e. Rowan Premium Plan	5	
Unit	Overhead	Hours	Mode
IV	a.Meaning - Classification of Overheads - Accounting for overheads - Allocation Vs Apportionment of Overheads.	3	Class room lectures,PPT presentation,

	b.Bases of Apportionment –Primary Distribution and Secondary Distribution of Overheads	3	Quiz, Assignments,
	c.Repeated distribution, Simultaneous equation method	5	
	d. Absorption of overheads- Bases of absorption	5	
	e. calculation of Machine Hour Rate	2	
Unit V	Operating or Service Costing	Hours	Mode
	a.Meaning - Cost Unit - Characteristics - Transport Costing	5	Class room lectures,
	 b. Power House Costing – Hospital Costing – Canteen Costing. 	5	PPT, Quiz,
	c.Process Costing: Meaning - Advantages	2	Assignments,
	d. Losses and Gains in Process Costing	6	

Course designed by Dr.B.Rekha

Programme	B.Com	Programme Code	U	CO	
Course Code	20UCOA31 2UCCA31	Number of Hours/Cycle	6		
Semester	Ш	Max. Marks	1	00	
Part	Ш	Credit	4		
		ALLIED COURSE			
Course Title	Business Stati	stics	L	T	P
Cognitive Lev	el	Up to K3	90		1

This course is designed to provide students with an understanding of the need for the Primary data and Secondary data, how they are collected, tabulated and presented. It illustrates the role of Measures of Central Tendency and Dispersion in Statistics. It educates the students about the Correlation, Regression, Index number and Time Series Analysis in Statistics.

		18 Hours
	Introduction: Introduction to Statistics- Meaning and	
	Definition - Functions - Importance - Data collection -	
	Sources - Primary- Secondary - Techniques - Census -	
	Sampling - Classification - Presentation - Tabulation -	
	Diagrammatic Representation - Graphical presentation	
Unit II	Measures of Central Tendency and Dispersion	20 Hours
	Measures of Central Tendency: Arithmetic mean - Combined	
	mean - Median - Mode - Geometric mean - Harmonic mean	
	Measure of Variations: Introduction - Range - Mean	
	deviation – Quartile deviation – Variance - Standard deviation –	
	Combined Standard deviation - Co-efficient of Variation -	
	Skewness - Kurtosis	
Unit III	Correlation and Regression Analysis	20 Hours
	Correlation: Concept, Types and uses - Methods of studying	
	correlation - Scatter diagram - Graphic method - Karl	
	Pearson's Co-efficient of Correlation, Rank Correlation,	
	Concurrent deviation method	
	Regression analysis: Concept – Relation between Correlation	
	and Regression - Regression equations - Least square method	
	- Deviations taken from actual mean and assumed mean	
	method	
Unit IV	Index Number	16 Hours
	Meaning - Features - Classification of index numbers -	
	Construction of index numbers - Various Price and Quantity	
	index number - Consumer price index number	
Unit V	Time Series	16 Hours
	Analysis of time series – components – Methods of determining	
	trend - Graphical Method - Semi average method - Moving	
	Average Method - Method of Least Square - Measurements	
	Seasonal Variations - method of simple average only	
Instru	action for framing Question Paper (Problems - 60% and Theory	y – 40 %)

Pedagogy

Class Room Lectures, Power point presentation, Peer Learning, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study.

Text Books

- Pillai R. S. N.and Bagavathi, V. (2019), Statistics theory and Practice, S Chand & Co, New Delhi.
- 2. Gupta, S. P. (2020), Statistical Methods, S Chand & Co, New Delhi.

Reference Books

- 1. Gupta, C. B. (2011), Statistical Methods, Sultan Chand & Co, New Delhi.
- 2. Srivatstava T N and Shailaja Rego (2010), Statistics for Management, Tata McGrew Hill Education Private Limited, New Delhi.
- James T. McClave (2013), Statistics for Business and Economics, Pearson Publisher, New Delhi.
- Richars I. Levine (2014), Business Statistics, Prentice Hall Publihers, New Delhi.
- Dr. Sancheti D C and Kapoor V K (2003), Statistics (Theory, Methods & Application), Sultan Chand & Sons, New Delhi.

E-Resources

- www.toppr.com
- www.wrps.org
- www.managementstudyguid.com
- www.datasciencecentral.com
- www.economicsdiscussion.net
- www.statisticssolutions.com

Course Outcomes

(After completion of this course, the students will be able to)

CO1	Interpret the Data and Presentation of Data.
CO2	Illustrate the Measures of Central Tendency and Identify the Measures of Dispersion.
CO3	Apply and Interpret the Correlation Co-efficient and Simple Linear Regression Analysis in the business context.
CO4	Construct Simple, Weighted and Cost of Living Index Numbers.
CO5	Utilize the models of Time Series to forecast the business trend.

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PS O 1	PS O2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PS O	PSO 12
CO 1	2	3	3	3	2	2	1	2	2	1	1	1
CO 2	2	3	3	3	2	2	1	2	2	1	1	1
CO 3	2	3	3	3	2	2	1	2	2	1	1	1
CO 4	2	3	3	3	2	2	1,	2	2	1	1	1
CO 5	2	3	3	3	2	2	1	2	2	1	1	1

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

	Į.		Section	on A	Section B	Section C	
Units	COs	K-Level	MC	Qs	Either/ or Choice	Open Choice	
			No. Of Questions	K- Level	No. Of Question	No of Questions	
1	CO1	Up to K2	2	K1&K1	2(K1&K1)	1(K2)	
2	CO2	Up to K3	2	K1&K2	2(K2&K2)	1(K3)	
3	CO3	Up to K3	2	K1&K2	2(K2&K2)	1(K3)	
4	CO4	Up to K3	2	K1&K2	2(K2&K2)	1(K2)	
5	CO5	Up to K3	2	K1&K2	2(K2&K2)	1(K3)	
No of (Questions	to be asked	10		10	5	
No of (Questions ed	to be	10		5	3	
Marks	for each	Question	1		4	10	

Total marks for each Section	10	20	30

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers
- K3 Application oriented Solving problems

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice
K1	6	8	-	14	14
K2	4	32	20	56	56
К3	*	5 0 0	30	30	30
Total Marks	10	40	50	100	100

Lesson Plan

788 SEC 2000	Lesson Plan	1	
Unit	Data and Presentation of Data	Hours	Mode
I	a. Statistics	1	
	b. Meaning and Definition	1	
	c. Functions	1	ř.
	d. Importance	1	ž.
	e. Data collection	2	
	f. Sources	1	Class Room Lecture/
	g. Primary data	1	Seminar/
	h. Secondary data	1	Power Point Presentation /
	i. Techniques	1	Peer Learning
	j. Census	1	/Problem Solving
	k. Sampling	1	
	1. Classification	2	
	m. Presentation	1	
	n. Tabulation	1	
	o. Diagrammatic Representation	1	
	p. Graphical Presentation	1	
Unit	Measures of Central Tendency and	Hours	Mode
II	Dispersion		
	a. Arithmetic mean	2	Class Room
	b. Combined mean	1	Lecture/ Seminar/
	c. Median	1	Power Point
	d. Mode	2	Presentation /
	e. Geometric mean	2	Peer Learning /Problem
	f. Harmonic mean	2	Solving

	g. Range	1	
	h. Quartile deviation	2	
	i. Mean deviation	2	
	j. Standard deviation	2	
	k. Combined Standard deviation	1	
	1. Co-efficient of Variation	2	
Unit	Correlation and Regression Analysis	Hours	Mode
Ш	a. Correlation	1	
	b. Meaning, Types and uses	2	
	c. Methods of studying correlation	1	
	d. Scatter diagram	2	
	e. Graphic method	2	Class Room
	f. Karl Pearson's Co-efficient of Correlation	1	Lecture/ Seminar/
	g. Rank Correlation	2	Power Point
	h. Concurrent deviation method	1	Presentation / Peer Learning
	i. Regression analysis	2	/Problem Solving
	j. Relation between Correlation and Regression	1	Solving
	k. Regression equations	1	
	1. Least square method	2	
	m. Deviations taken from actual mean and assumed mean method	2	
Unit	Index Number	Hours	Mode
IV	a. Meaning	2	N050 74
	b. Features	2	Class Room Lecture/
	c. Classification of index numbers	3	Seminar/
	d. Unweighted index numbers	1	Power Point Presentation /
	e. Weighted index number	2	Peer Learning

	e. Various Price & Quantity index number	4	/Problem	
	f. Consumer price index number	2	Solving	
Unit	Time Series	Hours	Mode	
\mathbf{v}	a. Introduction to Analysis of time series	2		
	b. Components	1	Class Room Lecture/ Seminar/ Power Point Presentation / Peer Learning /Problem	
	c. Methods of determining trend	2		
	d. Graphical Method	2		
	e. Semi average method	1		
	f. Moving Average Method	2		
	g. Method of Least Square	3	Solving	
	h. Measurements Seasonal Variations	2	5)	
	i. Method of simple average only	1	t.	

Course designed by Dr. P. Ravichandran,

Programme	B.Com CA	Programme Code	UCC			
Course Code	20UCCS31	Number of Hours / Cycle	2			
Semester	Ш	Max. Marks	50			
Part	IV	Credit	2			
	SKILL BA	SED COURSE - I				
Course Title	Business Communication					
Cognitive Level	Up to K2					

To develop better written and oral business communication skills among the students and enable them to know the effective media of communication.

Unit I	Introduction to Business Communication	5 Hours
	Business Communication: Meaning – Objectives – Types of Communication - Importance of Effective Business Communication –Barriers to Communication. Business Letters: Need – Functions – Kinds – Layout.	
Unit II	Business Correspondence	6 Hours
	Application for Jobs: Preparation of resume – Interviews – Meaning – Types of Interview – Enquiries – Replies – Orders – Complaints and Adjustments– Sales Letter- Circular Letter.	
Unit III	Banking, Insurance and Agency Correspondence	8 Hours
	Banking Correspondence - Introduction - correspondence with customer, Head office - Insurance Correspondence - Life insurance- Fire insurance - Marine insurance - Agency Correspondence - correspondence with Shareholders - Directors.	
Unit IV	Report Writing	6 Hours
	Company Secretarial Correspondence - Agenda, Minutes and Report Writing - Meaning - Types- Characteristics of good Report.	
Unit V	Technology and Business Communication	5 Hours
	Strategic Importance of E – Communication: Email – Internet- Video conferencing - Group Discussion – Social Networking.	

Pedagogy

Class Room Lectures, Quiz and Assignments.

Text Book

 N.Gupta, K.Jain, P.Mahajan, (2018), Business Communication, Sahiya Bhawan Publications

Reference Books

- Rajendra Pal, J.S. Korahilli, Essentials of Business Communication, Sultan Chand & Sons, New Delhi.
- R.S.N.Pillai and Bhagavathi.S, Commercial Correspondence, ChandPublications, New Delhi.
- 3. R.K.Madhukar, (2018), Business Communication, S.Chand Publishing, Third edition.
- 4. Dr.C.B.Gupta, (2018), Business Correspondence and Reporting, Taxmann,.
- R.C.Sharma, Krishna Mohan, (2017), Business Correspondence and Report Writing, McGraw Hill Education, 5th Edition.

E - Resources

- 1. www.newagepublishers.com.
- 2.www.businesscommunication.org.
- 3. www.managementstudyguide.com
- 4. www.smallbusiness.chorn.com

Course outcomes:

At the end of the course, students would be able to

CO 1	Understanding the basic principles, Objectives and Importance of Communication.
CO 2	Make use of business enquiries, place orders and write collection letters.
CO 3	Construct the banking, insurance and agency letters.
CO 4	Acquire knowledge on report preparation.
CO 5	Experiment with practical knowledge in E-Communication.

Mapping of Course Outcomes (Cos) with Programme Specific outcomes

PSO/CO	PS01	PS02	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	1	0	0	1	2	2	3	3	2	0	0	0
CO2	3	0	0	2	2	2	3	3	3	0	0	0
CO3	3	0	0	2	2	2	3	3	3	0	0	0
CO4	1	0	0	2	2	2	3	3	3	0	0	0
CO5	3	2	2	3	3	2	3	2	3	0	0	3

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Section A	Section B	
Units	COs	K – Level	Either/or Choice	Open Choice	
			No. Of Questions	No. Of Questions	
1	CO1	Up to K2	2(KI&K1)	1(K2)	
2	CO2	Up to K2	2(K1&K1)	1(K2)	
3	CO3	Up to K2	2(K1&K1)	1(K2)	
4	CO4	Up to K2	2(K1&K1)	1(K2)	
5	CO5	Up to K2	2(K1&K1)	1(K2)	
No of Questions to be asked			10	5	
No of Questions to be answered			5	3	
Marks for each Question			3	5	
Total Ma	arks for each	Section	15	15	

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (Either/or)	Section B (Open Choice)	Total Marks	% of Marks	Consolidated (Rounded off)
K1	15		15	50	50
K2		15	15	50	50
Total Marks	15	15	30	100	100%

 $[\]label{eq:K2-Basic understanding of facts and stating main ideas with general answers \\ K3-Application oriented-Solving problems$

K4 - Examining, analyzing, presentation and make inferences with evidences

LESSON PLAN

	Introduction to Business Communication	Hours	Mode		
	Business Communication: Meaning – Objectives – Types of Communication.	1	*		
Unit I	Importance of Effective Business Communication –Barriers to Communication.	2	Class Room Lectures PPT Presentation		
	3. Business Letters : Need - Functions - Kinds - Layout	2			
	Business Correspondence		Text book		
Unit II	 Application for Jobs: Preparation of resume – Interviews – Meaning – Types of Interview. 	2	assignments PPT Presentation		
	2. Enquiries – Replies – Orders.	2			
	3. Complaints and Adjustments – Sales Letter - Circular Letter.	2			
	Banking, Insurance and Agency Correspondence	ā	Text book assignments		
Unit III	 Banking Correspondence - Introduction - correspondence with customer, Head office. 	2	PPT Presentation		
	2. Insurance Correspondence –Life insurance- Fire insurance – Marine insurance.	3			
	3. Agency Correspondence – correspondence with Shareholders – Directors.	3			
	Report Writing		Class Room		
Unit IV	Company Secretarial Correspondence - Agenda, Minutes.	3	Lectures PPT Presentation		
	2. Report Writing — Meaning - Types- Characteristics of good Report.	3	 [5		
	Technology and Business Communication		Text book		
Unit V	Strategic Importance of E – Communication : Email – Internet.	2	assignments Quiz		
	Video conferencing - Group Discussion - Social Networking.	3			

Course Designed By: Miss.P.ARUL MOLI

Course Code	20UCOC41/20UCCC41	Number of Hours/Cycle	6
Semester	IV	Max. Marks	100
Part	Ш	Credit	5
	Core (Course XI	
Course Title	P	artnership Accounting	
Cognitive Leve	Up to K3		

Students can understand the basic concept of Partnership Accounts and accounting treatment at the time of Admission, Retirement, Death , Dissolution, Amalgamation and Sale to a company.

Unit I	Partnership Accounts	18 Hours		
	Introduction-Definition-Features of Partnership-Partnership Deed-Content-Rules Applicable in absence of an Agreement-Interest on Capital-Interest on Drawings-Profit and Loss Appropriation Account-Capital Accounts- Capital Ratio-Fixed capital accounts-Fluctuating Capital Accounts.			
Unit II	Admission of a Partner	18 Hours		
	Calculation of New Profit Sharing Ratio-Sacrificing Ratio-Revaluation of Assets and Liabilities-Memorandum Revaluation method-Treatment of Goodwill-Factors affecting the Value of value of Goodwill-Methods-Need for valuing the Goodwill-Adjustment of undistributed Profits and Losses-Adjustment of Capital – Balance Sheet of the New firm			
Unit III	Retirement and Death of a Partner			
	Retirement –Treatment of Goodwill –Gaining Ratio-Settlement of amount due to retiring Partner-Admission cum Retirement-Calculation of capital of the New firm-Balance Sheet of the New firmDeath of a Partner-Settlement of Deceased Partner's Capital account-Executors Account-Joint Life Policy.			
Unit IV	Dissolution of a Firm	18 Hours		
	Dissolution-Meaning-Distinction between Dissolution of Partnership and Dissolution of a Firm-Settlement of accounts on Dissolution-Firm's Debt versus Private Debt-Entries on DissolutionInsolvency of a Partner-Garner versus Murray rule-Fixed and Fluctuating Capital-Insolvency of all Partners-Proportionate and Maximum Loss method.			
Unit V	Amalgamation and Sale to a Company	18 Hours		
	Meaning-Objectives-Accounting treatment in the books of Amalgamating Firm-Books of the new firm Sale of firm to a Company-Purchase Consideration-Accounting procedure.			

Pedagogy

Class Room Lectures, Power point presentation, Quiz, Assignments and Practice paper

Text Book

1. Jain. S.P. & Narang. K.L. (2019) , Advanced Accounting, Volume –I, Kalyani Publishers, New Delhi, 18th Revised Edition

Reference Books

- Shukla, M.C, Grewal. T.S. and Gupta, S.C.(2013), Advanced Accounts, Sultan & Chand Publications, New Delhi
- Gupta. R.L. and Radhasamy, (2013), Advanced Accounting, S.Chand& Company Ltd., New Delhi, edition (2018).
- 3. Tulsian, P.C (2013), Financial Accounting, Pearson Education (Singapore) Pte. Ltd

E-Resources

- https://www.tutorialpoint.com
- https://www.yourarticlelibrary.com
- https://www.edurev.in
- https://www.accounting details.com
- https://www.investopedia.com

Course Outcomes

After completion of this course, the students will be able to:

CO1	Explain the meaning of Partnership, Partnership Deed and its contents and to prepare capital accounts of Partners under fixed and fluctuating capital method.
CO2	Distinguish between Revaluation and Memorandum Revaluation account and to make adjustments for Goodwill, Reserves and past accumulated profit
CO3	Prepare revaluation account at the time of Retirement and to calculate the amount due to retiring partner and to executors of Deceased Partner.
CO4	Solve problems on dissolution of a Firm and to describe the accounting procedures involved in piecemeal distribution of cash.
CO5	Calculate the amount of purchase consideration and to summarise the accounts in case of amalgamation and sale to a company

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PSO 1	PSO 1	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO	PSO 12
COI	3	0	3	3	2	0	3	3	0	0	0	2
CO2	3	0	3	3	2	0	3	3	0	0	0	2
CO3	3	0	3	3	2	0	3	3	0	0	0	2
CO4	3	0	3	3	2	0	3	3	0	0	0	2
C05	3	0	3	3	2	0	3	3	0	0	0	2

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs) (Model)

Units	COs	K-Level	Section A	Section B	Section C
	l.				, ,

			MCQs		Either/ or Choice	Open Choice
		;	No. Of Questions	K-Level	No. Of Question	
1	CO1	Up to K2	2	K1 & K2	2(K1& K1)	1 (K2)
2	CO2	Up to K2	2	K1 & K2	2(K2 & K2)	1(K2)
3	CO3	Up to K3	2	K1 & K2	2(K2 &K2)	1(K3)
4	CO4	Up to K3	2	K1 & K2	2(K3& K3)	1(K2)
5	CO5	Up to K3	2	K1 & K2	2(K1& K1)	1(K3)
No of Q	uestions to	be asked	10		10	5
No of Q	uestions to	be answered	10		5	3
Marks f	for each Qu	estion	1		4	30
Total m	arks for eac	ch Section	10		20	30

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
K1	5	16	A	21	21	21
K2	5	16	30	51	51	51
K3	1 4 3	08	20	28	28	28
Total Marks	10	40	50	100	100	100%

K1 – Remembering and recalling facts with specific answers
 K2 – Basic understanding of facts and stating main ideas with general answers
 K3 – Application oriented – Solving problems

Lesson Plan

Unit I	Partnership Accounts	Hours	Mode	
CIME I	, a :		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
	a. Introduction-Definition-Features of Partnership-Partnership Deed-Content	3	Class Room	
	b. Rules Applicable in absence of an Agreement-Interest on Capital-Interest on Drawings	3	Lectures PPT Presentation	
	c. Profit and Loss appropriation Account- Capital Ratio- Capital Accounts	4	Quiz	
	d. Fixed capital accounts	4	Assignments	
	e. Fluctuating Capital Accounts	4	Practice paper	
Unit II	Admission of a Partner			
	a. Calculation of New Profit Sharing Ratio- Sacrificing Ratio	3	Class Room Lectures	
	b. Revaluation of Assets and Liabilities Memorandum Revaluation method	3	PPT Presentation	
	c. Treatment of Goodwill-Factors affecting the Value of value of Goodwill	3	Quiz Assignments	
	d. Need for valuing the Goodwill-Adjustment of undistributed Profits and Losses	4	Practice paper	
	e. Adjustment of Capital – Balance Sheet of the New firm	5		
Unit III	Retirement and Death of a Partner		+	
	a. Retirement –Treatment of Goodwill – Gaining Ratio	3	Class Room Lectures	
	b. Settlement of amount due to retiring Partner	4	PPT Presentation	
	c. Admission cum Retirement-Calculation of capital of the New firm	4	Quiz Assignments	
	d. Death of a Partner-Settlement of Deceased Partner's Capital account	4	Practice paper	
	e. Executors Account-Joint Life Policy	3		
Unit IV	Dissolution of a Firm	°i		
	a. Dissolution-Meaning-Distinction between Dissolution of Partnership and Dissolution of a Firm	3	Class Room Lectures	

	b. Firm's Debt versus Private Debt-Entries on Dissolution	3	PPT Presentation
	c. Insolvency of a Partner-Garner versus Murray rule-Fixed and Fluctuating Capital	4	Quiz Assignments
	d. Proportionate Method	4	Practice paper
	e. Maximum Loss method	4	
Unit V	Amalgamation and Sale to a Company		
	a. Meaning-Objectives-Accounting treatment in the books of Amalgamating Firm	3	Class Room Lectures
	b. Books of the new firm	4	Presentation
	c. Sale of firm to a Company		Quiz
	d. Purchase Consideration		Assignments

Course designed by V.Vetri Selvi

Programme	B.Com CA	Programme Code	UCC		
Course Code	20UCCC42	Number of Hours/Cycle	6		
Semester	IV	Max. Marks	100		
Part	III	Credit	4		
	Core Co	ourse XII			
Course Title	Banking Theory Law & Practices				
Cognitive Level	Up to K3				

The course enables the students to acquire knowledge on the functions of RBI, Commercial Banks and the recent trends in banking concepts and technology.

Unit I	Introduction to Banking	18 Hours
	Definition of Banking - Definition of Banker- Relationship	
	Between Banker and Customer - General and Special Relationship	
	BetweenBanker and Customer - Obligations of Banker - Rights of Banker	
	- Types of Bank Accounts - Fixed Deposit Account - Savings - Current	
	andRecurring Account - Features - Benefits - Account Opening	
	Formalities - KYCNorms - Fixed Deposit Receipts - Non Residence	
	Deposit Account - Currency(Domestic) Account - Senior Citizen Deposit	
	Account - Flexi Deposit Account.	
Unit II	Negotiable Instruments	18 Hours
	Definition - Essential Features - Types - Comparison Between	
	Cheque, Billsand Pro Note - Cheque - Crossing - Types - Endorsement -	
	Types of Endorsement - Holder in due Course Privileges - Holder for	
	Value - Acceptancefor Honour - Account - Reasons for Dishonour a	
	Cheque.	
Unit III	Loans and Advances	18 Hours
	Principles of good Lending - Significance of bank Lending -Forms	
	of Unsecured Advances and Secured Advances - Advance Against	
	Securities like Stock Exchange Securities, Document of title to Goods,	
	Trust Receipts , Life Policy, Supply Bills - Fixed Deposit Receipt	
	Mortgage - Types of Mortgage - Hypothecation - Pledge -	
	NonPerforming Assets - Causes - Remedial Measures - Management of	
-west - Theorem	NPA – DebtRecovery Tribunal.	
Unit IV	Recent Trends in Banking	18 Hours
	Electronic Banking - Features - Internet Banking Vs Traditional	
	banking - Mobile banking - Features - Requirements - Telephone	
	banking - Features - Telephone banking facilities -ATM - Features -	
	Functions of ATM - Benefits of ATM - Credit cards - Electronic Fund	
	Transfer — Features – Real Time Gross Settlement(RTGS) – Digital	
	Payments - Digital Payment Systems - Types of Digital Payment	
	Systems- Measures for promoting digital payments and creation of Less	
20 1120	cash economy.	22.22
Unit V	Banking Ombudsman	18 Hours

	Meaning - Object - Appointment of Ombudsman - Powers and
duties	of Ombudsman - Procedure for Redressal of Grievance - Settlement
by agr	reement – Settlement by recommendation – Settlement by award.

Pedagogy

Class Room Lectures, Power point presentation, Quiz and Assignments.

Text Book

 E. Gordon and K. Natarajan- 201,; Banking Theory Law And Practice – 25th Revised Edition, Himalaya Publishing House, Delhi.

Reference Books

- K.P.M. Sundaram and Varshney- 2014 Banking Theory Law And Practice— 20th Revised Edition. Sultan Chand & Sons, New Delhi.
- Shekhar and Lekshmy Shekhar-2013 Banking Theory And Practice –
 Revised Edition, S.Chand Publishing. New Delhi.

E-Resources

- · https://indianmoney.com/articles/relationship-between-the-banker-and-customer
- https://www.lawnn.com/negotiable-instruments-meaningtypes/
- https://sarkaribank.com/atm-automated-teller-machine/

Course Outcome

After completion of this course, the students will be able to:

CO1	Explain the banking systems in India.
CO2	Use cheques and drafts in commercial transactions.
CO3	Recall the bank lending procedures.
CO4	Illustrate the recent trends in Banking system.
CO5	Analyse the provisions of Banking Ombudsman Scheme and Redressal of grievance procedure.

Mapping of Course Outcomes (COs) with Programme Specific Outcomes (Model)

	PS0 1	PSO 2	PS O3	PS O4	PS O5	PS O6	PS O7	PS O8	PS O9	PSO 10	PSO 11	PSO 12
CO1	3	2	3	1	2	3	1	2	0	0	0	0
CO2	2	1	2	1	3	3	2	0	0	0	0	3
CO3	3	0	1	2	1	2	3	0	0	0	0	2
CO4	2	1	1	0	2	1	0	2	0	0	0	1
C05	2	2	2	1	0	3	1	1	0	0	0	3

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs) (Model)

Units COs			Section A		Section B	Section C
		K-Level	MCQs		Either/ or Choice	Open Choice
			No. Of Questions	K-Level	No. Of Question	
1	COI	Up to K2	2	K1&K2	2 (K1&K1)	1 (K2)
2	CO2	Up to K2	2	K1&K2	2 (K1&K1)	1 (K2)
3	CO3	Up to K3	2	K1&K2	2 (K2&K2)	1 (K3)
4	CO4	Up to K3	2	K1&K2	2 (K1&K1)	1 (K2)
5	CO5	Up to K3	2	K1&K2	2 (K2&K2)	1 (K3)
No of (Questions	s to be asked	10		10	5
No of (Questions	s to be answered	10		5	3
Makes For each Question		1		4	10	
Total Marks for each Section		10		20	30	

K1 – Remembering and recalling facts with specific answers

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open choice)	Total Marks	% of Marks	Consolidated (Rounded off)
K1	5	24		29	29	29
K2	5	16	30	51	51	51
К3	=		20	20	20	20
Total Marks	10	40	50	100	100	100%

K2 - Basic understanding of facts and stating main ideas with general answers

K3 – Application oriented – Solving problems

Lesson Plan

	Lesson Plan			
Unit I	Introduction to Banking	Hours	Mode	
	a.Definition of Banking – Definition of Banker – Relationship Between Banker and Customer – General and Special Relationship Between Banker and Customer	4	Class room lectures, PPT presentation,	
	b. Obligations of Banker - Rights of Banker	4	Quiz,	
	c. Types of Bank Accounts – Fixed Deposit Account – Savings – Current and Recurring Account	4	Assignments	
	d. Features – Benefits - Account Opening Formalities – KYC Norms – Fixed Deposit Receipts – Non Residence Deposit Account	3		
	e. Currency (Domestic) Account – Senior Citizen Deposit Account – Flexi Deposit Account.	3		
Unit II	Negotiable Instruments	Hours	Mode	
	a.Definition – Essential Features – Types	4	Class room	
	b. Comparison Between Cheque, Bills and Pro Note	4	_ lectures,	
	c. Cheque – Crossing – Types	4	PPT presentation,	
	d. Endorsement – Types of Endorsement	3	Quiz,	
	e. Holder in due Course Privileges – Holder for Value – Acceptance for Honour - Account – Reasons for Dishonour a Cheque.	3	Assignments	
Unit III	Loans and Advances	Hours	Mode	
	a.Principles of good Lending – Significance of bank Lending	4	Class room lectures, PPT presentation,	
	b. Forms of Unsecured Advances and Secured	3	Quiz,	
	Advances		Assignments	
	c. Advance Against Securities like Stock Exchange Securities, Document of title to Goods, Trust Receipts, Life Policy, Supply Bills – Fixed	4	Zasagiments	
	Deposit Receipt			
	d. Mortgage – Types of Mortgage – Hypothecation	4		
	e. Pledge – Non Performing Assets - Causes - Remedial Measures - Management of NPA – Debt Recovery Tribunal.	3		

Recent Trends in Banking	Hours	Mode			
a.Electronic Banking - Features - Internet Banking Vs Traditional banking	4	Class room lectures,			
 b. Mobile banking – Features – Requirements – Telephone banking – Features – Telephone banking facilities 	4	PPT presentation,			
c. ATM – Features – Functions of ATM – Benefits of ATM - Credit cards - Electronic Fund Transfer — Features	4	Quiz, Assignments			
d. Real Time Gross Settlement(RTGS) — Digital Payments — Digital Payment Systems — Types of Digital Payment Systems	2				
e. Measures for promoting digital payments and creation of Less cash economy.	4				
Banking Ombudsman	Hours	Mode			
a. Meaning – Object	4	Class room lectures,			
b. Appointment of Ombudsman	3	PPT			
c. Powers and duties of Ombudsman	3	presentation,			
d. Procedure for Redressal of Grievance – Settlement by agreement	4	Quiz, Assignments			
e. Settlement by recommendation - Settlement by award.	4	_ rasignments			
	a.Electronic Banking - Features - Internet Banking Vs Traditional banking b. Mobile banking - Features - Requirements - Telephone banking - Features - Telephone banking facilities c. ATM - Features - Functions of ATM - Benefits of ATM - Credit cards - Electronic Fund Transfer — Features d. Real Time Gross Settlement(RTGS) - Digital Payments - Digital Payment Systems - Types of Digital Payment Systems e. Measures for promoting digital payments and creation of Less cash economy. Banking Ombudsman a. Meaning - Object b. Appointment of Ombudsman c. Powers and duties of Ombudsman d. Procedure for Redressal of Grievance - Settlement by agreement e. Settlement by recommendation - Settlement by	a.Electronic Banking - Features - Internet Banking Vs Traditional banking b. Mobile banking - Features - Requirements - Telephone banking - Features - Telephone banking facilities c. ATM - Features - Functions of ATM - Benefits of ATM - Credit cards - Electronic Fund Transfer — Features d. Real Time Gross Settlement(RTGS) - Digital Payments - Digital Payment Systems — Types of Digital Payment Systems e. Measures for promoting digital payments and creation of Less cash economy. Banking Ombudsman a. Meaning - Object b. Appointment of Ombudsman c. Powers and duties of Ombudsman d. Procedure for Redressal of Grievance - Settlement by agreement e. Settlement by recommendation - Settlement by 4			

Course designed by Dr.B.Rekha

Programme	BCom CA	Programme Code	UCC
Course Code	20UCCC43	Number of Hours/Cycle	5
Semester	IV	Max. Marks	100
Part	III	Credit	4
CORE COURSE	XIII	()	W
Course Title	Relational Da	tabase Management System	
Cognitive Level	9.M	Up to K3	

This course provides the student with foundation on Database ideas. It also introduces the concepts related to information system by using queries and the different principles of data handling.

Unit I	Introduction to Database and Database Models	15 Hours
,	Introduction to Databases - Database concepts - purpose of database system, database architecture, Types of database models - hierarchical model - network model - relational data model - object oriented Data Model- ER Model.	
Unit II	Relational Model, Concepts Constraints and languages	15 Hours
,	The Relational model concepts – Codd's rule - Characteristics of Relation - Relational model Notations - Constraints : Domain constraints - Integrity: Keys - Relational database Schemas - Entity - Referential – Foreign Keys – other type of constraints Update operations, transactions and constraint violations.	
Unit III	SQL Queries and PL/SQL	17 Hours
	Introduction to SQL - meaning - features of SQL - DDL - DML-DCL-TCL- Database objects: views, indexes. Joins- types of joins -Unions, Null Values - null-queries & sub-queries -nested sub queries - aggregate functions. PL/SQL: PL/SQL Blocks - Architecture - variables - data types - control structures - Cursors - Implicit - Explicit - Triggers - Exceptions.	
Unit IV	Transaction management and Concurrency control	14 Hours
	Transactions — Concurrent Transactions — Locking Protocols — Serialisable schedule — Optimistic Concurrency control — Database Recovery and Security. Database Recovery meaning — Kinds of failures — Failure controlling methods— Database Errors — Backup and Recovery Techniques — Database Security — Authorization.	
Unit V	Distributed and Client Server Databases	14 Hours
	Purpose of Distributed Database systems – Structure of Distributed databases – Advantages and Disadvantages of Distributed databases – Data Replication – Data Fragmentation – Types – Horizontal - Vertical. Client server Architecture – Structure of Client Server Systems – Advantages and Disadvantages of Client Server Systems	

Pedagogy

Class Room Lectures, Power point Presentation, Seminar, Quiz, Assignment

Text Book

1. Ramez Elmasri, & Shamkant B. Navathe, (2017) "Fundamentals of Database Systems", Seventh Edition, Pearson Education, chennai

Reference Books

- 1. A Silberschatz, H Korth, S Sudarshan, (2019), "Database System and Concepts", Seventh Edition, McGraw-Hill
- 2. Ragu Ramakrishnan,(2014), "Database Management System", Third Edition, McGraw-Hill
- 3. H G Molina, J Widom, J D Ullman, (2009), "Database Systems The Complete Book" Fourth Edition, Pearson Edition

E-Resources

- http://www.w3schools.com/sql/default.asp
- http://www.codeacademy.com/learn/learn-sql
- http://www.learnsql.com
- http://www.tutorialpoints.com/sql/index.html
- http://www.udacity.com/course/intro-to-relational-databases--ud197

Course Outcomes

After completion of this course, the students will be able to:

CO1	Explain the basic Database concepts and Classify Data Models
CO2	Classify the various Constraints.
CO3	Experiment Queries, Constraints, and functions.
CO4	Discuss the various Transaction Management and Concurrency Control methods
CO5	Summarize the concepts of Distributed and Client Server Databases.

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

PSO/C O	PSO 1	PSO 2	PS O	PS O	PS O	PS O	PS O	PSO 8	PS O	PS O1	PSO 11	PS O
			3	4	5	6	7		9	0		12
CO1	2	2	0	3	1	1	0	1	0	0	0	3
CO2	2	2	0	3	1	1	0	1	0	0	0	3
CO3	2	2	0	3	1	1	0	1	0	0	0	3
CO4	2	2	0	3	1	1	0	1	0	0	0	3
C05	2	2	0	3	1	1	0	1	0	0	0	3

³ High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs) (Model)

			Sec	tion A	Section B	Section C
Units	COs	K-Level	M Q:		Either/or Choice	Either/or Choice
			No. Of Questions		No. Of Question	No. Of Question
1	COI	Up to K2	2	K1&K1	2(K1&K1)	1(K2)
2	CO2	Up to K2	2	K1&K1	2(K2&K2)	1(K2)
3	CO3	Up to K3	2	K1&K1	2(K2&K2)	1(K3)
4	CO4	Up to K2	2	K1&K1	2(K2&K2)	1(K2)
5	CO5	Up to K2	2	K1&K1	2(K1&K1)	1(K2)
No of Quest	ions to be ask	ed	10	1	10	5
No of Questions to be answered		10		5	3	
Marks for ea	ach Question		1		4	10
Total marks	for each Sect	ion	10	<u> </u>	20	30

K1 - Remembering and recalling facts with specific answers

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks	Consolidated (Rounded off)
K1	10	16		26	26	26%
K2		24	40	64	64	64%
K3			10	10	10	10%
Total Marks	10	4 0	50	100	100	100%

K2 - Basic understanding of facts and stating main ideas with general answer.

K3 - Application oriented - Solving problems

Lesson Plan

Introduction to Database and Database Models	Hours	Mode			
Introduction to Databases - Database concepts - purpose of database system, database architecture	5	Descriptive method			
Types of database models – hierarchical model – network model	5	PPT presentation Assignment			
Relational data model – object oriented Data Model- ER Model.	5				
Relational Model, Concepts Constraints and languages.	Hours	Mode			
The Relational model concepts - Codd's rule - Characteristics of Relation - Relational model Notations	5	Descriptive method Quiz			
Constraints : Domain constraints - Integrity: Keys - Relational database Schemas	5				
SQL Queries and PL/SQL	Hours	Mode			
Introduction to SQL - meaning - features of SQL - DDL - DML-DCL-TCL	3	PPT presentation Assignment			
Configuration of the Community of the Configuration					
Null Values - null-queries & sub-queries -nested sub queries - aggregate functions.	4	Demo			
PL/SQL: PL/ SQL Blocks -Architecture - variables-	4				
	3				
Transaction management and Concurrency control		Mode			
Transactions - Concurrent Transactions - Locking Protocols -	3	Descriptive method			
Serialisable schedule – Optimistic Concurrency control – Database Recovery and Security.	3	Assignment			
Database Recovery meaning – Kinds of failures – Failure controlling methods.	4				
Database Errors – Backup and Recovery Techniques –Database Security – Authorization.	4				
Distributed and Client Server Databases	Hours	Mode			
Purpose of Distributed Database systems – Structure of Distributed database.	4	PPT presentation Descriptive			
Advantages and Disadvantages of Distributed database – Data Replication – Data Fragmentation.	4	method Quiz			
	3				
The state of the s	3				
	Introduction to Databases - Database concepts purpose of database system, database architecture Types of database models - hierarchical model network model Relational data model - object oriented Data Model-ER Model. Relational Model, Concepts Constraints and languages. The Relational model concepts - Codd's rule - Characteristics of Relation - Relational model Notations Constraints: Domain constraints - Integrity: Keys - Relational database Schemas Entity - Referential - Foreign Keys other type of constraints Update operations, transactions and constraint violations. SQL Queries and PL/SQL Introduction to SQL - meaning - features of SQL - DDL - DML-DCL-TCL Database objects: views, indexes. Joins- types of joins - Unions Null Values - null-queries & sub-queries -nested sub queries - aggregate functions. PL/SQL: PL/ SQL Blocks - Architecture - variables-data types - control structures. Cursors - Implicit - Explicit - Triggers - Exceptions Transaction management and Concurrency control Transactions - Concurrent Transactions - Locking Protocols - Serialisable schedule - Optimistic Concurrency control - Database Recovery and Security. Database Recovery meaning - Kinds of failures - Failure controlling methods. Database Errors - Backup and Recovery Techniques - Database Security - Authorization. Distributed and Client Server Databases Purpose of Distributed Database systems - Structure of Distributed database. Advantages and Disadvantages of Distributed database - Data Replication - Data Fragmentation. Client server Architecture - Structure of Client Server Systems. Advantages and Disadvantages of Client Server	Introduction to Databases - Database concepts - purpose of database system, database architecture Types of database models - hierarchical model - network model Relational data model - object oriented Data Model- ER Model. Relational Model, Concepts Constraints and languages. The Relational model concepts - Codd's rule - Characteristics of Relation - Relational model Notations Constraints: Domain constraints - Integrity: Keys - Relational database Schemas Entity - Referential - Foreign Keys other type of constraints Update operations, transactions and constraint violations. SQL Queries and PL/SQL Introduction to SQL - meaning - features of SQL - DDL - DML-DCL-TCL Database objects: views, indexes. Joins- types of joins -Unions Null Values - null-queries & sub-queries - nested sub queries - aggregate functions. PL/SQL: PL/SQL Blocks - Architecture - variables-data types - control structures. Cursors - Implicit - Explicit - Triggers - Exceptions Transaction management and Concurrency control Transactions - Concurrent Transactions - Locking Protocols - Serialisable schedule - Optimistic Concurrency control - Database Recovery meaning - Kinds of failures - Failure controlling methods. Database Errors - Backup and Recovery Techniques - Database Errors - Backup and Recovery Techniques - Database Errors - Backup and Recovery Techniques - Database Security - Authorization. Distributed and Client Server Databases Purpose of Distributed Database systems - Structure of Distributed database. Advantages and Disadvantages of Distributed database - Data Replication - Data Fragmentation. Client server Architecture - Structure of Client Server Systems. Advantages and Disadvantages of Client Server 3			

Course designed by: Mrs. T. Priyadharishinirajakalyani & Mrs. G.Balasaranya

3	Programme	DCom CA	Drogramma Coda	UCC	
	Programme	BCom CA	Programme Code	UCC	ı.

Course Code	20UCCC4P	Number of Hours/Cycle	.5
Semester	IV	Max. Marks	100
Part	Ш	Credit	4
	CC	ORE COURSE XIV	
Course Title	Relational Da	tabase Management System concep	ots Lab
Cognitive Level	.,	Up to K3	-

To give hands on training in basic query language. To inculcate programming ability to compute data. To aim at making experts in the most widely used Database Packages.

Oracle-Lab

- 1. Create a table 'emp' with the following fields:
 - i. EmpID, EmpName, BP, HRA, TA, DA, DED, NP and add 10 records.
- 2. Alter the table 'emp' with fields CCA, PF, ITAX.
- 3. Update the table 'emp' with the given calculation DA=33% of BP, HRA=15%, CCA=7.5%, PF=8.9%, ITAX=10%, TA=5%.
- Delete records using conditions.
- Create a table 'student' with the following fields: Reg No, Name, Qualification, Application date, date of birth, percentage set the following validation rules,
 - Qualification should be B.Sc/M.Sc/B.Com/B.com CA
 - Date of birth should be between 1st January 2000 and 1st January 2002.
 - Percentage should be between 50 & 100.
- a) Create a query named interview list to select only the candidate having above 70% and qualification as B.Sc Comp-sci (or) B.Com.
- b) Create a query to select the records having names starting with letter S.
- c) Create a query to select the records having names starting with letters S (or) A.
- d) Create a query to select the records having application date between 20-3-20 and 30-3-20.
- e) Sort the table in the ascending order of names.

PL/SQL

- 1. Create an employee table in SQL and process at least 10 queries.
- 2. Create a program using conditional control, iterative controls and sequential controls.
- 3. Create a program using Aggregate functions sum, Average etc.
- 4. Create a program using Group by and Having clause.
- 5. Create a program using exception handling.
- 6. Create a program using explicit cursors
- Create a program using implicit cursor.
- 8. Create a program using database trigger.

Programme	B.Com	Programme Code	UCO		
Course Code	20UCOA41 20UCCA41	Number of Hours/Cycle	6		
Semester	IV	Max. Marks	100		
Part	ш	Credit	4		
	di.	ALLIED COURSE	97		
Course Title	Business Mat	hematics	L	T	P
Cognitive Lev	el	Up to K3	90	7.5	

The course on Business Mathematics illustrates the Arithmetic Applications of Mathematics, Basic applications of mathematical reasoning. It means the role of Set theory, Algebra, Differential, Integral Calculus and Matrices in solving business problems. It also educates the significance of Mathematics in giving solutions to problems frequently arising in the business.

Unit I	Basic Mathematical Concepts	18 Hours
	Ratios and Proportions- Basic laws of ratios, Proportions - Continued, Direct, inverse, Compound, Mixed proportions (Time and work only) - Variation - Percentage - Application in business and commerce	,
Unit II	Theory of Sets	16 Hours
	Elements of set Theory – Definition – Symbols – Roster method and Rule method – Types of sets – Union and Intersection – Sub sets – Complements – Difference of two sets – Family of Sets – Venn diagram – De-Morgon's law	
Unit III	Mathematics for Finance	18 Hours
7	Interest – Simple – Compound – Normal rate – Effective rate – Types of annuities – immediate, due, deferred, continuous, perpetual and their future and present values – Present value – Discounting of bills – Face value of bills – Banker's discount – Banker's gain – Normal due date – Legal due date – Calculation of period for banker's discount and true discount	,
Unit IV	Calculus	20 Hours
	Differential calculus (excluding trigonometric functions) — Rules — Sum rule — Product rule - Quotient rule, functions of a function rule (Simple problems only) — Maxima and Minima (Single variable cases) — Methods of integral calculus — Rules (Excluding integration by parts of Fractions) — Simple problems only	

Unit V	Matrices	18 Hours
	Introduction - Types of Matrices - Addition, Subtraction and Multiplication - Properties - Determinants - Matrix Inversion Techniques - Solving a system of linear equation using matrix inversion - Rank of matrix - Testing consistency of equations	
Inst	ruction for framing Question Paper (Problems – 70% & Theory	- 30 %)

Pedagogy

Class Room Lectures, Power point presentation, Peer Learning, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study.

Text Books

- Manoharan, M. and Elango, C. (2019), Business Mathematics, Palani Paramount Publishers, Palani.
- 2. Vittal, P.R. (2019), Business mathematics, Margham Publications, Chennai.

Reference Books

- Sancheti, D.C. and Kapoor, V.K. (2021), Business Mathematics, Sultan Chand & Co, New Delhi.
- 2. Jeyaseelan and Sundaresan (2015), Business Mathematics, S Chand & Co, New Delhi.
- 3. Ranganathan, G. K. (2014), Business Mathematics, Girija Publishers, Chennai.
- Sharma, J. K. (2016), Business Mathematics, I.K. International Publishing House Pvt. Ltd. New Delhi.
- 5. Singh, J. K. (2013), Business Mathematics, Himalaya Publishing House, New Delhi.

E-Resources

- www.toppr.com
- www.smallbusiness.chron.com
- www.educba.com
- www.oreilly.com
- www.brainkart.com
- www.scribd.com

Course Outcomes

After completion of this course, the students will be able to:

CO1	Discuss the various mathematical applications.						
CO2	Acquire the basic arithmetic operations on set theory.						
CO3	Understanding the basic meaning in the areas of elementary function and financial mathematics.						
CO4	Solving business problems by applying various mathematical tools including Differential and Integral Calculus.						
CO5	Utilize the contributions of matrices for the business.						

17	PS	PS	PSO	PS	PSO							
	O 1	O2	3	4	5	6	7	8	9	10	O 11	12
CO 1	2	3	3	3	2	1	1	1	2	1	1	1
CO 2	2	3	3	3	2	1	1	1	2	1	1	1
CO 3	2	3	3	3	2	1	1.	1	2	1	1	1
CO 4	2	3	3	3	2	1	1	1)	2	1	1	1
C0 5	2	3	3	3	2	1	1	1	2	1	1	1

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs) (Model)

			Section	Section A		Section C
Units COs	Os K-Level	MC	Qs	Either/ or Choice	Open Choice	
			No. Of	K-	No. Of	No of
			Questions	Level	Questions	Questions
1	CO1	Up to K2	2	K1&K1	2(K2&K2)	1(K2)
2	CO2	Up to K2	2	K1&K1	2(K1&K1)	1(K2)
3	CO3	Up to K2	2	K1&K1	2(K1&K1)	1(K2)
4	CO4	Up to K3	2	K2&K2	2(K2&K2)	1(K3)
5	CO5	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
No of (Questions	to be asked	10		10	.5
No of Questions to be answered					5	3
Marks for each Question		or each Question 1			4	10
Total marks for each Section					20	30

K1 - Remembering and recalling facts with specific answers

 $\begin{array}{l} K2-Basic\ understanding\ of\ facts\ and\ stating\ main\ ideas\ with\ general\ answers\ K3-Application\ oriented-Solving\ problems \end{array}$

Distribution of Section - wise Marks with K Levels (Model)

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice
K1	7	16	180	23	23
K2	3	24	30	57	57
К3	322	-	20	20	20
Total Marks	10	40	50	100	100

Lesson Plan

** 4.	Lesson Plan	10.77	
Unit	Basic Mathematical Concepts	18 Hours	Mode
1	a. Ratios	2	
	b. Basic laws of ratios	1	
	c. Proportions -Types	2	Class Room Lecture/
	d. Continued proportions	1	Seminar/
	e. Direct proportions	1	Power Point
	f. Inverse proportions	1	Presentation / Peer
	g. Compound proportions	2	Learning /Problem
	h. Mixed proportions (Time and work only)	2	Solving
	i. Variation	2	
	j. Percentage	2	
	k. Application in business and commerce	2	
Unit	Theory of sets	16 Hours	Mode
п	a. Elements of set Theory	1	
	b. Definition, Symbols	1	
	c. Roster method and Rule method	1	Class Room Lecture/
	d. Types of sets	2	Seminar/
	e. Union and Intersection	1	Power Point
	f. Sub sets	1	Presentation / Peer
	g. Complements	1	Learning /Problem
	h. Difference of two sets	1	Solving
	i. Family of Sets	1	
	j. Venn diagram	3	
	k. De-Morgon's law	3	
Unit	Mathematics for Finance	18 Hours	Mode
ш	a. Types of Interest	1	

	b. Simple, Compound, Normal rate, Effective rate	4	
	c. Types of annuities	1	
	d. Immediate, due, deferred, continuous, perpetual and their future and present values	4	Class Room Lecture/ Seminar/
	e. Discounting of bills	1	Power Point
	f. Face value of bills	1	Presentation / Peer
	g. Banker's discount	1	Learning
	h. Banker's gain	1	/Problem Solving
	i. Normal due date	1	
	j. Legal due date	1	
	k. Calculation of period for banker's discount and true discount	2	
Unit	Calculus	20 Hours	Mode
IV	a. Differential calculus (excluding trigonometric functions)	2	
	b. Types of Rules	1	
	c. Sum rule	2	Class Room
	d. Product rule	2	Lecture/ Seminar/
	e. Quotient rule	2	Power Point
	f. Functions of a function rule (Simple problems only)	2	Presentation / Peer Learning
	g. Maxima and Minima (Single variable cases)	2	/Problem Solving
	h. Methods of integral calculus	2	
	i. Rules (Excluding integration by parts of Fractions)	2	
	j. Simple problems only	3	
Unit	Matrices	18 Hours	Mode
V	a. Introduction	1	

	b. Types of Matrices	1	
Matrices	c. Addition, Subtraction and Multiplication	3	Class Room Lecture/
	d. Properties	2	Seminar/
	e. Determinants	2	Power Point Presentation
	f. Matrix Inversion Techniques	3	/ Peer
	g. Solving a system of linear equation using matrix inversion	3	/Problem Solving
	h. Rank of matrix	1	
	i. Testing consistency of equations	2	1

Course designed by Dr. P. Ravichandran.

Programme	B.Com CA	Programme Code	UCC			
Course Code	20UCCS42	Number of Hours/Cycle	2			
Semester	IV	Max. Marks	50			
Part	IV	Credit	2			
	Skill I	Based Course - II	,			
Course Title	e Title Elements of Tally ERP 9					
Cognitive Level	Level Up to K2					

To expose the students about the basics of business organizations and accounting in Tally.

Introduction	5 Hours
Introduction of Accounting – Tally ERP9 – Features of Tally.	
Opening Screen of Tally	6 Hours
Opening Screen of Tally – Company Creation – Display – Alter - Delete – Shutting down a company.	
Group Creation	7 Hours
Single/Multiple Group Creation in Tally – Display - Alter – Delete.	
Ledger Creation	6 Hours
Single/Multiple Ledger Creation in Tally – Display - Alter – Delete.	
Vouchers Tally	6 Hours
Vouchers in Tally – Voucher Creation - Features of Tally Vouchers - Various types – Voucher entry – Short Cut Keys	
	Introduction of Accounting – Tally ERP9 – Features of Tally. Opening Screen of Tally Opening Screen of Tally – Company Creation – Display – Alter – Delete – Shutting down a company. Group Creation Single/Multiple Group Creation in Tally – Display – Alter – Delete. Ledger Creation Single/Multiple Ledger Creation in Tally – Display - Alter – Delete. Vouchers Tally Vouchers in Tally – Voucher Creation - Features of Tally Vouchers

Pedagogy

Class Room Lectures, Power point presentation, Quiz, Assignments and Practice paper

Text Book

1.Rizwan Ahmed,(2017) "Computer Applications in Business with Tally ERP9", Margham Publications, Chennai

Reference Books

- 3 1. Tally- Power of Simplicity, Tally. ERP9 at a Glance, (2009) Tally Solutions Pvt. Ltd.
- 4 2. Mohapatra, (2012), "Business Process Automation", PHI Learning, New Delhi.
- Venkatachalam & Chellppan (2014) "Business Process PHI Learning", New Delhi.

E-resources

- https://www. Tallysolutions.com
- https://www.sscstudy.com
- https://www.studycafe.in
- https://www.teachoo.com
- https://www.tallyerp9book.com

Course Outcome

After completion of this course, the students will be able to

CO1 Remembering the basic principles of accounts and Tally ERP			
CO2	Outline Open Screen of Tally and Company Creation		
CO3	Creation of Groups in Tally.		
CO4	Creation of Ledgers in Tally.		
CO5	Construct types of voucher		

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PS0 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	3	0	2	1.	0	0	1	0	0	0	0	0
CO2	2	0	2	1	0	0	1	0	0	0	0	0
CO3	2	0	3	2	0	0	2	0	0	0	0	0
CO4	2	0	3	2	0	0	2	0	0	0	0	0
C05	2	0	3	2	0	0	2	0	0	0	0	0

^{3.} High; 2. Moderate; 1.Low

Articulation Mapping - K Levels with Course Outcomes (COs)

		Os K – Level	Section A	Section B
Units	COs		Either/or Choice	Open Choice
			No. Of Questions	No. Of Questions
1	CO1	Up to K1	2(KI&K1)	1(K1)
2	CO2	Up to K2	2(K1&K1)	1(K2)
3	CO3	Up to K3	2(K2&K2)	1(K3)
4	CO4	Up to K3	2(K2&K2)	1(K3)
5	CO5	Up to K3	2(K2&K2)	1(K3)
No of Questions to be asked			10	5
No of Questions to be answered			5	3
Marks for each Question			3	5
Total Ma	arks for each	Section	15	15

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (Either/or)	Section B (Open Choice)	Total Marks	% of Marks	Consolidated (Rounded off)
K1	12	5	17	30.9	31
K2	18	5	23	41.8	42
K3	*	15	15	27.3	27
Total Marks	30	25	55	100	100%

 $[\]label{eq:K2-Basic understanding of facts and stating main ideas with general answers \\ K3-Application oriented-Solving problems$

K4 – Examining, analyzing, presentation and make inferences with evidences

Lesson Plan

Unit	Introduction	Hours	Mode		
Omt	Introduction	Hours	Nioue		
1	a. Introduction of Accounting	2	Classroom		
	b. Introduction of Tally ERP9	2	Lectures, Assignments		
2	c. Features of Tally.	1	PPT Presentation Quiz, Seminar, Assignment		
Unit	Opening Screen of Tally	Hours	Mode		
п	a.Opening Screen of Tally	1	Classroom Lectures,		
	b.Company Creation	1	Assignments PPT Presentation		
	c.Display - Alter - Delete	3	Quiz, Seminar,		
	d. Shutting down	1	Assignment		
Unit	Group Creation	Hours	Mode		
Ш	a.Single Group Creation in Tally	2	Classroom Lectures,		
	b.Multiple Group Creation in Tally	3	Assignments PPT Presentation		
	c.Display - Alter - Delete.	2	Quiz, Seminar, Assignment		
Unit	Ledger Creation	Hours	Mode		
IV	a.Single Ledger Creation in Tally -	2	Classroom Lectures,		
	b.Multiple Ledger Creation in Tally	2	Assignments PPT Presentation		
	c.Display - Alter – Delete.	2	Quiz, Seminar, Assignment		
Unit	Vouchers Tally	Hours	Mode		
v	a. Vouchers Types in Tally	1	Classroom Lectures,		
	b. Voucher Creation	1	Assignments PPT Presentation		
	c. Features of Tally	1	Quiz, Seminar,		
	d. Voucher entry	2	Assignment		
	e. Short Cut Keys	1	,		

Course Designed By Dr.J.Murugapandi

Value Added Courses

Programme	All	Programme Code	U	CO	
Course Code	20CCOM31 ···	Number of Hours per Semester	3	0	
Semester	m	Max. Marks	5	0	
Part	V	Credit	2		
	Va	lue Added Course I			T
Course Title	Industrial Organisa	ation	L	P	T
Cognitive Lev		K2	30		

Preamble

To make the students to understand about the concept of business, promotion of business enterprise, proper plant location and layout and different types of industrial combinations

Unit I	Introduction to Industrial Organistion and Business	6 Hours
12	Industrial Orgaisation – Meaning – Nature and Scope – Business – Meaning, Features – Factors of Business – Components of Business	
Unit II	Establishing a New Business Enterprise	5 Hours
	Business Enterprise – Motives of entering into new business – Promotion of New Business Enterprise – Important steps in the Promotion of a Business Enterprise	
Unit III	Plant Location	7 Hours
	Introduction – Situations Giving Rise to the Problems of Location – Decisions Regarding the Location of an Industrial Plant –Factors of Production – Primary Factors – secondary Factors – Criteria for Selecting an Appropriate Site	
Unit IV	Plant Layout	7 Hours
	Plant Layout – Meaning and Definition, Features – Objectives – Benefits – Factors influencing the Plant Layout – Types of Layout – Process, Product or Line Layout, Combination of Product and Process Layout, Statioerya Layout	
Unit V	Industrial Combinations	5 Hours
	Meaning and Definition – Types of Combinations – Vertical, Horizontal, Latest or Allied, Circular – Conditions that led to Combinations – Reasons for the Slow Growth of Combinations in India	

Course designed by Dr. M. Inbalakshmi

Pedagogy

Class Room Lectures and Power point presentation

Text Book

1. Inbalakshmi (2014), Industrial Organisation, Kalyani Publishers, Ludhiana.

Reference Books

- 1. Gupta, C.B (2019), Business Organisation and Management, Sultan Chand & Sons, New Delhi.
- 2. Don E. Waldman, Elizabeth, J.Jensen (2016), Pearson Series in Economics

E-Resources

- https://examupdates.in/business-organisation-management-book/ testpot.com
- http://pareto.uab.es/xmg/Docencia/IO-en/IO-Introduction.pdf

Programme	All	Programme Code	ι	ICO	
Course Code	20CCOM41	Number of Hours per Semester	3	0	
Semester	IV	Max. Marks	5	0	
Part	V	Credit	2	1	
	1	Value Added Course II		-	T
Course Title	Advertising and	Sales Promotion	L	P	T
Cognitive Le		K2	30		\perp

To make the students to have practical exposure of Advertising and Sales Promotion.

Unit I	Introduction to Advertising	6 Hours
,	Advertising –Introduction, Characteristic Features, Nature and Scope - Benefits and Criticism of Advertising – Difference between Advertising and Salesmanship	
Unit II	Advertising Media	5 Hours
Can 2	Advertising Media – Factors considered for the selection of an Appropriate Media – Classification of Media – Indoor and Outdoor Advertising Media – Direct Advertising Media – Promotional Advertising Media- Advantages and Disadvantages of each classification	0
Unit III	Advertising Copy	7 Hours
拼	Advertising Copy - Meaning, Definition - Types - Human interest ad copy, Educational ad copy, Reason why? ad cop, Institutional ad copy, Suggestive ad copy, Expository ad copy - Essentials of a Good Advertising Copy - Credibility, Attention, Assurance of Benefit, Brief and Clear, Apt and Conforming-Preparation of Advertisement Copy	
Unit IV	Sales Promotion	7 Hours
	Sales Promotion – Meaning and Definitions – Characteristics - Objectives - Role – Benefits - Limitations	
Unit V	Sales Promotion Techniques	5 Hours
	Sales Promotion Techniques – Discounts – Time-limited offers –Seasonal promotions – 1+1=3. Holiday promotions, Gifts, Contests, Reward points, Special prices, First-purchase coupons, Free Shipping, Refunds, Product combinations, Usable benefits	

Course designed by Dr. M. Inbalakshmi

Pedagogy

Class Room Lectures and Power point presentation

Text Book

1. Inbalakshmi M, Dharani N, (2015), Advertising and Salesmanship, Kalyani Publishers, Ludhiana.

Reference Books

1

2. Don E. Waldman, Elizabeth, J.Jensen (2016), Pearson Series in Economics

E-Resources

- https://examupdates.in/business-organisation-management-book/ testpot.com
- https://www.geektonight.com/advertising-and-sales-promotion-pdf/

Under Choice Based Credit System (CBCS)

Under Graduate Courses

- G.T.N. Arts College (Autonomous), a pioneer in higher education institution in India, strives to work towards the academic excellence. The new Outcome Based Education (OBE) system allows enhanced academic mobility and enriched employability for the students. At the same time this system preserves the identity, autonomy and uniqueness of every department and reinforces their efforts to be student centric curriculum designing and skill imparting. This new system will work concertedly to achieve and accomplish the following objectives:
- Optimal utilization of resources both human and material for the academic flexibility leading to exemplary outcome.
- 2. Students experience or enjoy their choice of courses and credits for their horizontal mobility.
- The existing curricular structure as specified by TANSCHE and other higher educational institutions facilitate the Credit-Transfer Across the Disciplines (CTAD) – a uniqueness of the Choice Based Credit System.

Course Pattern for B.Com CA

The Under graduate degree course consists of five vital components. They are as follows:

Part I Language (Tamil / French)

Part II English

Part III Core Course (Theory, Practical, Electives, Allied, Project and Internship).

Part IV Skill Based, Non Major Electives, Environmental Studies, Value Education and Self Study

Part V Physical Education (Non Semester) and Extension Activities.

Objectives

The Syllabus for **B.Com CA** Programme under semester system has been designed on the basis of Choice Based Credit System (CBCS), which would focus on job oriented programmes and value added education. It will come into effect from June 2020 onwards.

Eligibility

Candidates should have passed the Higher Secondary Examination, Government of Tamil Nadu or any other examination accepted by the syndicate of Madurai Kamaraj University as equivalent there to.

Duration of the Course

The students who join the **B.Com CA** Programme shall undergo a study period of three academic years – Six semesters.

SUMMARY OF HOURS AND CREDITS UG COURSES

Part	Semester	Specification	No. of Course	Hrs	Credit	Total credits	
Ī	I-II	Languages (Tamil / French)	2	8	6	6	
п	1-II	English	2	12	6	6	
ш	I-VI	Core Courses Theory Practical On the Job Training Project	14 5 1	110	90	114	
	V-VI	Core Elective Courses	2	10	8	114	
	III-VI	Allied Courses	4	24	16		
	III-VI	Skill Based Courses	-4	8	8		
IV	III & IV	Self Study Courses 1. Soft Skills 1 2. Soft Skills II	2	(*)	4	20	
	I & II	Non -Major Electives	2	4	4		
	1&II	Value Education Environment and Gender Studies	2	4	4		
v	I-IV	Physical Education Practical (Non-Semester Course)	1	97	2	4	
		Extension Activities	1	(40	2		
		Total		180	150	150	

Allied Courses

There will be FOUR Allied courses to fulfill the B.COM CA programme during three years.

Subject	Maximum Marks	Year of Study
Business Statistics	100	п
Business Mathematics	100	п
Research Methods in Commerce	100	Ш
Business Economics	100	ш

The Syllabus for the Allied Courses can be obtained from the Allied Department of Economics.

Allied Courses Offered by the Department of Commerce with CA to Department of Computer Application

Sem	Part	Study Component	Course Code	Course Title	Hrs	Credit
ш	Ш	Allied Course I	20UCCA31	Computer Based Financial Accounting	4	4
IV	111	Allied Course II	20UCCA41	Cost and Management Accounting	4	4

Extra Credit Value Added Courses

The Department of Commerce with Computer Application has offered the following Value Added Courses for UG students.

- (i) Advertising and Sale Promotion
- (ii) Industrial Organization
- (iii) Business Ethics
- (iv) Interview Techniques

Extra Credit Self Paced Courses for Advanced Learners

The Department of Commerce with Computer Application has offered the following Extra Credit Self Paced Courses to enlighten the advanced learners. The department persuades the students to take virtual courses on MOOCS, SWAYAM and NPTEL.

- a. Tally ERP 9
- b. Trading skills
- c. Consumer Rights

DEPARTMENT OF COMMERCE WITH COMPUTER APPLICATION Course Pattern – from 2020-2021

Sem	Part	Study Component	Course Code	Course Title	Hours	Credit
	1	Tamil-I	20UCCL11/ 20UCOL11	காப்பீடு	4	3
	П	English - I	20UENL11	English Language through Literature I	6	3
		Core Course I	20UCCC11/ 20UCOC11	Principles of Accounting	6	5
I	3111	Core Course II	20UCCC12	Information Technology for Business Process	5	4
	1	Core Practical I	20UCCC1P	Business Application Lab	5	4
	IV	Non Major Elective Course I	20UCCN11/ 20UCON11	Business Organisation	2	2
	7000	Value Education	20UVEV11	Value Education	2	2
				TOTAL	30	23
	ı	Tamil-II	20UCCL21/ 20UCOL21	நிறுமச்சட்டங்கள்	4	3
	п	English-II	20UENL21	English Language through Literature - II	6	3
		Core Course III	20UCCC21/ 20UC0C21	Financial Accounting	6	5
П	Ш	Core Course IV	20UCCC22	Object Oriented Programming with C++	5	4
		Core Practical II	20UCCC2P	Object Oriented Programming with C++ Lab	5	4
	IV	Non Major Elective Course II	20UCCN21/ 20UCON21	Modern Banking	2	2
	10	Environment & Gender Studies	20UEGS21	Environment & Gender Studies	2	2
	V	Extension Activity	20UPEV2P	Physical Education – Practical (Non Semester Course)	::	2
				TOTAL	30	25
		Core Course V	20UCCC31/ 20UCOC31	Business Accounting	6	5
		Core Course VI	20UCCC32	Multimedia	5	4
	ш	Core Practical III	20UCCC3P	Multimedia Lab	5	4
ш		Core Course VII	20UCCC33/ 20UCOC33	Costing	6	5
		Allied Course I	20UCCA31/ 20UCOA31	Business Statistics	6	4
		Skill Based Course I	20UCCS31	Business Communication	2	2
	IV	Self Study Course I	20USSS31	Soft Skill I		2
				TOTAL	30	26

		Overall T	otal for All VI S	7. C.	180	150
				TOTAL	30	24
	IV	Skill Based Course IV	20UCCS62	Introduction to Cloud Computing	2	2
		Allied Course IV	20UCCA61	Business Economics	6	4
		Course II	20UCCE63	Computer Networks		
VI	Core Elective	20UCCE62	Software Project Management	5	4	
VI			20UCCE61	Operating System		
	Ш	On the Job Training Project	20UCCC6P	On the Job Training Project	5	5
		Core Course XIV	20UCCC62/ 20UCCC63	Industrial Law	6	4
		Core Course XIII	20UCCC61/ 20UCCC62	Income Tax Law and Practices - II	6	5
				TOTAL	30	24
V	IV	Skill Based Course III	20UCCS51/ 20UCOS51	Elements of E-Commerce	2	2
		Allied Course III	20UCCA51	Research Methodology	6	4
		Course I	20UCCE53	Python		
		Core Elective	20UCCE52	Java	5	4
	Ш	29-00-00 AT 2-1111 (C.0224-1.01)	20UCCE51	Visual Basic .Net	550.	
	ш	Core Practical V	20UCCC5P	VB.Net/Java/Python Lab	5	4
		Core Course XII	20UCCC52/	Business Law	6	4
		Core Course XI	20UCCC51/ 20UCOC52	Income Tax Law and Practices -1	6	5
				TOTAL	30	28
	v	Extension Activities		Extension Activities	•	2
		Self Study Course II	20USSS41	Soft Skill II	*	2
	IV	Skill Based Course II	20UCCS42	Elements of Tally ERP 9	2	2
	, ш	Allied Course II	20UCCA41/ 20UCOA41	Business Mathematics	6	4
V		Core Practical IV	20UCCC4P	Relational Database Management System Lab	5	4
		Core Course X	20UCCC43	Relational Database Management System	5	4
		Core Course IX	20UCCC42	Banking Theory Law and Practices	6	- 5
		Core Course VIII	20UCCC41/ 20UCOC41	Partnership Accounting	6	5

B.Com CA	Programme Code	UCC
20UCCCE51	Number of Hours/Cycle	5
V	Max. Marks	100
ш	Credit	4
Core F	Elective Course I) —
	VISUAL BASIC.NET	
Up to K3		
	V III Core F	20UCCCE51 Number of Hours/Cycle V Max. Marks III Credit Core Elective Course I VISUAL BASIC.NET

Students are able to understand the basic concepts of Visual Basic.Net programming, its elements, dialog boxes and files with OOPS concepts.

Unit-I	Essentials of Visual Basic.Net	15 Hours
	What's New in VB.NET - Upgrading form Visual BasicNET	
	Framework and Common Language Runtime - Building VB.NET	
	applicationsNET IDE - Visual Basic Language - Keywords- Data	
	types- Declaring Variables- Operators-Conditional Structures and	
	Control Flow: Making decision with IF - and IF -Else Statement -	
	using Select Case - Making selections with switch and choose -	
	Looping using Do Loop - For Loop -for each- while loop.	
Unit-II	Elements of Visual Basic.Net	14 Hours
	Properties- Events and Methods of Form- Label- Text Box- List Box-	
	Combo Box- Radio Button- Button- Check Box- Progress Bar- Date	
	Time Picker-Calendar- Picture Box- HScrollBar- VScrollBar- Group	
	Box- ToolTip- Timer.	
Unit-III	Functions, Built-in Dialog Boxes, Menus and Toolbar	16 Hours
	Menus and Toolbars- Menu Strip-Tool Strip, Built-in Dialog boxes-	
	Open File Dialogs, Save File Dialogs, Font Dialogs, Color Dialogs,	
	Print Dialogs- The MsgBox () function - The InputBox () function-	
	Functions and Procedures- Built-in Functions-Mathematical and	
	String Functions-User defined Functions and Procedures.	
Unit-IV	Object-oriented programming and Files	15 Hours
	What is OOP? - Implementing OOPS - Inheritance overriding -	
	Collections. Working with files: Introduction to files - classification	
	of files - Handling files and folders using functions - File processing	
	using streams. Advanced Techniques in Visual Basic.NET: Single	
	document interface and multiple document interface.	
Unit- V	Data Access with ADO.NET	15 Hours
	What are databases? - Connections, Data Adapters and Datasets -	
	Accessing Data with the Server Explorer - Accessing Data with Data	
	Adaptors and Datasets - Working with ADO.Net - Overview of	
	ADO.Net Objects.	

Pedagogy

Chalk and Talk Method / Demonstration / PowerPoint Presentation / Seminar / Quiz / Discussion / Assignment

Text Book(s):

- 1. Steven Holzner, (2005), "Visual Basic NET Black Book", Dreamtech Press, 1st Edition, New Delhi.
- Jeffrey R.Sharpiro (2017), "The Complete Reference VISUAL BASIC.NET", Tata McGraw Hill, 1st. Edition, New Delhi.

Reference books:

- Jeffrey Kent, (2013), "Visual Basic.Net A beginner's guide", Tata McGraw Hill, 1st Edition, New Delhi.
- 2. Muthu, (2008), "Visual Basic .Net", Tata McGraw Hill, 2nd Edition, New Delhi.
- 3. Anne Prince, (2003), "Murach's Beginning Visual Basic.Net", BPB Publications, 2nd Edition, Noida.
- 4. Steven holzner, (2005), "Visual Basic .Net Programming Black Book", Dreamtech Press.
- 5. Gary cornell, (1998), "Visual Basic 6 from the Ground Up", Osbrone Mcgraw Hill.

E-Resources:

- https://www.tutorialspoint.com/vb.net/index.htm
- https://www.javatpoint.com/vb-net
- https://docs.microsoft.com/en-us/dotnet/visual-basic/
- https://www.guru99.com/vb-net-tutorial.html
- https://www.udemy.com/course/learning-visual-basic-net/

Course Outcomes

After the completion of the course, students will be able to

CO1	Summarize the essential concepts of VB.Net
CO2	Illustrate the use of elements of VB.Net.
CO3	Make use of the concepts of dialog boxes and functions.
	Manipulate file operations with OOPs concepts
CO5	Develop programs using Database connectivity

Mapping of Programme Specific outcomes with Course Outcomes

PSO/C 0	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSOII	PSO12
CO1	3	3	2	3	1	0	2	0	0	0	0	2
CO2	3	3	2	2	1	0	1	0	0	0	0	2
CO3	3	3	3	2	1	0	1	0	0	0	0	2
CO4	3	3	3	3	1	0	1	0	0	0	0	2
CO5	3	3	3	3	1	0	1	1	1	1	0	2

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Secti	on A	Section B	Section C
Units	COs	K – Level	МС	Qs	Either/or Choice	Open Choice
		Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions
1	CO1	Up to K2	2	K1 & K1	2(K2&K2)	K2
2	CO2	Up to K3	2	K1 & K1	2(K2&K2)	K3
3	CO3	Up to K3	2	K1 & K1	2(K2&K2)	K3
4	CO4	Up to K3	2	K1 & K1	2(K3&K3)	K3
5	CO5	Up to K3	2	K1 & K1	2(K3&K3)	K3
No of Q asked	uestions	to be	10		10	5
No of Questions to be answered			10		5	3
Marks for each Question			rks for each Ouestion 1		4	10
Total Marks for each Section			10		20	30

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C Open Choice	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10	-		10	10%	10%
K2		6	1	46	34%	34%
К3	-	4	4	54	56%	56%
Total Marks	10	40	50	100	100%	100%

K2 – Basic understanding of facts and stating main ideas with general answers K3 – Application oriented – Solving problems

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I- Essentials of Visual Basic.Net	 a. What's New in VB.NET – Upgrading form Visual BasicNET Framework and Common Language Runtime – Building VB.NET applications – .NET IDE b. Visual Basic Language – Keywords– Data types- Declaring Variables- Operators- c. Conditional Structures and Control Flow: Making decision with IF – and IF –Else Statement – using Select Case d. Making selections with switch and choose - Looping using Do Loop – For Loop -for each- while loop. 	5 3 4 3	PPT slides Assignment
Unit II- Elements of Visual Basic.Net	a. Properties- Events and Methods of Form- Label- Text Box b. List Box- Combo Box- Radio Button-Button- Check Box c. Progress Bar- Date Time Picker-Calendar- Picture Box d. HScrollBar- VScrollBar- Group Box-ToolTip- Timer.	4 4 3 3 3	PPT slides Lab Demo
Unit III - Functions, Built-in Dialog Boxes, Menus and Toolbar	a. Menus and Toolbars- Menu Strip- Tool Strip b. Built-in Dialog boxes- Open File Dialogs, Save File Dialogs, Font Dialogs, Color Dialogs, Print Dialogs- c. The MsgBox () function – The InputBox () function- Functions and Procedures- d. Built-in Functions-Mathematical and String Functions- e. User defined Functions and Procedures.	3 4 3 2	PPT slides Lab Demo
Unit IV- Object- oriented programming and Files	a. What is OOP? – Implementing OOPS – Inheritance overriding – Collections. b. Working with files: Introduction to files – classification of files – Handling files and folders using	5	PPT slides Assignment Lab Demo

	functions – File processing using streams. c. Advanced Techniques in Visual Basic.NET: Single document interface and multiple document interface.		
Unit V- Data Access with ADO.NET	 a. What are databases? – Connections, Data Adapters and Datasets – b. Accessing Data with the Server Explorer c. Accessing Data with Data Adaptors and Datasets d. Working with ADO.Net – Overview of ADO.Net Objects. 	4 3 4 4	PPT slides Assignment Lab Demo

Course Designed By: 1. Mrs. Balasaranya

B.Com	UCO /	UCO / UCC		
20UCOC52/ 20UCCC51	Number of Hours/Cycle	Number of Hours/Cycle 6		
v	Max. Marks			
Ш		5		
Co				
Income T	ax Law and Practices – I	L	Ť	P
	Up to K4	90	_	-
	V III	V Max. Marks III Credit Core Course XIV Income Tax Law and Practices – I	V Max. Marks 10 III Credit 5 Core Course XIV Income Tax Law and Practices – I L	V Max. Marks 100 III Credit 5 Core Course XIV Income Tax Law and Practices – I L T

Providing an in depth knowledge for calculation of different heads of taxable

income under income tax and computation of total income.

Unit I	Introduction	18 Hours
	Brief history of income tax in India- basic concepts - agricultural income - previous year, assessment year - Assessee - person - income - residential status of an assessee - incidence of tax - incomes exempted from tax.	
Unit II	Income from Salaries	18 Hours
	Income from salary – definition – computation of salary income – salary u/s 17(1) – allowances – perquisites and their types and treatment – profit in lieu of salary – deductions u/s 16.	
Unit III	Income from House Property	18 Hours
	Income from house property – basis of charge – exemptions regarding income from house property – annual value – computation of annual value – let out and self-occupied – deduction u/s24.	
Unit IV	Income from Business/Profession	18 Hours
	Income from profits and gains of business/profession – computation of income – deduction expressly allowed – expenses expressly disallowed – expenses not deductible in certain cases – depreciation.	A
Unit V	Income from Capital Gains and Other Sources	18 Hours
	Capital gains – capital asset – transfer of capital asset – cost of acquisition – cost inflation index - computation of capital gains – special cases –capital gains exempt from tax u/s 54 – tax on capital gains. Income from other sources – income u/s 56(2) – deductions under 57 – amount not deductible u/s 58.	

Problem 80%, Theory 20%

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience discussion

Text Book

1. Mehrotra. H.C., and Goyal S.P.(Current Assessment year), Income Tax Law and Accounts. Sahitya Bhawan Publication, New Delhi.

Reference Books

1. Gaur, V.P. & Narang D.P (Current Assessment year), Income Tax - Law and Publication, New Delhi. Practice, Kalyani

2. Dinkar Pagare (Current Assessment year), Income Tax - Law and Practice, Sultan Chand & Sons, New Delhi.

3. Reddy, T.S. & Hariprasad (Current Assessment year), Income Tax Law and Practice, Margam publication, Chennai.

E-Resources

- https://www.incometaxindiaefilling.gov.in/home
- https://icmai.in/studentswebsite/studymat.php
- https://www.icsi.edu/media/webmodules/DIRECTTAXLAWANDPRACTICEBO OK.pdf
- https://www.icai.org/post.html?post_id=16945
- http://cbseacademic.nic.in/web_material/Curriculum/Vocational/2018/Taxation/Taxation%20XI%20.pdf

Course Outcomes

After completion of this course, the students will be able to:

CO1	Explain the basic concepts of income tax.						
CO2	Prepare the statement of income from salary of individuals.						
CO3	Determine the annual values and income from house property.						
CO4	Examine the tax provisions in the computation of business and professional income.						
CO5	analyse the tax provisions in computing capital gains and income from other						

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO
	1	2	3	4	5	6	7	8	9	10	11	12
CQ1	3	2	3	2	2	2	1	3	2	2	3	3
CO2	3	2	3	2	2	2	1	3	1	1	3	
CO3	3	2 .	3	2	1	1	2	3	1			2
CO4	3	1	3	2	2					1	2	2
C05	3	1	2		1 4 /3	1	1	, 3	1	1	2	3
3. High		1	3	1	1	1	1	3	1	1	2	2

Articulation Mapping - K Levels with Course Outcomes (COs)

2			Section A	Section B	Section C	
Units	COs	K-Level	MCQs	Either/ or Choice	Either / or Choice	
*			No. of Questions	No. of Questions	No. of Question	
1	CO1	Up to K2	2(K1&K2)	2(K2&K2)	1(K2)	
2	CO2	Up to K3	2(K1&K2)	2(K2&K2)	1(K3)	
3	CO3	Up to K3	2(K1&K2)	2(K2&K2)	1(K3)	
4	CO4	Up to K4	2(K1&K2)	2(K3&K3)	1(K4)	
5	CO5	Up to K4	2(K1&K2)	2(K3&K3)	1(K4)	
No of Q	uestions	s to be asked	10	10	5	
No of Questions to be answered Marks for each Question			10	5	3	
			1	4	10	
Total marks for each Section			10	20	30	

K1 - Remembering and recalling facts with specific answers

K2 - Basic understanding of facts and stating main ideas with general answers

K3 - Application oriented - Solving problems

K4 - Examining, analyzing, presentation and make inferences with evidences

Distribution of Section - wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
K1	5	•	#V F	5	- 5%	5%
K2	5	24	10	39	39%	39%
К3	_	. 16.	20	36	36%	36%
K4		-	. 20	20	20%	20%
Total Marks	10	40	50	100	100%	100%

*	eccon	D	OB
	eccon		2111

	Lesson Plan	77	rs Mode
Unit I	Introduction	Hou	
Omex	a. Income tax Act, 1961- Definition- Basis charge-	of 3	Classroom Lectures,
-	b. Residential status- Capital and revenue items	- 4	Assignment
	c. Exempted income	11	PPT
	c. Exempted income		Presentation
		1	Quiz and
3			Seminar
Unit II	Income From Salary	Hour	Mode
80-419-444-380	a. Allowances	. 5	Classroom
	b. Perquisites and their types and treatment	- 5	Lectures,
	profits in lieu of salary		Assignments
	c. Income from salary-Computation of Salary	10	PPT
	income	(6)	Presentation
	5 d		Quiz and
** . ***			Seminar.
Unit III	Income from House Property	Hours	Mode
	a. Income from house property- annual value -	3	Classroom
7.	determination of annual value-		Lectures,
	b. Deduction u/s 24	3	Assignments
IE:	c. Let out and self occupied Computation of	10	PPT -
	House property income	19	Presentation
	a * 1 = *		Quiz and
Unit IV	Income from Business /Profession	T.	Seminar.
	a. Income from profits and gains of business	Hours 8	Mode
8, 1	b. Income from profits and gains of profession	6	Classroom
	c. computation of depreciation allowable	4	Lectures,
	1 anomable	4	Assignments
e c			PPT
			Presentation.
Unit V			Quiz and
<u></u>	Income from capital gain and other sources	Hours	Seminar
	a. Capital asset – basis of charge	2	Mode
F	o. computation of capital gains-	6	Classroom
	c. capital gains exempt from tax u/s 54	4	Lectures,
4	u. Income from other sources	6	Assignments PPT
	9 I I I I	9	(기요하다) 목
	# P		Presentation, Quiz and
urse designe	d by Dr. R. Balasubramani		Quiz and Seminar.
0	-, A. Dalasubramani		ociiiiiar.

Programme	B.Com / B.Com (CA)	B.Com / B.Com (CA) Programme Code			
Course Code	20UCOC53/ 20UCCC52	Number of Hours/Cycle	6		
Semester	V	V Max. Marks		100	
Part	III Credit		4		-
	Core Cou	rse XV			
Course Title		s Law	L.	T	P
Cognitive Level Up to K3					

This syllabus enables the students to process a test which caters to their needs in the relating to Business laws which set out the basic of Laws simply and clearly.

Unit I	The Indian Contract Act 1872	18 Hours
	The Indian Contract Act 1872 – Introduction – Definition of	
	contract - Essential Elements of valid contract - kinds of contract	
	and agreements-Sources of Indian Mercantile law.	
Unit II	Offer and Acceptance	18 Hours
	The Proposal or offer - Legal rules regarding a valid offer -	
8.5	Lapse and Revocation of offer - The Acceptance and legal rules	.*.
	regarding a valid Acceptance. Communication of offer,	
×	acceptance and revocation.	
Unit III	Consideration, Capacity of Parties and Free consent	18 Hours
	Definition of Consideration; Essentials of valid consideration	
	- Exception to the rule "No consideration No contract"	
	Capacity of Parties: Minor's agreement; persons of unsound	
	mind; Disqualified persons.	
)×	Free consent: Effect of coercion, undue influence,	
	Misrepresentation; Distinction between fraud and	25
	misrepresentation. Mistake of a law and mistake of fact.	
Unit IV	Discharge of Contract and Contract of Indemnity and	18 Hour
F	Guarantee	
	Discharge of Contract: By performance, by mutual consent,	
	by Subsequent or Supervening impossibility or illegality, by lapse	
	of time, by operation of law, by Breach of contract and remedies	
	for breach of contract.	5.
	Contract of Indemnity and Guarantee: Rights of Indemnity	
4 9	holder and his liability - Definition of guarantee - Nature and	<u> </u>
	extent of surety's liability and kinds of guarantee.	10 TY
Unit V	Law relating to Bailment and Pledge and Sale of Goods Act	18 Hour
	Law relating to Bailment, Pledge: Definition of Bailment Essentials and different kinds of bailment Rights and duties of	
81	Essentials and different kinds of bailment regines and duties of bailor and Bailee – Termination of bailment – Finder of low	
	Deficition of pledge Essentials, Rights and Duties of	
	Diedgee I sw of agency Essentials of Agency -	
H¢	CA	
	- Coode Act: Wealing and Classification of goods -	1
5	Contract of sale – Sale and agreement to sell.	
	Contract of Sale Sale	

gy Class Room Lectures, Power point presentation, Quiz, Assignments and Practice Pedagogy paper

Text Books

ooks
1. Pillai, R.S.N. & Bhagavathi (2007) Business Law S.Chand & Conpany Ltd, New Delli 2. Teipal Sheth (2012) Business Law Pearson Education, Chennai,

Reference Books

1. Shukla, M.C. (2012) Mercantile Law, Vikas Publishing Co, New Delhi 2.Sreenivasan M.R. (2007) Commercial Law and Industrial Law, Margham

Publications, Chennai

3. Kapoor, N.D. (2014) Elements of Mercantile Law, Sultan Chand & Sons, New

4. Business Laws, S.Kathiresan, Dr. V. Radha (2009), Prasanna Publishers.

5. Business Law, Frank B. Cross Kenneth W. Clarkson, Roger LeRoy Miller, (2011)

6. Taxmann's Business Laws-B.Com (2020) Sushma Arora

E-resources

https://guides.baker.edu

· https://www.tutorials.com

https://www.investopedia.com

https://study.com

Course Outcome

After completion of this course, the students will be able to:

CO1	explain statutory provisions in contracts.
CO2	summarize the legislations related to offer and acceptance
CO3	outline the legislations related to Consideration, Capacity of Parties and Free consent.
CO4	explain the legal framework in discharge and remedies for breach of contract, rules related to indemnity and guarantee
CO5	develop the knowledge Law relating to Bailment, Pledge and provisions related to the sale of goods.

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6	PS O7	PS O8	PS O9	PSO 10	PSO 11	PSO 12
CO 1	3	2	3 (1	2	3	1 .	2	1.	1	1	1
CO 2	2	1	2	1	3	3	2	1	1.	. 1	1	3
CO 3	3	.1	i	2	1	2	3	1	1	1	1	2
CO 4	2	1	1 34	2	2	1	1	2	1	1 =	1	1
CO 5	2	2	2	1	1	3	1	1	1	1	1	3

3. High; 2. Moderate; 1.Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Section A	Section B	Section C Open Choice	
Units	COs	K-Level	MCQs	Either/ or Choice	Open Chor	
S min	COS	K-Level	No. of Questions	No. of Questions	No. of Questions	
1	CO1	Up to K2	2(K1&K2)	2(K1&K1)	1(K2)	
2 .	CO2	Up to K3	2(K1&K2)			
3	CO3	Up to K3	2(K1&K2)	2(K2&K2)	1(K3)	
4	CO4	Up to K3	2(K1&K2)	2(K3&K3)	1(K3)	
5	CO5	Up to K2	2(K1&K2)	2(K2&K2)	1(K2)	
No of Questions to be asked		10	10	5		
No of Questions to be				5	3	
answered Marks for each Question		1	4	10		
Total Marks for each Section					30	

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers
K3 – Application oriented – Solving problems

Distribution of Section - wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
		8	-	13	13%	13%
K1	3	8	20	49	49%	49%
K2	. 5	24	20	1 1	A61326	E.
A		8	30	38	- 38%	38%
K3	•	10	-50	100	100%	100%
Total Marks	10	40	30	100	3	9 - 9

Lesson Plan

	Lesson Tian	18 Hours	Mode	
Unit I	The Indian Contract Act 1872	2	Classroom	
	a Introduction	4	Lectures,	
	f contract	4	Assignments	
	b. Definition of contract c. Essential Elements of valid contract	4	PPT	
	d. Kinds of contract and agreements e. The Indian contract Act 1872	4	Presentation	
	e. The Indian contract	18 Hours	Mode	
Unit II	Offer and Acceptance	4 .	Classroom Lectures,	
	a. The Proposal or Offer	5		
¥	b. Legal rules regarding a varian of offer	3	Assignments	
	d. The acceptance and legal rules regarding a	. 3	PPT Presentation	
	valid Acceptance. e. Communication of offer, acceptance and revocation.	3	Quiz, Seminar,	

			Assignment		
Unit III	Consideration, Capacity of Parties and Free Consent	18 Hours	Mode		
	a. Definition of Consideration- Free consent: Effect of coercion, undue influence, Misrepresentation.	4	Classroom Lectures, Assignments		
	b. Essentials of valid consideration	. 4	PPT		
	c. Exception to the rule "No consideration No contract", Capacity of Parties	4	Presentation Quiz,		
	d. Minor's agreement; persons of unsound mind	3	Seminar,		
	e. Disqualified persons.	3	Assignment		
Jnit IV	Discharge of Contract and Contract of Indemnity and Guarantee	18 Hours	Mode		
	a. Discharge of contract; By performance, by mutual consent, by Subsequent or Supervening impossibility	4	Classroom Lectures, Assignments		
	b. Illegality, by lapse of time, by operation of law, by breach of contract and remedies for breach of contract	4	PPT Presentation Quiz, Seminar, Assignment		
	c. Contract of Indemnity and Guarantee: Rights of Indemnity holder and his liability	4			
	d. Definition of guarantee and its nature	3			
	e. Extent of surety's liability and kinds of guarantee	3	78 Th. 157		
Unit V	Law relating to Bailment and Pledge and Sale of Goods Act	18 Hours	Mode		
	a. Definition of Bailment Essentials and different kinds of bailment Rights and duties of bailor and Bailee	3	Classroom Lectures, Assignments		
	b. Definition of pledge Essentials, Rights and Duties of pledger and pledgee.	4	PPT Presentation		
	c. Law of agency Essentials of Agency	3	Quiz,		
	d. Classification of goods, Contract of sale	4	Seminar,		
	e. Sale and agreement to sell.	4	Assignment		

Course designed by Mr.V. Abraham - Lawyer

Reference Books

1. Shukla, M.C. (2012) Mercantile Law, Vikas Publishing Co, New Delhi

2. Sreenivasan M.R. (2007) Commercial Law and Industrial Law, Margham Publications, Chennai

3. Kapoor, N.D. (2014) Elements of Mercantile Law, Sultan Chand & Sons, New Delhi.

4. Business Laws, S.Kathiresan, Dr. V. Radha (2009), Prasanna Publishers.

5. Business Law, Frank B. Cross Kenneth W. Clarkson, Roger LeRoy Miller, (2011)

6. Taxmann's Business Laws-B.Com (2020) Sushma Arora

E-resources

https://guides.baker.edu

· https://www.tutorials.com

• https://www.investopedia.com

https://study.com

Course Outcome

After completion of this course, the students will be able to:

	le le destate de la constante
CO1	explain statutory provisions in contracts.
CO2	summarize the legislations related to offer and acceptance
CO3	outline the legislations related to Consideration, Capacity of Parties and Free consent.
CO4	explain the legal framework in discharge and remedies for breach of contract, rules related to indemnity and guarantee
CO5	develop the knowledge Law relating to Bailment, Pledge and provisions related to the sale of goods.

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6	PS O7	PS O8	PS O9	PSO 10	PSO 11	PSO 12
со	3	2	3	1.	2	3	1 -	2	1	1	1	1
1. CO		1	2	1	3	, 3	2	1	1	1	1	3
2 CO	2	1	(8)	2	1	2	3	1	1	1	1	2
3	3	1	1	+-	2	1	1	2	1	1	1	1
CO 4	2	1.	1	2		+	1	1	1	1	1	2
CO 5	2	2	2	- 1	1	3	1	<u> </u>				3

3. High; 2. Moderate; 1.Low

Programme	B. Com CA	Programme Code	UCC
Course Code	20UCCE5P	Number of Hours/Cycle	5
Semester	V	Max. Marks	100
Part	III	Credit	4
	C	ore Practical	
Course Title	VB.Net Lab		
Cognitive Level	Up to K3		

To give hands on training in Windows Programming with VB.NET and to aim at making experts in building and experiment with enterprise applications.

List of Practical

- 1. Write a VB.Net program to understand the properties, events, methods of form and other tools.
- 2. Design an arithmetic calculator in VB.Net.
- Create a form using check box and option button to give effects of font such as bold, italic, underline for the text entered in rich text box in VB.Net.
- 4. Create a VB.Net program with data time picker and calendar controls
- 5. Create a simple application with menus and tool strip in VB.Net.
- Design a student mark sheet that displays all subject marks and calculate total and percentage in VB.Net.
- 7. Create a simple application to implement string and math functions in VB.Net.
- 8. Create a simple note pad application in VB.Net.
- 9. Design an application that uses directory searcher, folder browser and file toolsin VB.Net
- 10. Design an application with data grid view
- 11. Develop a VB.Net program to calculate employee payroll processing with database connectivity.
- 12. Develop a VB.Net program to maintain student profile in ADO.Net

Course Designed By: Mr. L. Soosai Suresh

Programme	B.Com CA	Programme Code	UCC
Course Code	20UCCE52	Number of Hours/Cycle	5
Semester	V	Max. Marks	100
Part	Ш	Credit	4
	Core	Elective Course I	
Course Title		JAVA PROGRAMMING	
Cognitive Level	Up to K3		

Student can understand the basic concepts of Java Programming and acquire the knowledge on Object Oriented Concepts, basic ideas of Applet and Abstract Window Toolkit.

Unit-I	Introduction	15 Hours
	Java Evolution: Java History – Java Features - How java differs from C and C++. Overview of Java Language - Data Types-Variables and Arrays. Operators – Control Statements-Selection Statements-Iterative Statements-Jump Statements.	
Unit-II	OOPs Concepts	12 Hours
	Classes and Objects: Constructors-The keyword-The finalize () method-Overloading methods-Inheritance-Super Class-Method Overriding - String Handling- String length-Special String operations-Character Extraction-String Comparison-Searching Strings-Modifying a String.	
Unit-III	Package and Interfaces	18 Hours
	Packages-Importing Packages-Interfaces-Exception Handling: Fundamentals-Exception Types-Nested try statements-throw-throws-finally-Built-in Exceptions. Multithreaded Programming- Thread Model-Thread Priority-Thread Class and Runnable interface — The Main Thread-Creating Thread-Implementing the 'Runnable' Interface-Extending Thread.	
Unit-IV	Applet	15 Hours
	The Applet class - Applet Basics - Two types of Applets - Applet Architecture - An Applet Skeleton- Simple applet display methods- Requesting repainting- A simple banner Applet- The HTML Applet tag- Passing parameters to Applet.	
Unit- V	AWT	15 Hours
	AWT Classes-Window Fundamentals-Working with frame Windows-Creating a frame window in an Applet-working with graphics-working with colors- Setting the paint mode-working with font.	

Pedagogy

Chalk and Talk Method / Demonstration / PowerPoint Presentation / Seminar / Quiz / Discussion / Assignment

Text Book:

 Herbert Schildt, (2017), "Java: The Complete Reference", Tata Mc Graw Hill Publishing Company Limited, New Delhi, 10th Edition.

Reference Books:

- E. Balagurusamy, (2019), "Programming with Java A Primer", Tata Mc Graw Hill Publishing Company Limited, New Delhi, 6th Edition.
- Herbert Schildt, (2014), "Java: A Beginner's Guide", Tata Mc Graw Hill Publishing Company Limited, New Delhi,, 6th Edition.
- Sachin Malhotra & Saurabh Chaudary, (2013), "Programming in Java", Oxford University Press, 2nd Edition.
- Horstmann & Cornell, (2012), "Core Java Volume-I Fundamentals", Pearson Education, New Delhi, 9th Edition.
- D.T. Editorial Services, (2015) "Java 8 Programming Black Book", Dream Tech Publication, New Delhi.

E-Resources

- https://www.programiz.com/java-programming
- https://www.tutorialspoint.com/java
- https://www.javatpoint.com/
- https://www.w3schools.com/java/java_intro.asp
- https://beginnersbook.com/java-tutorial-for-beginners-with-examples/

Course Outcomes

After the completion of the course, students will be able to

CO1	State the basic concepts of Programming Language.
CO2	Demonstrate the Oops and String Concepts in Java Programming.
CO3	Make use of the concepts of Interface and Packages to implement in Java.
CO4	Prepare programs using Applet.
CO5	Develop programs using AWT.

Mapping of Programme Specific outcomes with Course Outcomes

PSO/C 0	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	2	2	1	2	1	1	2	0	0	0	0	2
CO2	3	2	2	2	2	0	1	0	0	0	0	2
CO3	3	2	2	2	2	0	1	0	0	0	0	2
CO4	3	2	2	2	1	0	1	1	1	1	0	2
CO5	3	2	2	2	1	0	1	1	1	1	0	2

^{3.} High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Secti	on A	Section B	Section C	
Units COs		K -	MCQs		Either/or Choice	Open Choice	
		Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
4	CO1	Up to K2	2	K1 & K1	2(K2&K2)	K2	
2	CO2	Up to K2	2	K1 & K1	2(K2&K2)	K2	
3	CO3	Up to K3	2	K1 & K1	2(K3&K3)	K3	
-4	CO4	Up to K3	2	K1 & K1	2(K3&K3)	K3	
5	CO5	Up to K3	2	K1 & K1	2(K3&K3)	K3	
No of Q asked	uestions	to be	10		10	5	
No of Questions to be answered		10		5	3		
Marks for each Question		1		4	10		
Total Marks for each Section		10		20	30		

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C Open Choice	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10			10	10%	10%
K2		4	2	46	46%	46%
К3		6	3	54	54%	54%
Total Marks	10	40	50	100	100%	100%

K2 – Basic understanding of facts and stating main ideas with general answers K3 – Application oriented – Solving problems

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I-	a) Java Evolution: Java History - Java	4	PPT slides
Introduction	Features - How java differs from C and		Assignment
	C++. b) Overview of Java Language -	4	
	Data Types-Variables and Arrays.		
	c) Operators - Control Statements-	3	
	d) Selection Statements-Iterative	4	
	Statements-Jump Statements.	31	
Unit II-	a) Classes and Objects: Constructors-The	3	PPT slides
OOPs	keyword-The finalize () method-		Lab Demo
Concepts	Overloading methods		Control of the Contro
	b) Inheritance-Super Class-Method	3	
	Overriding c) String Handling- String	3	
	Length-Special String operations		
	d) Character Extraction-String	3	
	Comparison-Searching Strings- Modifying a String.		
Unit III -	a) Packages-Importing Packages-	5	PPT slides
Package and	Interfaces-b) Exception Handling:	5	Lab Demo
Interfaces	Fundamentals-Exception Types-Nested	Fild	
	try statements-throw-throws-finally-		
	Built-in Exceptions.		
	c) Multithreaded Programming- Thread	3	
	Model-Thread Priority	3	
	d) Thread Class and Runnable interface	3	
	- The Main Thread- Creating Thread-	2	
		_	
	Implementing the 'Runnable' Interface		
T T	e) Extending Thread.		DOVE I' I
Unit IV-	a) The Applet class - Applet Basics -	4	PPT slides Assignment
Applet	Two types of Applets –	4	Lab Demo
	b) Applet Architecture - An Applet	7.	Lao Demo
	Skeleton- Simple applet display		
	methods-	4	
	c) Requesting repainting- A simple		
	banner Applet-	_	
	d) The HTML Applet tag- Passing	3	
	parameters to Applet.		
Unit V-	a) AWT Classes-Window	4	PPT slides
AWT	Fundamentals-Working with frame	4	Assignment
	Windows-	4	Lab Demo
	b) Creating a frame window in an	3	
	Applet-	3	
	c) working with graphics-working with	4	
	colors-	٠	

d) Setting the paint mode-working with font.	

Course Designed By: 1.Mrs.G. Balasaranya

Programme	B. Com CA	Programme Code	UCC
Course Code	20UCCE5P	Number of Hours/Cycle	5
Semester	V	Max. Marks	100
Part	Ш	Credit	4
	Core	Elective Practical	<u>. </u>
Course Title	JAVA Lab		
Cognitive Level	Up to K3		

To give hands on training in fundamental concepts of JAVA. To aim at making experts in the concepts of multithreading, Applet and AWT.

List of Practical

- 1. Write a java program to find sum of ten numbers.
- 2. Develop a java program to calculate SI and CI.
- 3. Develop a java program to find the given number is odd / even.
- 4. Write a java program for sorting numbers.
- 5. Write a java program to demonstrate Constructors.
- 6. Develop a java program to implement Method Overloading.
- 7. Develop a java program to implement Method Overriding.
- 8. Develop a java program to implement string functions.
- 9. Write a java program to illustrate inheritance.
- 10. Develop a java program to implementing the concept of multithreading.
- 11. Develop a java program to create your own package.
- 12. Develop a java Program to implement multiple inheritance using interface.
- 13. Write a java program to implement exception handling.
- 14. Develop a java Program to implement Applets.
- 15. Write a java program to implement event handling.

Course Designed By: Mr. L. Soosai Suresh

Programme	B. Com CA	Programme Code	UCC
Course Code	20UCCE53	Number of Hours/Cycle	5
Semester	V	Max. Marks	100
Part	Ш	Credit	4
	Core	Elective Course I	<u>. </u>
Course Title		PYTHON	
Cognitive Level	Up to K3		

The objective of the course is to provide learners an insight into Python programming, and develop programming skills to manage the development of software systems.

Unit-I	INTRODUCTION AND OVERVIEW	12 Hours
	Introduction and overview: Introduction to Python - Origin -	
	Features - Simple Program - Comments - Operators - Variables and	
	Assignment - Numbers - Strings - Lists and Tuples, Dictionaries.	
	Syntax and Style: Statements and Syntax - Variable Assignment -	
	Identifiers - Basic Style Guidelines- Memory Management- Python	
	Application Examples.	
Unit-II	PYTHON OBJECTS AND NUMBERS AND STRINGS	18 Hours
	Python Objects: Python Objects - Standard Types - Other Built - in	
	Types - Internal Types - Standard Type Operators - Standard Type	
	Built - in Functions - Type factory functions - Categorizing the	
	Standard Types, Unsupported Types. Numbers and Strings:	
	Introduction to Numbers - Integers- Floating Point Real Numbers -	
	Complex Numbers - Operators- Built - in and Factory Functions -	
	Other Numeric Types. Sequences, Strings, Lists, and Tuples:	
	Sequences - Strings - Strings and Operators - String - only	
	Operators, built - in Functions, String Built - in Methods, Special	
	Features of Strings.	
Unit-III	LISTS AND CONDITIONALS AND LOOPS	15 Hours
	Lists and Dictionaries: Operators - Built - in Functions - List Type	
	Built - in Methods - Special Features of Lists - Tuples, Tuple -	
	Operators and Built - in Functions - Special Features of Tuples -	
	Dictionaries - Operators = Built -in and Factory Functions - Built -	
	in Methods - Dictionary Keys. Conditionals and Loops: if	
	statement - else Statement - elif Statement- Ternary Operator - while	
	Statement - for Statement- break Statement, continue Statement- pass	
	Statement - else Statement - Iter() Function.	
Unit-IV	FILES AND INPUT/OUTPUT	15 Hours
	Files and Input/output: File Objects - File Built - in Function - File	
	Built - in Methods - File Built - in Attributes - Standard Files -	
	Command - line Arguments - File System - File Execution -	
	Persistent Storage Modules. Errors and Exceptions: Definition-	
	Exceptions in Python - Detecting and Handling Exceptions - Context	
	Management - Exceptions as Strings - Raising Exceptions -	
	Assertions – Standard Exceptions – Creating Exceptions.	
Unit- V	FUNCTIONS AND OBJECT-ORIENTED PROGRAMMING	15 Hours
	Functions and Functional Programming: Functions - Calling	
	Functions - Creating Functions - Passing Functions - Formal	

Arguments – Variable Length Arguments – Functional Programming – Variable Scope – Recursion – Generators. **Object Oriented Programming:** Classes – Class Attributes – Instances – Instance Attributes – Binding and Method Invocation – Static Methods and Class Methods – Composition – Sub classing and Derivation – Inheritance – Built – in – functions for Classes – Delegation.

Pedagogy

Chalk and Talk Method / Demonstration / PowerPoint Presentation / Seminar / Quiz / Discussion / Assignment

Text Book:

1. Chun, J Wesley, (2006), "Core Python Programming", Prentice Hall of India, New Delhi, 2nd Edition.

Reference Books:

- 1. Paul Barry, (2016) "Head First Python", Shroff/O'Reilly Publications, Mumbai, 2nd Edition,
- Martin C. Brown, (2018), "Python: The Complete Reference" Tata Mc Graw Hill, New Delhi, 4th Edition.
- 3. Aditya Kanetkar, Yashavant Kanetkar, (2021), "Let Us Python", BPB Publications, Noida, 3rd Edition.
- Alleny Downey, Jeffrey Elkner, Chris Meyers, (2015), "Learning with Python", DreamTech Press, Noida, First Edition.
- 5. Nageswara Rao, (2021), "Core Python Programming", Dreamtech Press, Noida, 3rd Edition.

E-Resources:

- https://docs.python.org/3/tutorial/
- https://www.programiz.com/python-programming
- https://www.w3schools.com/python/python_intro.asp
- · https://www.geeksforgeeks.org/python-programming-language/

Course Outcomes

After the completion of the course, students will be able to

CO1	List out the concepts of Python Objects.
CO2	Outline the Python objects and Numbers, Strings and Tuples.
CO3	Develop programs by utilizing the List, Decision Making and Loops statements.
CO4	Construct programs in Python to process data stored in files by utilizing the modules.
CO5	Develop Object Oriented programs using Python.

Mapping of Programme Specific outcomes with Course Outcomes

PSO/CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
COI	2	2	1	2	1	0	1	0	0	0	0	2
CO2	2	2	2	2	1	0	1	0	0	0	0	2
CO3	2	2	2	2	2	0	1	0	0	0	0	2
CO4	2	2	2	2	2	0	1	0	0	0	0	2
CO5	2	2	2	2	2	0	1	1	1	1	0	2

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Section	on A	Section B	Section C	
Units	COs	K – Level	МС	Qs	Either/or Choice	Open Choice	
		Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
1	COI	Up to K1	2	K1 & K1	2(K1&K1)	K1	
2	CO2	Up to K2	2	K1 & K1	2(K2&K2)	K2	
3	CO3	Up to K3	2	K1 & K1	2(K2&K2)	К3	
4	CO4	Up to K3	2	K1 & K1	2(K2&K2)	К3	
5	CO5	Up to K3	2	K1 & K1	2(K3&K3)	К3	
No of Q asked	uestions	to be	10		10	5	
No of Q answere	uestions d	to be	10		5	3	
Marks for each Question		1		4	10		
Total M Section	larks for	each	10		20	30	
			10		20	30	

K1 - Remembering and recalling facts with specific answers

K2 - Basic understanding of facts and stating main ideas with general answers

K3 - Application oriented - Solving problems

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C Open Choice	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10	2	Í	28	28%	28%
K2		6	1	34	34%	34%
КЗ		2	3	38	38%	38%
Total Marks	10	40	50	100	100%	100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE		
Unit I- INTRODUCTION AND OVERVIEW	a. Introduction to Python – Origin - Features – Simple Program - Comments.	3	PPT slides Assignment		
OVERVIEW	 Description Description Description Description Description Assignment - Numbers - Strings Lists and Tuples, Dictionaries. 	3			
	c. Statements and Syntax - Variable Assignment. d. Identifiers - Basic Style	3			
	Guidelines – Basic Style Guidelines – Memory Management – Python Application Examples.	3			
Unit II- PYTHON OBJECTS AND NUMBERS AND	 a. Python Objects - Standard Types - Other Built - in Types - Internal Types - Standard Type Operators. 	4	PPT slides Lab Demo		
STRINGS	b. Standard Type Built – in Functions – Type factory functions - Categorizing the Standard Types, Unsupported	4			
	Types. c. Introduction to Numbers - Integers- Floating Point Real Numbers - Complex Numbers - Operators- Built - in and Factory Functions - Other Numeric Types.	5			
	d. Sequences – Strings - Strings and Operators - String – only Operators, Built – in Functions, String Built – in Methods, Special Features of Strings.				
Unit III - LISTS AND CONDITIONALS	 a. Operators - Built - in Functions - List Type Built - in Methods - Special Features of Lists - 	4	PPT slides Lab Demo		

AND LOOPS	Tuples, Tuple - Operators and Built - in Functions - Special Features of Tuples. b. Dictionaries - Operators - Built -in and Factory Functions - Built - in Methods - Dictionary Keys. c. if statement - else Statement - elif Statement - Ternary Operator - while Statement - for Statement. d. Break Statement, continue Statement - pass Statement - else Statement - else Statement - lter() Function.	3	
Unit IV- FILES AND INPUT/OUTPUT	 a. File Objects - File Built - in Function - File Built - in Methods - File Built - in Attributes. b. Standard Files - Command - 	4	PPT slides Assignment Lab Demo
	line Arguments - File System - File Execution - Persistent Storage Modules. c. Definition- Exceptions in Python - Detecting and Handling	4	
	Exceptions - Context Management. d. Exceptions as Strings - Raising Exceptions - Assertions - Standard Exceptions - Creating Exceptions.	3	
Unit V- FUNCTIONS AND OBJECT-	 a. Functions - Calling Functions - Creating Functions - Passing Functions b. Formal Arguments -Variable 	4	PPT slides Assignment Lab Demo
ORIENTED PROGRAMMING	Length Arguments – Functional Programming – Variable Scope – Recursion – Generators. c. Classes – Class Attributes –	4	
	Instances – Instance Attributes – Binding and Method Invocation d. Static Methods and Class Methods – Composition – Sub classing and Derivation – Inheritance – Built – in – functions for Classes – Delegation.	3	

Course Designed By: 1. Mr. L. Soosai Suresh

2. Mrs.G.Balasaranya

Programme	B. Com CA	Programme Code	UCC					
Course Code	20UCCE5P	Number of Hours/Cycle	5					
Semester	V	Max. Marks	100					
Part	III	Credit	4					
	C	ore Practical	<u>. </u>					
Course Title		PYTHON Lab						
Cognitive Level	Up to K3							

To aim at making experts in the concepts of Python Objects, Lists, file Input and Output and Oops Concepts.

List of Practicals

- 1. Write a Python program to check whether a number is Prime or not.
- Write a program to perform different arithmetic operations on numbers in python.
- 3. Write a Python Program to find largest element in an array.
- 4. Develop a Python program to swap two elements in a list.
- 5. Write a Python program to print even numbers in a list.
- 6. Write a Python program to check if a string is palindrome or not.
- 7. Write a Python program to Replace all occurrences of a substring in a string.
- 8. Write a Python Program for String slicing to rotate a string.
- 9. Develop a Python program to Extract Unique values dictionary values.
- 10. Develop a Python program to find the sum of all items in a dictionary.
- 11. Develop a Python program to Sort Dictionary key and values List.
- 12. Write a Python program to read file word by word.
- 13. Develop a Python Program to merge two files into a third file.
- 14. Develop a Python Program to demonstrate functions.
- 15. Create a Python Program to illustrate Exception handling methods in Python.
- 16. Write a Python program to demonstrate inheritance.

Course Designed By: Mr. L. Soosai Suresh

Programme	B.Com	Programme Code	UCO			
Course Code	20UCOC62/ 20UCCC61	Number of Hours/Cycle	6	6		
Semester	VI	Max. Marks	10	100		
Part	m	Credit	5			
	1:	Core Course XVIII				
med a		e Tax Law and Practices – II	L	T	P	
Cognitive Level		Up to K5	90			

Providing an in depth knowledge for calculation of different heads of taxable income under income tax and computation of total income.

Introduction	18 Hours
Clubbing of incomes—Deemed income – set off and carry forward of losses – deductions from gross total income.	
Assessment of Individual and HUF	20 Hours
Assessment of Individual and HUF – computation of total income – computation of tax liability – rebate and relief of tax	
Assessment of Firm, AOP and Company	20 Hours
Assessment of partnership firm: assessment as a firm – computation of Firm's income – adjustment of profit and loss account – computation of book profit. Assessment of Association of persons (AOP) Assessment of companies: types of companies – computation of total income of a company – computation of tax on companies – special provisions.	
Administration and Filing of returns	16 Hours
Income Tax Authorities – powers and duties - Filing of returns – types of return – PAN and Mandatory Quoting– assessment and its types – rectification of mistakes - – appeals and revisions- E- Filling.	
Tax Collection procedures	16 Hours
Collection of tax – deduction of tax at source – advance payment of tax – refund of tax – Tax avoidance and evasion	V
	Clubbing of incomes—Deemed income — set off and carry forward of losses — deductions from gross total income. Assessment of Individual and HUF Assessment of Individual and HUF — computation of total income — computation of tax liability — rebate and relief of tax Assessment of Firm, AOP and Company Assessment of partnership firm: assessment as a firm — computation of Firm's income — adjustment of profit and loss account — computation of book profit. Assessment of Association of persons (AOP) Assessment of companies: types of companies — computation of total income of a company — computation of tax on companies — special provisions. Administration and Filing of returns Income Tax Authorities — powers and duties — Filing of returns — types of return — PAN and Mandatory Quoting— assessment and its types — rectification of mistakes — appeals and revisions— E- Filling. Tax Collection procedures

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience discussion

Text Book

2. Mehrotra. H.C., and Goyal S.P.(Current Assessment year), Income Tax Law and Accounts. Sahitya Bhawan Publication, New Delhi.

Reference Books

6. Gaur, V.P. & Narang D.P (Current Assessment year), Income Tax - Law and Publication, New Delhi. Practice, Kalyani

7. Dinkar Pagare (Current Assessment year), Income Tax - Law and Practice,

Sultan Chand & Sons, New Delhi.

8. Reddy, T.S. & Hariprasad (Current Assessment year), Income Tax Law and Practice, Margam publication, Chennai.

E-Resources

https://www.incometaxindiaefilling.gov.in/home

https://icmai.in/studentswebsite/studymat.php

 https://www.icsi.edu/media/webmodules/DIRECTTAXLAWANDPRACTICEBO OK.pdf

https://www.icai.org/post.html?post_id=16945

http://cbseacademic.nic.in/web_material/Curriculum/Vocational/2018/Taxation/Ta xation%20XI%20.pdf

Course Outcomes

After completion of this course, the students will be able to:.

COI	Apply the provisions relating to ascertainment of taxable income of assesses
CO2	Assess the tax liability of individual, Hindu undivided family
CO3	Assess the tax liability of partnership firms, Association of persons and companies
CO4	Explain the procedure and provisions in filing of returns
CO5	Outline the provisions relating to tax collections, payment and refund of tax and assessment procedure.

Manning of Course Outcomes (COs) with Programma Specific Outco

	Map	bing or	Cours	se Oute	omes (COS	with Fi	ogram	me spe	ecific O	utcom	es
	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO	PSO
	1,	2	3	4	5	6	7	8	9	10	11	12
CO1	3	2	3	2	2	2	1	2	1	1	1	2
CO2	3	3	3	3	3	3	2	3	2	1	3	3
CO3	3	3	3	3	3	3	2	3	2	1	3	3
CO4	3	3	1	3	2	3	2	2	2	2	2	2
C05	3	2	2	2	1	2	1	3	1	1	2	3

3. High; 2. Moderate; 1. Low

			Section		Section B	Section C
Ųnits	COs	K-Level	MC	Qs	Either/ or Choice	Open Choice
			No. of Questions	K-Level	No. of Question	No. of Question
1	CO1	Up to K3	2	K1&K2	2(K2&K2)	1(K3)
2	CO2	Up to K5	- 2	K1&K2	2(K3&K3)	1(K5)
3	CO3	Up to K5	2	K1&K2	2(K3&K3)	1(K5)
4	CO4	Up to K2	2	K1&K2	2(K2&K2)	1(K2)
5	CO5	Up to K2	2	K1&K2	2(K2&K2)	1(K2)
No asked	of Ques	tions to be	10		10	5
No of Questions to be answered			10	*	5	3
Marks for each Question		1		4	10	
Total marks for each Section			10		20	30

K1 - Remembering and recalling facts with specific answers

K2 - Basic understanding of facts and stating main ideas with general answers

K3 – Application oriented – Solving problems

K4 - Examining, analyzing, presentation and make inferences with evidences

Distribution of Section - wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
77.1			-	5	5	5%
K1	3	24	20	39	39	39%
K2	5	24		26	26	26%
K3	12	16	10	20	20	2070
- 1		_		-		0.55
K4	- 5		20	20	20	20%
K5	(<u>-</u>	₩):		100	100	100%
Total Marks	10	40	50	100	100	13070

Lesson Plan

	Description	Hours	Mode
	a. Clubbing of income	3.	Classroom
	b Set off and carry forward of losses-	6	Lectures,
Unit I	c. deduction from gross total income-	9	Assignments PPT Presentation Quiz, Seminar, Assignment
	Description	Hours	Mode
	a. Assessment of Individual – computation of total income – computation of tax liability – rebate and relief of tax	12	Classroom Lectures,
Unit	b. Assessment of HUF – computation of total	8	Assignments
\mathbf{n}	income – computation of tax liability		PPT Presentation
		3	Quiz, Seminar, Assignment
	Description	Hours	Mode
Unit	a. Assessment of partnership firm-assessment as a firm — computation of Firm's income — adjustment of profit and loss account — computation of book profit	9	Classroom Lectures, Assignments PPT
ш	b. assessment of association of persons	4	Presentation Quiz,
	c. Assessment of companies: types of companies - computation of total income of a company - computation of tax on companies		Seminar, Assignment
	Description	Hours	Mode
15	a. Income Tax Authorities – powers – appeals and revisions	4	Classroom Lectures,
Unit IV	b. Filing of returns – types of return – PAN and Mandatory Quoting	5	Assignments PPT
	c. assessment and its types – rectification of mistakes	2	Presentation Quiz, Seminar, Assignment
	Description	Hours	Mode
	a. Collection of tax - deduction of tax at source -		Classroom
	b. advance payment of tax	4	Lectures,
Unit V	c. recovery and refund of tax	4	Assignment PPT Presentation
			Quiz, Seminar, Assignment

Course designed by Dr. R. Balasubramani

Programme	B.Com Programme Code		1		
Course Code		Programme Code	UCO & UCC		
	20UCOC63/ 20UCCC63	Number of Hours/Cycle	6		
Semester	VI	Ma- M- I			
Part	Max. Marks		100		
	III	Credit	4		
Commission		Core Course XIX			
Course Title		Industrial Law		Т	P
Cognitive Level		Up to K3			-

The objective of this course is to enable the students to be familiarized with various industrial or labour laws and legal aspect of legislations like industrial dispute, trade union act, wages act and grievance handling.

Unit I	Trade Unions Act 1926 and Industrial Employment Act	18 Hours			
ж	Trade Unions Act 1926: Object – Definitions – Registration of trade union – Cancellation of Restricted Trade Union – Appeal – Amalgamation and dissolution of trade union Collective bargaining - Industrial Employment Act 1946: Object – Definition of standing orders – submission of draft standing orders – certification of standing orders – interpretation of standing orders.	-			
Unit II	Industrial Disputes Act 1947 and Factories Act 1948	18 Hours			
-	Industrial Disputes Act 1947: Definitions-grievance- settlement authorities – conciliation machinery procedure- powers and duties of authorities – reference of disputes to boards, courts, tribunals, national tribunal – strike – lockout – layoff – retrenchment - unfired labour practice, penalties Factories Act 1948: Definitions – Factory inspector,				
54	Health, Safety welfare of workers – working hours of Adults – Employment young person and women – Annual leave with wages.	Þ			
Unit III	Employees Provident Fund Act 1952 and Payment of Wages Act 1936	18 Hours			
	Employees Provident Fund Act 1952:Definition of Basic wages, Employer, employee, superannuation – Employees Provident Fund Scheme – pension scheme – contribution – Employee Deposit – linked Insurance Scheme – Payment of Wages Act – 1936: Definitions – Procedure regarding payment of wages – deduction from wages – Payment of Minimum wages Act 1948: Definition of minimum wage – fixation and revision of minimum wages – Roll of inspectors.				
Unit IV	Payment of Bonus Act 1965, Consumer protection Act 1986 and Apprentice Act 1969				
	Payment of Bonus Act 1965: Concepts of Bonus – object – definitions – Eligibility and disqualifications regarding bonus – provisions in case of new establishments-Consumer protection Act 1986: meaning of consumer, compliant, defect, deficiency and service – protection of				

	consumer and redressal. Apprentice Act 1969: Meaning of apprentice – apprenticeship contract – hours of work – Leave and holidays.	
Unit V	Workmen's Compensation Act 1923	18 Hours
	Workmen's Compensation Act 1923 – Definitions – Scope and coverage – Rules regarding workman's compensations – Amount of Compensation – distribution of compensation – Theory of Notional Extension – Powers of commissioners.	ľ

Pedagogy

Class Room Lectures, Case Study, Group Discussion, Seminar, Quiz, Video Cases, Surprise Quiz, Assignments.

Text Book

1. Element of Industrial Law (2007), Sultan chand & sons, New Delhi.

Reference Books

- 1. Kapoor.N.D, (2020), "Elements of Mercantile law", New Delhi: Sultan chand& sons.
- Balaji.C.D, (2007), "Business Law", Chennai : Margham 2. Dr. Sreenivasan, Publications.
- 3. Dr. Premavathy.N, (2009), "Business Law", Chennai: Sri Vishnu Publication,

E-Resources

- https://www.indiacode.nic.in/bitstream/123456789/11102/1/industrial-disputesact-1947.pdf
- http://dgms.gov.in/writereaddata/UploadFile/The_Factories_Act-1948.pdf
- https://www.indiacode.nic.in/bitstream/123456789/13322/1/trade_unions_act_192
- https://clc.gov.in/clc/acts-rules/industrial-employment-standing-orders-act-1946
- https://taxguru.in/corporate-law/employees-provident-fund-act-1952.html

Course Outcomes

After completion of this course, the students will be able to:

CO1	Outline the details about the sections in Trade Unions Act 1926 and Industrial Employment Act 1946
CO2	Explain the legal provisions in Industrial disputes act 1947 and Factories act 1948
CO3	Summarize about the legislations in Employees provident fund act 1952 and Payment of wages act 1936
CO4	Interpret the legal framework of Payment of Bonus Act 1965, Consumer protection Act 1986 and Apprentice Act 1969.
CO5	Infer about the statutory provisions in workmen's compensation act 1923

Mapping of Course Outcomes (COs) with Programme Specific Outcomes

	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6	PSO 7	PSO 8	PSO 9	PSO 10	PSO 11	PSO 12
CO1	2	1	1	2	1	1	1	1.	1	1	1	2
CO2	2	1	1	2	1	1	1	1	1	2	2	2
CO3	2	1	1	2	1	1	1	1	1	1	1	2
CO4	2	1	1	2	1	1	1	1	1	1	2	2
C05	2	2	1	2	1	1	1	1	1	1	2	2

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

		Treatment ivi		on A	Section B	Section C
Units	COs	MCOs			Either/or Choice	Open Choice
		-	No. of Questions	K-Level	No. of Questions	No. of Questions
1	CO1	Up to K2	2	K1 & K2	2(KI&K1)	1(K2)
2	CO2	Up to K2	2	K1 & K2	2(K1&K1)	1(K2)
3	CO3	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)
4	CO4	Up to K2	2	K1 & K2	2(K2&K2)	1(K2)
5	CO5	Up to K3	2	K1 & K2	2(K3&K3)	1(K3)
No of asked	Ques	tions to be	10		10	5
No of Questions to be answered		10		5	. 3	
Marks for each Question		1		4	10	
Total Marks for each Section			10		20	30

K1 – Remembering and recalling facts with specific answers
K2 – Basic understanding of facts and stating main ideas with general answers

K3 - Application Oriented

Distribution of Section - wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks with choice	Consolidated (Rounded off)
K1	5	16	2 5	21	21%	21%
K2	5	16	30	51	51%	51%
K3		8	20	28	28%	28%
Total Marks	10	40	50	100	100%	100%

Lesson Plan

** '. *	Trade Unions Act 1926	18 Hours	Mode					
Unit I	and Industrial Employment Act 1946							
	a. Trade Unions Act 1926 : Object – Definitions 4 Classroom Registration of trade union. Lectures, b. Cancellation of Restricted Trade Union – 5 Assignment							
	Pagistration of trade union							
	h Cancellation of Restricted Trade Union -	5	Assignments					
	Appeal – Amalgamation and dissolution of		PPT Presentation					
	trade union - Collective bargaining.		Quiz, Seminar					
	c. Industrial Employment Act 1946 : Object –	5	Assignment					
	Definition of standing orders – submission of	5.7						
	draft standing orders							
	d. Certification of standing orders –	4						
	interpretation of standing orders							
Unit II	Industrial Disputes Act 1947 and	18 Hours	Mode					
Unit II	Factories Act 1948	10 110 110	1.2000					
	a. Industrial Disputes Act 1947: Definitions-	3	Classroom					
	200	,	Lectures,					
	grievance. b. Settlement authorities – conciliation	3 .	Assignments					
	machinery procedure-powers and duties of	- 2	PPT Presentation					
	authorities		Quiz, Seminar					
		3	Assignment					
	c. Reference of disputes to boards, courts,	3	7 too gament					
	tribunals, national tribunal	3	+					
	d. Strike - lockout - layoff - retrenchment -	3						
	unfired labour practice, penalties	3	-					
	e. Factories Act 1948 : Definitions – Factory	3						
	inspector, Health, Safety welfare of workers –		Si					
	working hours of Adults f. Employment young person and women – 3							
		3						
YT 'Y TYT	Annual leave with wages. Employees Provident Fund Act 1952 and	18 Hours	Mode					
Unit III		10 Hours	Mode					
	Payment of Wages Act 1936 a. Employees Provident Fund Act	3	Classroom					
	a. Employees Provident Fund Act 1952:Definition of Basic wages, Employer,	3	Lectures,					
	employee, superannuation.		Assignments					
	b. Employees Provident Fund Scheme – pension	4	PPT Presentation					
· · · · · · · · · · · · · · · · · · ·	scheme – contribution – Employee Deposit –	4	Quiz, Seminar					
	linked Insurance Scheme		Assignment					
	c. Payment of Wages Act – 1936 : Definitions –	4	Assignment					
	Procedure regarding payment of wages –	4						
	deduction from wages							
	d. Payment of Minimum wages Act 1948 :	4						
	Definition of minimum wages Act 1948 :	7						
	e. Fixation and revision of minimum wages –	3	1					
	Roll of inspectors.	3						
Unit IV	Payment of Bonus Act 1965 and Apprentice	10 TT	Mode					
Clift IV	Act 1969	18 Hours	Mode					
	Charles of the second of the s	6	Classroom					
	a. Payment of Bonus Act 1965: Concepts of Bonus – object – definitions – Eligibility and	O	Lectures,					
	disqualifications regarding bonus – provisions							
	in case of new establishments	41	Assignments PPT Presentation					
			CONTRACTOR OF THE CONTRACTOR O					
	b. Consumer protection Act 1986: meaning of	6						
	consumer, compliant, defect, deficiency and service – protection of consumer and redressal.		Assignment					
			-					
	c. Apprentice Act 1969: Meaning of apprentice	6						

Programme	B.Com CA	Programme Code	UCC			
Course Code		Number of Hours/Cycle	6			
Semester	VI	Max. Marks	100			
Part	Ш	Credit	5			
-	Co	ore Course IV				
Course Title	9	RESEARCH METHODOLOGY				
Cognitive Level		Up to K3				

Provide working knowledge of basic research, procedures, and steps to involve in research. Provide ability to collection of data analysis of data and to know the objectives of research and standards of research to prepare a research report.

Unit I	Research Methodology				
	Research Methodology – Meaning – Objectives – Purpose of research - Significance of Research - Types of Research – Research Process - Criteria for good research – Problems of Research in social sciences.				
Unit II	Research Design				
	Research design - Meaning - Nature- Importance - Need for Research Design - Selecting and Redefining Research Problem -Types of Research Design (exploratory, descriptive, experimental and etc.) - Qualitative and Quantitative.				
Unit III	Sampling	18 Hours			
	Sample survey- meaning - Sampling-Meaning- Types of sampling techniques- Measurement- process of sampling methods- probability and non probability sampling- Scales and scaling techniques- standard error- sampling distribution.				
Unit IV	Data Collection and Analysis of Data				
	Data- Types - Primary and Secondary data - mature of data- Secondary data resources - Methods of collecting data (primary and secondary data) - Questionnaire - Guidelines in questionnaire design - construction for schedule - difference between questionnaire and schedule - Organization of Data- Editing, Coding, Tabulation and Classification - Role of Tabulation - Parts of a Table - General rules of Tabulation - Preliminary analysis of data - Percentage analysis and Average analysis - Correlation and Regression.				
Unit V	Report writing	20 Hours			
	Report – Meaning- Types of Reports- Significance – Characteristics- Report Format- Analytical Report – Different Steps in Report Writing – Interpretation and Report Writing — Written and Oral Reports – Layout of Research Report – Criteria for Good Report- uses of library and internet research.				

Pedagogy Class Room Lectures, Power point presentation, Peer Learning, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study.

Text Book:

- Kothari C.R. and Gaurav Garg (2019) Research Methodology, Method and Techniques, New Age International Publishers, Delhi.
- 2. Peer Mohammed (2021), Research Methodology, Pass Publication Madurai.
- Priti R.Majhi and Prafull K. Khatua, (2017) Research Methodology (Concepts, Methods, Techniques and SPSS), Himalaya Publishing House, Delhi.

Reference Books:

- Donald R. Cooper and Pamela S. Schindler, (2017) Business Research Methods Tata McGraw Hill -6th Edition.
 - 2. Uma Sankaran, (2006) Research Methods for Business, Wiley India, New Delhi, India,.
 - 3. Alan Bryman and Emma Bell, (2016) Business Research Methods, OUP.

Course Outcomes

After completion of this course, the students will be able to

COI	Understand the basic methods of research and identify the problems in research.
CO2	Explain the research design and understand the qualitative and quantitative methods.
CO3	Explain the concept of sample survey, sampling techniques and scaling techniques
CO4	Describe the types of data and data collection methods. Explain the construction of questionnaire and analysis of data through statistical methods.
CO5	Describe the meaning and types of report and different steps involved in report writing

Mapping of Programme Specific outcomes with Course Outcomes

PSO/C 0	PSO1	PS02	PSO3	PSO4	PSOS	90Sd	PSO7	PSO8	PSO9	PSO10	PSOII	PSO12
CO1	3	1	0	0	0	0	0	3	0	0	0	3
CO2	3	0	0	0	1	0	0	2	0	0	0	2
CO3	3	0	2	0	2	0	0	2	0	0	0	2
CO4	3	2	0	0	0	2	0	2	0	0	0	2
CO5	3	0	0	0	0	0	0	3	0	0	0	2

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

ľ			Section	on A	Section B	Section C	
T714	co.	17 1	MC	Qs	Either/or Choice	Open Choice	
Units COs	COS	K – Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
1	COI	Up to K3	2	K1 & K2	2(K1&K1)	1(K1)	
2	CO2	Up to K3	2	K1 & K2	2(K2&K2)	1(K2)	
3	CO3	Up to K3	2	K1 & K2	2(K2&K2)	1(K3)	
4	CO4	Up to K3	2	K1 & K2	2(K3&K3)	1(K3)	
5	CO5	Up to K2	2	K1 & K2	2(K1&K1)	1(K2)	
No of	Questions	to be asked	10		10	5	
No of Q	uestions t	o be answered	10		5	3	
Marks for each Question		1		4	10		
Total N	Total Marks for each Section		10		20	30	

- $\label{eq:K1-Remembering} K1-\text{Remembering and recalling facts with specific answers} \\ K2-\text{Basic understanding of facts and stating main ideas with general answers} \\ K3-\text{Application oriented}-\text{Solving problems}$

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Either/or)	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	5	16	10	21	31	31%
K2	5	16	20	41	41	41%
К3		8	20	38	28	28%
Total Marks	10	40	50	100		100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE		
UNIT I – Introduction to Research	a) Research Methodology – Meaning – Objectives	3	Class Room Lectures, Power		
Methodology	b) Purpose of research - Significance of Research.	4	point presentation Seminar Quiz Assignments		
	c) Research Process — Types of Research	5	3.		
	d) Criteria for good research	3			
	e) Problems of Research in social sciences.	3			
UNIT II – Research Design	a) Research design - Meaning - Nature- Importance - Need for Research Design.	3	Class Room Lectures Power point presentation Seminar		
	b) Types of Research Design (Exploratory, Descriptive, Experimental and etc.) Selecting and Redefining Research Problem	3	Quiz Assignments		
	c) Types of Research Design - Qualitative and Quantitative	6			
UNIT III - Sampling	a) Sample survey- meaning - Sampling- Meaning process of sampling methods.	3	Class Room Lectures Power point presentation		
	b) Types of sampling techniques- Measurement	3	Seminar Quiz Assignments		
	c) probability and non probability sampling	4			
	d) Scales and scaling techniques	4			
	e) Standard error- sampling distribution.	4			
UNIT IV- Data Collection Analysis of Data	a) Data- Types - Primary and Secondary data - Questionnaire.	4	Class Room Lectures Power point presentation		
	b) Mature of data- Secondary data resources – Methods of collecting data (primary and secondary data) - Guidelines in questionnaire design – construction for schedule – difference between questionnaire and schedule.	8	Seminar, Quiz Assignments		
	c) Organization of Data- Editing, Coding, Tabulation and Classification – Role of	10			

	Tabulation – Parts of a Table – General rules of Tabulation – Preliminary analysis of data – Percentage analysis and Average analysis – Correlation and Regression.		
UNIT V – Report Writing	a) Report – Meaning- Types of Reports- Significance – Characteristics- Report Format.	4	Class Room Lectures Power point presentation
	b) Analytical Report – Different Steps in Report Writing - Interpretation and Report Writing.	8	Seminar, Quiz Assignments
	c) Written and Oral Reports - Layout of Research Report - Criteria for Good Report.	8	

Course Designed By: Dr.P.Ranjithkumar

Programme	B. Com CA	Programme Code	UCC
Course Code	20UCCE61	Number of Hours/Cycle	5
Semester	VI	Max. Marks	100
Part	Ш	Credit	4
	Core	Elective Course II	
Course Title		Operating System	
Cognitive Level	Up to K3		

Able to understand concepts of threads, process management and analyze the various scheduling algorithms in process and memory management.

Unit-I	Introduction to Operating System	15 Hours
	Introduction to Operating system: Definition of OS - Early History of OS - Definition of Process - Process States - Life cycle of a process .	
	Process Management: - Process State Transitions - Process Control Block - Operations on Processes - Suspend and Resume - Context	
	Switching. Interrupt: Interrupt Processing - Interrupt classes.	
Unit-II	Threads& Deadlock	15 Hours
	Threads: Definition of Thread – Thread States – Life cycle of Thread – Thread Operations – Thread models- Mutual Exclusion - Semaphore. Deadlock: Introduction - Examples of Deadlock - Resource Concepts - Four Necessary Conditions for Deadlock – Deadlock Solutions - Deadlock Prevention - Deadlock Avoidance and the Banker's Algorithm - Deadlock Detection - Deadlock Recovery.	
Unit-III	Memory Management	15 Hours
	Memory Management: Memory Organization - Memory Hierarchy -	
	Memory Management Strategies - Contiguous Vs Non-Contiguous	
	Memory allocation - Single user contiguous Memory allocation -	
	Fixed Partition Multiprogramming - Variable Partition	
	Multiprogramming - Multiprogramming with Memory Swapping.	
Unit-IV	Scheduling	15 Hours
	Scheduling: Processor Scheduling - Introduction - Scheduling Levels - Preemptive Vs Non-Preemptive Scheduling - Priorities - Scheduling Algorithms- FIFO - RR - Quantum Size - SJF - SRT.	
	Disk Performance Optimization - Evolution of secondary storage -	
	Seek Optimization - FCFS - SSTF - SCAN - RAM Disks - Optical	
	Disks.	
Unit- V	Virtual Memory Management	15 Hours
	Virtual Memory Management: Introduction - Locality - Demand	
	Paging - Page Replacement - Page Replacement Strategies -	
	Random Page Replacement - FIFO -LRU -LFU-NUR - FAR Page	
	Replacement - Page Fault - Page Release -Page Size.	

Pedagogy

Chalk and Talk Method / Demonstration / PowerPoint Presentation / Seminar / Quiz / Discussion / Assignment

Text Book:

 H. M. Deitel, Paul J. Deitel, David R. Choffnes, (2007), "Operating System", Pearson Education Publication, New Delhi, 3rd Edition.

Reference Books:

- Achyut S Godbole, (2011), "Operating System", Tata Mc Graw Hills Publishers, New Delhi, 3rd Edition
- Silbersehatz, Galvin, Gagne, (2011), "Operating System Concepts", Wiley India, New Delhi, 6th Edition.
- William Stallings, (2018), "Operating Systems: Internals and Design Principles", Pearson Education, New Delhi,9th Edition.
- Naresh Chauhan, (2014), "Principles of Operating Systems", Oxford University Press, New Delhi, 1st Edition
- Tanenbaum S.Andrew, (2011), "Modern Operating Systems", Prentice Hall of India, New Delhi, 3rd Edition.

E-Resources:

- https://www.tutorialspoint.com/operating_system/index.htm
- https://www.geeksforgeeks.org/introduction-of-operating-system-set-1/
- https://en.wikipedia.org/wiki/Operating_system
- https://www.guru99.com/operating-system-tutorial.html
- https://www.cl.cam.ac.uk/teaching/1011/OpSystems/os1a-slides.pdf

Course Outcomes

After the completion of the course, students will be able to

CO1	State the concepts of Operating System.
CO2	Describe Deadlock and Methods for handling Deadlock.
CO3	Classify the Memory Management System in Operating System.
	Illustrate the Scheduling Algorithms.
CO5	Demonstrate the Virtual Memory Strategies.

Mapping of Programme Specific outcomes with Course Outcomes

PSO/CO	PSO1	PSO2	PSO3	PSO4	PSOS	PSO6	PSO7	PSO8	PSO9	PSO10	PSOII	PSO12
COI	3	2	1	2	0	0	0	0	0	0	0	1
CO2	3	2	2	2	0	0	0	0	0	0	0	1
CO3	3	2	2	2	0	0	0	1	0	0	0	1
CO4	3	2	3	2	2	0	0	0	0	0	0	1
CO5	3	2	2	2	2	0	0	1	0	0	0	1

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Secti	on A	Section B	Section C	
Units	COs	K – Level	мс	Qs	Either/or Choice	Open Choice	
			No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
4	CO1	Up to K1	2	K1 & K1	2(K1&K1)	K1	
2	CO2	Up to K2	2	K1 & K1	2(K2&K2)	K2	
3	CO3	Up to K2	2	K1 & K1	2(K2&K2)	K2	
-4	CO4	Up to K3	2	K1 & K1	2(K2&K2)	K3	
5	CO5	Up to K3	2	K1 & K1	2(K3&K3)	K3	
No of Q asked	uestions	to be	10		10	5	
No of Q answere	uestions d	to be	10		5	3	
Marks for each Question		1		4	10		
Total Marks for each Section		10		20	30		
			10		20	30	

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C Open Choice	Total Marks	% Of Marks without choice	Consolidated (Rounded off)
K1	10	2	1	28	28%	28%
K2		6	2	44	44%	44%
К3		2	2	28	28%	28%
Total Marks	10	40	50	100	100%	100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I-	a. Introduction to Operating system -	3	PPT slides
Introduction to Operating	Definition of OS - Early History of OS -	3	Assignment
System	b. Definition of Process - Process		
	States – Life cycle of a process.	3	
	c. Process Management: - Process State Transitions - Process Control		
	Block -	3	
	d. Operations on Processes - Suspend	IEI	
	and Resume - Context Switching. e. Interrupt: Interrupt Processing -	3	

K2 - Basic understanding of facts and stating main ideas with general answers

K3 - Application oriented - Solving problems

	Interrupt classes.		
Unit II- Threads & Deadlock	 Definition of Thread – Thread States Life cycle of Thread – Thread Operations. 	3	PPT slides
	b. Thread models- Mutual Exclusion – Semaphore.	2	
	c. Deadlock: Introduction - Examples		
	of Deadlock - Resource Concepts - d. Four Necessary Conditions for	4	
	Deadlock – Deadlock Solutions - Deadlock Prevention –	3	
	e. Deadlock Avoidance and the Banker's Algorithm - Deadlock		
	Detection - Deadlock Recovery.	3	ppp 11.1
Unit III - Memory	 Memory Management: Memory Organization – Memory Hierarchy - Memory Management Strategies 	4	PPT slides
Management	b. Contiguous Vs Non-Contiguous Memory allocation – Single user	5	
	contiguous Memory allocation c. Fixed Partition Multiprogramming - Variable Partition	3	
	d. Multiprogramming -		
	Multiprogramming with Memory	3	
TT 2. TT .	Swapping.	2	DDT 111
Unit IV- Scheduling	 Scheduling: Processor Scheduling - Introduction - Scheduling Levels. 	3	PPT slides Assignment
beneduing	b. Preemptive Vs Non-Preemptive	3	rasignment
	Scheduling – Priorities.	0%	
	c. Scheduling Algorithms- FIFO - RR	3	
	Quantum Size - SJF - SRT.		
	d. Disk Performance Optimization:	3	
	Evolution of secondary storage:	v-a	
	e. Seek Optimization - FCFS - SSTF -	3	
*****	SCAN - RAM Disks - Optical Disks.	4	DDC 111
Unit V-	a. Virtual Memory Management:	4	PPT slides
Virtual Mamory	Introduction – Locality - Demand	A	Assignment
Memory Management	Paging b. Page Replacement - Page	4	
Management	 Page Replacement - Page Replacement Strategies. 	4	
	c. Random Page Replacement - FIFO	11.5M~.	
	-LRU -LFU-NUR - FAR Page		
	Replacement	3	
	d. Page Fault - Page Release -Page		
	Size.		

Course Designed By: 1.Mrs.G.Balasaranya

Programme	B. Com CA	Programme Code	UCC
Course Code	20UCCE62	Number of Hours/Cycle	5
Semester	VI	Max. Marks	100
Part	Ш	Credit	4
	Core	Elective Course II	<u>. </u>
Course Title		Software Project Managemen	t
Cognitive Level	Up to K3		

Students are able to understand basic ideas of SPM, the Software Project Planning and Evaluation techniques and to plan and manage projects at each stage of the software development life cycle (SDLC). They are able to learn about the activity planning and risk management principles until the software projects and control software deliverables.

Unit-I	INTRODUCTION TO SOFTWARE PROJECT MANAGEMENT	15 Hours
	Introduction - Importance of SPM - Definition of Project - software	
	Project Vs Other Types of Projects - Activities Covered by SPM -	
	plans Methods and Methodologies - Categorizing Software Projects -	
	Stake Holders - Setting Objectives - Project Success and Failure -	
	Management and Management Control.	
Unit-II	PROJECT EVALUATION AND PROJECT PLANNING	15 Hours
	Introduction - Project portfolio Management - Evaluation of an	
	Individual Project - Cost-Benefit Evaluation Techniques - Risk	
	evaluation - Program Management - Resource Allocation - Strategic	
	program Management - Stepwise Project Planning.	
Unit-III	PROJECT LIFE CYCLE AND EFFORT ESTIMATION	15 Hours
	Introduction - Choice of Process models - Waterfall Model - Spiral	=
	Model - Software Prototyping - Other ways of Categorizing	
	Prototypes - Incremental Delivery - Agile methods - Dynamic System	
	Development Method - Extreme Programming- Managing Iterative	
	Process - Basics of Software estimation - Effort and Cost estimation	
	techniques - Bottom Up Estimation - Top Down Approach -	
	COSMIC Full function points - COCOMO II - a Parametric	
	Productivity Model.	
Unit-IV	ACTIVITY PLANNING AND RISK MANAGEMENT	15 Hours
	Introduction - Objectives of Activity planning - Project schedules -	
	Activities - Sequencing and Scheduling - Network Planning models -	
	Formulating Network Model - Forward Pass & Backward Pass	
	Techniques - Critical path (CRM) method - Risk - Categories of Risk	
	- Risk identification - Assessment - Risk Planning - Risk Management	
	- PERT Technique	
Unit- V	MONITORING AND CONTROL	15 Hours
	Creating the Framework - Collection of Data - Visualizing Progress -	
	Cost Monitoring - Earned Value Analysis - Prioritizing Monitoring -	
	Project Tracking - Change Control. Managing contracts - Contract	
	Management - Managing people - Organizational Behavior - Best	
	methods of staff selection - Motivation- The Oldham - Hackman job	
	characteristic model - Stress - Health and Safety - Ethical and	
	Professional Concerns – Working in Teams.	

Pedagogy

Chalk and Talk Method / Demonstration / PowerPoint Presentation / Seminar / Quiz / Discussion / Assignment

Text Book:

 Bob Hughes, Mike Cotterell and Rajib Mall, (2012), "Software Project Management", Tata McGraw Hill, New Delhi, 5thEdition.

Reference books:

- 1. Maylor, (2004), "Project Management", Pearson India, New Delhi, 3rd Edition.
- 2. Robert K. Wysocki, (2011), "Effective Software Project Management", Wiley Publication, India.
- 3. Walker Royce, (2002), "Software Project Management", Pearson Education, New Delhi, 1st Edition.
- Gopalaswamy Ramesh, (2017), "Managing Global Software Projects", Tata McGraw Hill Education, New Delhi.

E-Resources

- https://www.javatpoint.com/software-project-management
- https://www.tutorialspoint.com/software_engineering/software_project_management.htm
- https://www.wrike.com/project-management-guide/faq/what-is-software-project-management/
- https://www.geeksforgeeks.org/software-engineering-software-project-management-spm/
- https://en.wikipedia.org/wiki/Software_project_management

Course Outcomes

After the completion of the course, students will be able to

CO1	Understand Project Management principles while developing software
CO2	Express knowledge about the basic project management concepts, framework and the process models.
CO3	Use software process models and software effort estimation techniques
CO4	Relate the risks involved in various project activities.
CO5	Explain the checkpoints, project reporting structure, project progress and tracking mechanisms using project management principles and predict staff selection process

Mapping of Programme Specific outcomes with Course Outcomes

PSO/C O	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3	2	1	2	0	0	0	1	0	0	0	1
CO2	3	2	1	2	0	0	0	1	0	0	0	1
CO3	3	2	1	2	0	0	0	2	0	0	0	1
CO4	3	2	1	2	0	0	0	2	0	0	0	0
CO5	3	2	1	2	0	0	0	2	0	0	0	1

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Secti	on A	Section B	Section C
Units C	COs	K -	МС	Qs.	Either/or Choice	Open Choice
		Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions
1	CO1	Up to K2	2	K1 & K1	2(K1&K1)	K1
2	CO2	Up to K2	2	K1 & K1	2(K1&K1)	K1
3	CO3	Up to K3	2	K1 & K1	2(K2&K2)	K3
4	CO4	Up to K3	2	K1 & K1	2(K2&K2)	K3
5	CO5	Up to K3	2	K1 & K1	2(K2&K2)	K3
No of Q asked	uestions	to be	10		10	5
No of Q answere	uestions d	to be	10		5	3
Marks f	or each (Question	1		4	10
Total Marks for each Section		10		20	30	
			10	3	20	30

K1 - Remembering and recalling facts with specific answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C Open Choice	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10	4	2	46	46%	46%
K2		6		24	24%	24%
К3			3	30	30%	30%
Total Marks	10	40	50	100	100%	100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
UNIT Unit I- INTRODUCTION TO SOFTWARE PROJECT MANAGEMENT	a. Introduction – Importance of SPM – Definition of Project b. software Project Vs Other Types of Projects – Activities Covered by SPM – plans c. Methods and Methodologies – Categorizing Software Projects d. Stake Holders – Setting Objectives e. Project Success and Failure – Management and Management	3 3 3	PPT slides Assignment

 $K2-Basic\ understanding\ of\ facts\ and\ stating\ main\ ideas\ with\ general\ answers\ K3-Application\ oriented-Solving\ problems$

Unit II- PROJECT	a.	Introduction - Project portfolio Management	3	PPT slide
	ь.	Evaluation of an Individual	4	
EVALUATION	U.	Project - Cost-Benefit	7	
AND PROJECT		Evaluation Techniques – Risk		
PLANNING		evaluation	2	
	c.	Program Management -	=	
		Resource Allocation	3	
	d.		3	
	e.	Stepwise Project Planning.		
Unit III -	a.	Introduction - Choice of Process	3	PPT slide
PROJECT LIFE	Server	models - Waterfall Model -	200	
CYCLE AND		Spiral Model – Software		
EFFORT			3	
ESTIMATION		Prototyping	-	
ESTIMATION	b.	Other ways of Categorizing		
		Prototypes - Incremental	3	
		Delivery - Agile methods -		
	c.	Dynamic System Development		
		Method - Extreme	3	
		Programming- Managing		
		Iterative Process		
	d.	Basics of Software estimation –	3	
	u.	Effort and Cost estimation		
		techniques – Bottom-Up		
		Estimation - Top-Down		
		Approach -		
	e.	COSMIC Full function points -		
		COCOMO II - a Parametric		
		Productivity Model.		
Unit IV-	a.	Introduction - Objectives of	3	PPT slide
ACTIVITY	11 =6.00	Activity planning - Project		Assignme
PLANNING AND		schedules –	4	
RISK	b.	Activities - Sequencing and		
MANAGEMENT		Scheduling - Network Planning		
MACHINE STERVILLEY I		models - Formulating Network		
		Model – Forward Pass &	IEI	
		Backward Pass Techniques	4	
	c.	4	247	
		Risk – Categories of Risk - Risk	4	
	- 47	identification – Assessment		
	d.	Risk Planning –Risk		
** . **	-	Management – PERT Technique	241	DOT U.
Unit V-	a.	Creating the Framework -	4	PPT slide
MONITORING		Collection of Data – Visualizing		Assignme
AND CONTROL		Progress – Cost Monitoring –		
		Earned Value Analysis –	4	
	1.	Prioritizing Monitoring	4	
	b.	Project Tracking - Change		

Control. Managing contracts - Contract Management - 4
Managing people c. Organizational Behavior – Best methods of staff selection –
Motivation— The Oldham — 3 Hackman job characteristic model
d. Stress – Health and Safety – Ethical and Professional Concerns – Working in Teams.

Course Designed By: 1.Mrs.G.Balasaranya

Programme	B. Com CA	Programme Code	UCC
Course Code	20UCCE63	Number of Hours/Cycle	5
Semester	VI	Max. Marks	100
Part	Ш	Credit	4
	Core	Elective Course II	<u>. </u>
Course Title		Computer Network	
Cognitive Level	Up to K3		

Students are able to understand basic ideas, overview of the concepts and fundamentals of data communication and computer networks.

Unit-I	NETWORK OVERVIEW	15 Hours
	Introduction: Data Communications - Networks-Network Types -	
	Internet History - Standards and Administration - Topology -	
	Transmission Models. Network Models: - The OSI Model - Layers in	
	the OSI Model - TCP/IP - Protocol suite.	
Unit-II	INTRODUCTION TO PHYSICAL LAYER	15 Hours
	Data and Signals - Analog Signal - Digital Signal - Transmission	
	Impairment - Performance. Digital Transmission: Digital-To-Digital	
	conversion - Analog-To-Digital conversion. Analog Transmission:	
	Digital-To-Analog conversion - Analog-To-Analog conversion.	
	Transmission media: Guided Media - Unguided media. Bandwidth	
	Utilization: Multiplexing.	
Unit-III	INTRODUCTION TO DATALINK LAYER	15 Hours
	Introduction - Link Layer Addressing - Error Detection and	
	Correction: Introduction - Block Coding - Cyclic Codes - Checksum	
	- Forward Error Correction. Data Link Control Services: Framing -	
	Flow and Error Control - Connectionless - Connection oriented.	
	Data Link Layer Protocols: Simple Protocol – Stop and Wait Protocol	
	 Piggybacking, Media Access Control; Channelization. 	
Unit-IV	INTRODUCTION TO NETWORK LAYER	15 Hours
	Connecting Devices -: Hub -Switches -Router - Virtual LAN -	
	Network Layer Services - Packet Switching - Performance - IPV4	
	Addresses - Forwarding of IP Packets - Internet Protocol - ICMPV4	
	- Mobile IP - Routing: Introduction - Algorithms - Distance Vector	
	Routing - Link State Routing - Path Vector Routing- Next	
	Generation IP - IPV6 Addressing.	2222
Unit- V	TRANSPORT AND APPLICATION LAYER	15 Hours
	Introduction - Simple Transport Protocol - Stop and Wait Protocol -	
	UDP- Datagram - Services - Applications - TCP - Services -	
	Features – Segments – TCP Connection – State Transition Diagram –	
	Flow Control – Error Control – TCP Congestion Control TCP Timer	
	- Options. APPLICATION LAYER: WWW and HTTP - FTP - E-	
	Mail – TELNET – Secure Shell - Domain Name System.	

Pedagogy

Chalk and Talk Method / Demonstration / PowerPoint Presentation / Seminar / Quiz / Discussion / Assignment

Text Book:

 Behrouz A. Forouzan, (2013), "Data communication and Networking", Tata Mc Graw-Hill, New Delhi, 5th Edition.

Reference Books:

- Andrew S. Tanenbaum (2003), "Computer Networks", Pearson Education/PHI, New Delhi, India, 4th Edition.
- Kurose, Ross (2017), "Computer Networking: A top-down approach", Pearson Education, India, 7th Edition.
- Larry L. Peterson, Bruce S.Davie, (2011), Computer Networks: A Systems Approach, Morgan Kaufmann, California, 5th Edition.
- Achyut Godbole and Atul Kahate, (2011), "Data Communication and Networks", Tata Mc Graw-Hill, New Delhi.
- William Stallings (2003), "Computer Networking With Internet Protocols and Technology" Pearson Education India, 5th Edition.

E-Resources

- https://www.javatpoint.com/computer-network-tutorial
- https://www.geeksforgeeks.org/basics-computer-networking/
- https://www.guru99.com/data-communication-computer-network-tutorial.html
- https://www.tutorialspoint.com/data_communication_computer_network/index.htm
- https://www.studytonight.com/computer-networks/

Course Outcomes

After the completion of the course, students will be able to

COI	Trace the flow of information from one node to another node in the network.
CO2	Understand the concept of Signal Transmission using Media.
CO3	Use the Error Correction and Deduction Techniques.
CO4	Apply the protocols in network layer using algorithms.
CO ₅	Choose the appropriate Protocols in communication.

Mapping of Programme Specific outcomes with Course Outcomes

PSO/CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSOII	PSO12
CO1	3	2	2	3	2	0	0	0	0	0	0	3
CO2	3	2	1	3	1	0	0	0	0	0	0	3
CO3	3	2	1	3	1	0	0	0	0	0	0	2
CO4	3	2	1	3	1	0	0	0	0	0	0	2
CO5	3	2	1	3	1	0	0	0	0	0	0	2

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

			Secti	on A	Section B	Section C	
Units	COs	K – Level	MCQs		Either/or Choice	Open Choice	
		Level	No. Of Questions	K-Level	No. Of Questions	No. Of Questions	
1	CO1	Up to K1	2	K1 & K1	2(K1&K1)	K1	
2	CO2	Up to K2	2	K1 & K1	2(K2&K2)	K2	
3	CO3	Up to K3	2	K1 & K1	2(K2&K2)	K3	
4	CO4	Up to K3	2	K1 & K1	2(K2&K2)	K3	
5	CO5	Up to K3	2 K1 & K		2(K3&K3)	K3	
No of Q asked	uestions	to be	10		10	5	
No of Q answere	uestions d	to be	10		5	3	
Marks for each Question		1		4	10		
Total Marks for each Section		10		20	30		
			10		20	30	

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers
- K3 Application oriented Solving problems

Distribution of Section -wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C Open Choice	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	10	2	1	28	28%	28%
K2		6	1	34	34%	34%
К3		2	3	38	38%	38%
Total Marks	10	40	50	100	100%	100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I	a. Introduction: Data	4	PPT slides
NETWORK	Communications - Networks-		Assignment
OVERVIEW	Network Types		
	b. Internet History - Standards and	4	
	Administration - Topology -		
	Transmission Models.	4	
	c. Network Models: - The OSI		
	Model - Layers in the OSI	3	
	Model		
	 d. TCP/IP – Protocol suite. 		
Unit II	a. Data and Signals - Analog	4	PPT slides
INTRODUCTION	Signal - Digital Signal -		
TO PHYSICAL	Transmission Impairment -		
LAYER	Performance.	3	
	b. Digital Transmission: Digital-		
	To-Digital conversion - Analog-	4	
	To-Digital conversion.		
	c. Analog Transmission: Digital-	4	
	To-Analog conversion - Analog-		
	To-Analog conversion.		
	d. Transmission media: Guided		
	Media - Unguided media.		
	Bandwidth Utilization:		
	Multiplexing.		
Unit III	a. Introduction - Link Layer	3	PPT slides
INTRODUCTION	Addressing - Error Detection		
TO DATALINK	and Correction: Introduction -		
LAYER	Block Coding	3	
	b. Cyclic Codes - Checksum -		
	Forward Error Correction. Data	3	
	Link Control Services: Framing	2	
	 Flow and Error Control 	3	
	c. Connectionless - Connection		
	oriented.	3	
	d. Data Link Layer Protocols:		
	Simple Protocol – Stop and Wait		
	Protocol – Piggybacking.		
	e. Media Access Control:		
	Channelization.		
Unit IV	a. Connecting Devices -: Hub -	4	PPT slides
INTRODUCTION	Switches -Router - Virtual LAN		Assignment
TO NETWORK	 Network Layer Services - 	£.	
LAYER	Packet Switching –	3	
	b. Performance - IPV4 Addresses	065	
	- Forwarding of IP Packets -	4	
	Internet Protocol - ICMPV4 -		
	Mobile IP –	4	
	c. Routing: Introduction -		

	Algorithms – Distance Vector Routing – d. Link State Routing – Path Vector Routing – Next Generation IP - IPV6 Addressing.		
Unit V TRANSPORT AND	a. Introduction – Simple Transport Protocol – Stop and Wait Protocol -		PPT slides Assignment
APPLICATION LAYER	 UDP – Datagram – Services – Applications - TCP – Services – 	100	
	Features – Segments – c. TCP Connection – State	4	
	Transition Diagram – Flow Control – Error Control – TCP Congestion Control TCP Timer - Options.	4	
	 d. Application Layer: WWW and HTTP - FTP - E-Mail - TELNET - Secure Shell - Domain Name System. 		

Course Designed By: 1.Mrs.G.Balasaranya

Programme	B.Com CA	UCC							
Course Code	20UCCA61	Number of Hours/Cycle	6						
Semester	VI	Max. Marks	100						
Part	Ш	4							
T	Allied	I Course IV							
Course Title		Business Economics							
Cognitive Level	Up to K3								

Preamble

Business Economics is designed to equip students with an understanding of the dynamics of economic principles that guide business decision making at micro level.

Unit-I	Introduction	16 Hours
	Definition, Nature and Scope of Business Economics – Economics and other disciplines – Role and responsibilities of a business Economist – Objects of a modern business firm.	
Unit-II	Demand Analysis	18 Hours
	Law of Demand – Demand curve – Demand schedule – Factors influencing demand – Types of demand – Demand determinants – Demand distinctions – Elasticity of demand – Types of Elasticity of demand – Measurement of Elasticity of demand – Factors determining Elasticity of demand – Uses of Elasticity of demand.	
Unit-III	Price Analysis	20 Hours
	Price determination under various market forms – Perfect competition, monopoly and monopolistic competition – Oligopoly (features only) Pricing policies – Pricing methods – Skimming pricing, Penetration Pricing – Differential Pricing – Product Line pricing.	
Unit-IV	Demand or Sales Forecasting	18 Hours
	Meaning - Factors involved in forecasting - Importance - Methods of Forecasting for an established product and a new product.	
Unit- V	Profit Analysis	18 Hours
	Nature of profit – Profit Planning – Break Even Analysis – Concepts, uses and limitations – Profit Forecasting.	

Pedagogy

Class Room Lectures, Power point presentation, Group Discussion, Seminar, Quiz, Assignments, Experience Sharing, Brain storming, Activity, Case Study

Text Books

- Cauvery, R, Sudhanayak , U.K, Girija, M and Meenakshi R. (2016), Managerial Economics, S.Chand & Co., New Delhi.
- 2. Sankaran, S. (2020), Managerial Economics, Margham Publishers, Chennai.

Reference Books

- 1. Ahuja, H.L. (1998), Managerial Economics, Sultan Chand & Co, New Delhi.
- 2. Dweivedi (1988), Managerial Economics, Kalyani Publishers, New Delhi.
- 3. Jain, T.R (2002), Managerial Economics, V.K.Publishers, New Delhi.
- 4. Jhingan, M.L. (2004), Managerial Economics, Sultan Chand & Co, New Delhi.
- 5. Joel Dean (1982), Managerial Economics, Prentice Hall Publishers, New Delhi.

E-resources

- https://www.ddegjust.ac.in/studymaterial/bba/bba-103.pdf
- https://www.jandkicai.org/pdf/16781Demand_n_Elasticity.pdf

- https://ocw.mit.edu/courses/engineering-systems-division/esd-260j-logistics-systems-fall-2006/lecture-notes/lect5.pdf
- http://www.jiwaji.edu/pdf/ecourse/management/Paper%20202%20Marketing%20%20of%20health%20care%20services..pdf
- https://www.mbaknol.com/managerial-economics/profit-planning-and-forecasting-in-business/

Course Outcome

After completion of this course, the students will be able to:

COI	Recall the basic principles and concepts of Business Economics.
CO2	Describe economic theories related to consumer behavior.
CO3	Show the different methods of forecasting in new products.
CO4	Relate different kinds of market structure and pricing decisions.
CO5	Apply Break Even Analysis for profit planning.

Mapping of Programme Specific outcomes with Course Outcomes

PSO/CO	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSO11	PSO12
CO1	3	1	2	2	1	1	1	2	0	0	0	2
CO2	3	1	2	1	1	1	1	2	0	0	0	3
CO3	3	1	3	3	1	1	1	2	0	0	0	2
CO4	2	1	i	1	1	1	1	1	0	0	0	2
C05	2	1	1	2	1	2	2	2	0	0	0	1

^{3.} High; 2. Moderate; 1. Low

Articulation Mapping -K Levels with Course Outcomes (COs)

Unit s	COs	K-Level	Section A	1	Section B	Section C	
			MCQs		Either/ or Choice	Open Choice	
			No. Of Questions	K-Level	No. Of Question	No. Of Question	
1	CO1	Up to K2	2	K1 & K2	2(K1& K1)	2(K2)	
2	CO2	Up to K2	2	K1 & K2	2(K1& K1)	2(K2)	
3	CO3	Up to K2	2	K1 & K2	2(K2& K2)	2(K2)	
4	CO4	Up to K3	2	K1 & K2	2(K2&K2)	2(K3)	
5	CO5	Up to K3	2	K1 & K2	2(K2& K2)	2(K3)	
No of	Question	ns to be asked	10		5	5	
No of	Question	ns to be answered	10		5	3	
Makes For each Question		1		4	10		
Total Marks for each Section		10		20	30		

- $K1-Remembering and recalling facts with specific answers <math display="inline">K2-Basic \ understanding \ of facts \ and \ stating \ main \ ideas \ with \ general \ answers \ K3-Application \ oriented$

Distribution of Section - Wise Marks with K Levels

K Levels	Section A (No Choice)	Section B (Either/or)	Section C (Open Choice)	Total Marks	% of Marks without Choice	Consolidated (Rounded off)
K1	5	16		21	21%	21%
K2	5	24	30	59	59%	59%
K3		Ť	20	20	20%	20%
Total Marks	10	40	50	100		100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE	
Unit I -	a. Definition, Nature and Scope of Business	4	Class Room Lectures	
Introduction	b. Economics and Business Economics	4	PPT Presentation	
	 Role and responsibilities of a business Economist 	5	Assignments Group Discussion	
	d. Objects of a modern business firm	5		
Unit II-	a. Law of Demand - Demand determinants	5	Class Room Lectures	
Demand	 b. Demand distinctions – Elasticity of 		PPT Presentation	
Analysis	demand –Types of Elasticity of demand c. Measurement of Elasticity of demand – Factors determining Elasticity of demand.	5	Assignments Group Discussion	
	d.Uses of Elasticity of demand.	5		
		5		
Unit III- Demand or	 a. Meaning – Factors involved in forecasting Importance 	6	Class Room Lectures PPT Presentation	
Sales Forecasting	b. Methods of Forecasting c. For an established product and a new	6	Assignments	
	product	6		
Unit IV-	a. Price determination under various market		Class Room Lectures	
Price Analysis	forms – Perfect competition ,monopoly and monopolistic competition	6	PPT Presentation Assignments	
	 b. Oligopoly (features only) Pricing policies Pricing methods – Skimming pricing , 	6		
	c. Penetration Pricing c.Differential Pricing – Product Line pricing.	6		
Unit V- Profit	a. Nature of profit - Profit Planning	6	Class Room Lectures	
Analysis	 Break Even Analysis Concepts, uses and limitations 	6	PPT Presentation Group Discussion	
	c. Profit Forecasting.	6	Assignments	

Course Designed By: Dr.A.Babitha

Programme	B. Com CA	Programme Code	UCC
Course Code	20UCCS62	Number of Hours/Cycle	5
Semester	VI	Max. Marks	100
Part	IV	Credit	4
	Skill	Based Course V	
Course Title	ji	ntroduction to Cloud Computi	ng
Cognitie Level	Up to K2		

Preamble

This course will help students to improve the knowledge about cloud concepts, cloud architecture, cloud services, Cloud security and about cloud storage.

Unit I	UNDERSTANDING CLOUD COMPUTING	6 Hours
	Cloud computing – cloud types – the cloud cube model – deployment models – service models – characteristics of cloud computing – benefits of cloud computing – disadvantages of cloud computing.	
Unit II	CLOUD ARCHITECTURE	6 Hours
	The cloud computing stack – Composability-Infrastructure- Platforms-virtual appliances – communication protocols – Applications- Google Chromium OS.	
Unit III	DEVELOPING CLOUD SERVICES	6 Hours
	Infrastructure as a Service (IaaS) – IaaS workloads – Platform as a Service (PaaS) – Software as a Service (SaaS) – Identity as a Service (IDaaS) – Compliance as a Service (CaaS).	
Unit IV	CLOUD SECURITY	6 Hours
	The Security Boundary- Security Service boundary- Security mapping- Securing Data-Brokered cloud storage access- Storage location -Encryption- Auditing and compliance.	
Unit V	CLOUD STORAGE	6 Hours
	Cloud storage – unmanaged cloud storage – managed cloud storage – creating cloud storage systems-Virtual storage containers- Cloud Back up- Types- features- Attached backup.	

Pedagogy

Class Room Lectures, chalkboards, Power point presentation, You Tube, Group Discussion, Seminar, Quiz, Assignments, Brain storming, Activity

Text Book:

1. Barrie Sosinsky., (2012), "Cloud Computing Bible", Wiley India Pvt Ltd, New Delhi 1st Edition.

Reference Books:

- Kaittwang Geoffrey C.Fox and Jack J Dongrra., (2012), "Distributed and Cloud Computing", Elsevier India.
- 2. Michael Miller., (2008), "Cloud Computing", Pearson Education Inc., New Delhi, 1st Edition
- Anthony T.Velte, Toby J.Velte, Robert Elsenpeter., (2011), "Cloud Computing: A Practical Approach", Tata McGraw Hill, New Delhi

- Rajkumar Buyya, James Broberg, andrzej, wiley.,(2011) "Cloud Computing:" Principles and Paradigms, Editted by India Publications.
- Srinivasan and Jeyasuresh., (2014) "Cloud Computing A Practical Approach for Learning and Implementation" Pearson India Publications.

E-Resources:

- https://www.javatpoint.com/cloud-computing-tutorial
- · https://www.tutorialspoint.com/cloud_computing/index.htm
- https://www.guru99.com/cloud-computing-for-beginners.html
- · https://www.simplilearn.com/tutorials/cloud-computing-tutorial
- https://www.w3schools.in/cloud-computing/cloud-computing/

Course Outcomes

After completion of this course, the students will be able to:

CO1	Understand the basics of Cloud Computing.	
CO2	Understand Cloud Architecture.	
CO3	Distinguish between various Cloud Services.	
CO4	Summarize Cloud Security Concepts.	
CO5	Express the concepts of Cloud storage.	

Mapping of Programme Specific outcomes with Course Outcomes

PSO/C 0	PSO1	PSO2	PSO3	PSO4	PSO5	PSO6	PSO7	PSO8	PSO9	PSO10	PSOII	PSO12
CO1	2	2	1	2	0	0	0	0	0	0	0	2
CO2	2	2	1	2	1	0	0	0	0	0	0	2
CO3	2	2	1	2	3	0	0	0	0	0	0	2
CO4	2	2	2	2	2	0	0	0	0	0	0	2
CO5	2	2	2	2	2	0	0	0	0	0	0	2

3. High; 2. Moderate; 1. Low

Articulation Mapping - K Levels with Course Outcomes (COs)

Units	COs	K – Level	Section A Either/Or Choice	Section B Open Choice
200000000		Level	No. Of Questions	No. Of Questions
1	CO1	Up to K1	2(K1&K1)	K1
2	CO2	Up to K2	2(K1&K1)	K2
3	CO3	Up to K2	2(K1&K1)	K2
4	CO4	Up to K2	2(K2&K2)	K2
5	CO5	Up to K2	2(K2&K2)	K2
No of Questions to be asked		10	5	
No of Qu answered		be	5	3
Marks for each Question			3	5
Total Marks for each Section			15	15
			15	15

- K1 Remembering and recalling facts with specific answers
- K2 Basic understanding of facts and stating main ideas with general answers

Distribution of Section -wise Marks with K Levels

K Levels	Section A (Either/or)	Section B Open Choice	Total Marks	% of Marks without choice	Consolidated (Rounded off)
K1	6	1	23	41.81%	42%
K2	4	4	32	58.18%	58%
Total Marks	30	25	55	100%	100%

LESSON PLAN

UNIT	DESCRIPTION	HOURS	MODE
Unit I UNDERSTANDING CLOUD COMPUTING	a. Cloud computing — cloud types — the cloud cube model b. deployment models — service models — characteristics of cloud computing c. benefits of cloud computing — disadvantages of cloud computing.	2 2 2	PPT slides Assignment
Unit II CLOUD ARCHITECTURE	a. The cloud computing stack – Composability-Infrastructure b. Platforms-virtual appliances – communication protocols c. Applications- Google Chromium OS.	2 2 2	PPT slides
Unit III DEVELOPING CLOUD SERVICES	 a. Infrastructure as a Service (IaaS) – IaaS workloads b. Platform as a Service (PaaS) – Software as a Service (SaaS) c. Identity as a Service (IDaaS) – Compliance as a Service (CaaS). 	2 2 2	PPT slides
Unit IV CLOUD SECURITY	a. The Security Boundary- Security Service boundary b. Security mapping- Securing Data-Brokered cloud storage access c. Storage location -Encryption- Auditing and compliance.	2 2 2	PPT slides Assignment
Unit V CLOUD STORAGE	a. Cloud storage — unmanaged cloud storage — managed cloud storage b. creating cloud storage systems-Virtual storage containers c. Cloud Back up- Types-features- Attached backup	2 2 2	PPT slides Assignment

Course Designed By: 1. Mr.L. Soosai Suresh 2. Mrs.G.Balasaranya

Programme	B.Com/ B.Com CA	Programme Code	UCO & UCC
Course Code	20CCOM51/ 20CCCA51	Number of Hours/Cycle	2
Semester	v	Max. Marks	50
		Credit	2
Course Title	V	Business Ethics	

Preamble

The basic objective of this paper is to familiarize students with the importance of values and ethics in business and, then, to apply those skills to the real and current challenges of professions. How to promote Ethic in Business- it's action plan.

Unit I	Business Ethics	6 Hours
	Business Ethics: Introduction, Business Ethics and Management, Business Ethics and Moral Obligations; Corporate Social Responsibility; Corporate Governance; Role of Media in Ensuring Corporate Governance; Environmental Concerns and Corporations.	
Unit II	Ethics Management	6 Hours
	Ethical Issues related with Advertisement and Marketing; Secular versus Spritual Values in Management, Work Ethics, Stress at Workplace.	
Unit III	Ethical Values	6 Hours
	Relevance of Values in Management; Gandhian Approach in Management and Trusteeship; Social Values and Political Environment.	v 6
Unit IV	Indian Ethos in Management	6 Hours
2	Indian Ethos: Values and Ethics; Requisites for Ethics Globally - Cases of Indian Ethos in management.	V PI
Unit V	Holistic Management System	6 Hours
	A Holistic Management System; Management in Indian Perspective	

Pedagogy

Class Room Lectures, Power point presentation, Quiz, Assignments and Practice paper

Text Books

- 1. Kaur, Tripat; Values & Ethics in Management, Galgotia Publishers.
- 2. Chakraborty, S.K.; Human values for Managers

Reference Books

- Chakraborty, S.K.; Ethics in Management: A Vedantic Perspective, Oxford University Press.
- 2. Dr. F.C. Sharma Business Values & Ethics, Shree Mahavir Book Depot (Publisher).

Course designed by Dr.M. ManiMaheswaran

Programme	B.Com & B.Com CA	Programme Code	UCO &UCC
Course Code	20CCOM61/ 20CCCA61	Number of Hours/Cycle	2
Semester	VI	Max. Marks	50
Part	V	Credit	
Course Title]	Interview Techniques	
Cognitive Level		-d F)	

Objectives

To understand the interview technique concept and body language and how to attend and respond the interview to succeed in their job carrier.

Unit I	Concept of Interview	6 Hours
	Meaning and Definition of Interview- objectives of Interview- Elements of Interview - Oral, Observational, Face to Face, Conversational Personal evaluation.	
Unit II	Process of Interview	6 Hours
	Pre interview Stage: Steps in Interview process-Guidelines for effective Interview	o mours
Unit III	Qualities of Interview	6 Hours
	Preparing for Interview: Dress Code, Need for Punctuality, Avoiding Tensions and Nervousness, Qualities Observed during the Interview.	o Hours
Unit IV	Interview Technique	6 II
	Interview Technique- Interview Tips-Interview follow ups- Common Model Interview questions- How to Answer Questions. , Need for Preparation, Post Interview Behaviour	6 Hours
Unit V	Attitude formation	
	Attitude formation – Reasons for Negative Attitude, Components, Functions and Developing Positive Mental Attitude.	6 Hours

Text Book

- Shashi K.Gupta and Rosi joshi Human Resource Management, Kalyani Publishers, Ludhiana.
- Diane Berk "Preparing for Interview", Viva Books Pvt. Ltd. Chennai

 Reference Books
- 1.Shalini Varma "Art of reading gestures and posture", S. Chand & Co. New Delhi.
- 2.Farhathullah "Planning Career in 21st Century Job Market" Boston Publishers.
- 3.Sudhir Andrews "How to Succeed Interviews" Tata Mc Graw Hill Company.
 New Delhi.
- 4. Vinay Mohan "Understanding Body Language" Pustak Mahal Publications.

 Course designed by Dr.M. Mani Maheswaran