



V.V.VANNIAPERUMAL COLLEGE FOR WOMEN

(Belonging to Virudhunagar Hindu Nadars)

An Autonomous Institution Affiliated to Madurai Kamaraj University, Madurai

Reaccredited with 'A++' Grade (4th Cycle) by NAAC

VIRUDHUNAGAR

Quality Education with Wisdom and Values

OUTCOME BASED EDUCATION WITH CHOICE BASED CREDIT SYSTEM REGULATIONS AND SYLLABUS (with effect from Academic Year 2023 - 2024)

V.V.Vanniaperumal College for Women, Virudhunagar, established in 1962, offers 13 UG Programmes (Aided), 15 UG Programmes (SF), 15 PG Programmes and 6 Ph.D. Programmes. The curricula for all these Programmes, except Ph.D. Programmes, have been framed as per the guidelines given by the University Grants Commission (UGC) & Tamil Nadu State Council for Higher Education (TANSICHE) under Choice Based Credit System (CBCS) and the guidelines for Outcome Based Education (OBE).

The Departments of Commerce, English, History, Mathematics, Biochemistry and Tamil upgraded as Research Centres offer Ph.D. Programmes as per the norms and regulations of Madurai Kamaraj University, Madurai and do not come under the purview of CBCS.

A. CHOICE BASED CREDIT SYSTEM (CBCS)

The CBCS provides an opportunity for the students to choose Courses from the prescribed Courses. The CBCS is followed as per the guidelines formulated by the UGC. The performance of students is evaluated based on the uniform grading system. Computation of the Cumulative Grade Point Average (CGPA) is made to ensure uniformity in evaluation system.

List of Programmes in which CBCS/Elective Course System is implemented

UG PROGRAMMES

Arts & Humanities	:	History (E.M. & T.M.), English, Tamil
Physical & Life Sciences	:	Mathematics, Zoology, Chemistry, Physics, Biochemistry, Home Science - Nutrition and Dietetics, Costume Design and Fashion, Microbiology, Biotechnology, Computer Science, Information Technology, Data Science, Computer Applications and Computer Applications - Graphic Design
Commerce & Management	:	Commerce, Commerce (Computer Applications), Commerce (Professional Accounting), Business Administration

PG PROGRAMMES

Arts & Humanities	:	History, English, Tamil
Physical & Life Sciences	:	Mathematics, Biochemistry, Home Science - Nutrition and Dietetics, Chemistry, Biotechnology, Computer Science, Computer Science (Data Science) and Computer Applications (MCA) *
Commerce & Management	:	Commerce, Business Administration (MBA) *

* AICTE approved Programmes

OUTLINE OF CHOICE BASED CREDIT SYSTEM – UG

1. Core Courses
2. Elective Courses
 - Generic Elective Courses
 - Discipline Specific Elective Courses (DSEC)
 - Non Major Elective Courses (NMEC)
3. Skill Enhancement Courses (SEC)
4. Environmental Studies (EVS)
5. Value Education
6. Self Study Courses (Online)
7. Extra Credit Courses (Self Study Courses) (Optional)

List of Non Major Elective Courses (NME)
(2023-2024 onwards)

Name of the Course	Course Code	Semester	Department
Introduction to Tourism	23UHIN11	I	History(EM)
Indian Constitution	23UHIN21	II	History(EM)
சுற்றுலா ஓர் அறிமுகம்	23UHIN11	I	History (TM)
இந்திய அரசியலமைப்பு	23UHIN21	II	History(TM)
Popular Literature and Culture	23UENN11	I	English
English for Professions	23UENN21	II	
பேச்சுக்கலைத்திறன்	23UTAN11	I	Tamil
பயன்முறைத் தமிழ்	23UTAN21	II	
Practical Banking	23UCON11	I	Commerce (Aided)
Basic Accounting Principles	23UCON22	II	
Financial Literacy-I	23UCON12	I	Commerce (SF)
Financial Literacy -II	23UCON21	II	
Self-Employment and Startup Business	23UCCN11	I	Commerce CA (SF)
Fundamentals of Marketing	23UCCN21	II	

Women Protection Laws	23UCPN11	I	Commerce (Professional Accounting)
Basic Labour Laws	23UCPN21	II	
Basics of Event Management	23UBAN11	I	Business Administration
Business Management	23UBAN21	II	
Quantitative Aptitude I	23UMTN11	I	Mathematics
Quantitative Aptitude II	23UMTN21	II	
Physics for Everyday life -I	23UPHN11	I	Physics
Physics for Everyday life -II	23UPHN21	II	
Food Chemistry	23UCHN11	I	Chemistry
Drugs and Natural Products	23UCHN21	II	
Ornamental fish farming and Management	23UZYN11	I	Zoology
Biocomposting for Entrepreneurship	23UZYN21	II	
Foundations of Baking and Confectionery	23UHSN11	I	Home Science – Nutrition and Dietetics
Basic Nutrition and Dietetics	23UHSN21	II	
Nutrition and Health	23UBCN11	I	Biochemistry
Life Style Diseases	23UBCN21	II	
Social and Preventive Medicine	23UMBN11	I	Microbiology
Nutrition & Health Hygiene	23UMBN21	II	
Herbal Medicine	23UBON11	I	Biotechnology
Organic farming and Health Management	23UBON21	II	
Basics of Fashion	23UCFN11	I	Costume Design And Fashion
Interior Designing	23UCFN21	II	
Office Automation	23UCSN11	I	Computer Science
Introduction to Internet and HTML 5	23UCSN21	II	
Office Automation	23UITN11	I	Information Technology
Introduction to HTML	23UITN21	II	
Introduction to HTML	23UCAN11	I	Computer Applications
Fundamentals of Computers	23UCAN21	II	
Introduction to HTML	23UGDN11	I	Computer Applications - Graphic Design
Fundamentals of Computers	23UGDN21	II	
Organic Farming	23UBYN11	I	Botany
Nursery and Landscaping	23UBYN12		
Mushroom Cultivation	23UBYN21	II	
Medicinal Botany	23UBYN22		
Cadet Corps for Career Development I	23UNCN11	I	National Cadet Corps
Cadet Corps for Career Development II	23UNCN21	II	

B. OUTCOME BASED EDUCATION (OBE) FRAMEWORK

The core philosophy of Outcome Based Education rests in employing a student - centric learning approach to measure the performance of students, based on a set of pre-determined outcomes. The significant advantage of OBE is that it enables a revamp of the curriculum based on the learning outcomes, upgrade of academic resources, quality enhancement in research and integration of technology in the teaching–learning process. It also helps in bringing clarity among students as to what is expected of them after completion of the Programme in general and the Course

in particular. The OBE directs the teachers to channelise their teaching methodologies and evaluation strategies to attain the Programme Educational Objectives (PEOs) and fulfill the Vision and Mission of the Institution.

Vision of the Institution

The founding vision of the Institution is to impart Quality Education to the rural womenfolk and to empower them with knowledge and leadership quality.

Mission of the Institution

The mission of the Institution is to impart liberal education committed to quality and excellence. Its quest is to mould learners into globally competent individuals instilling in them life-oriented skills, personal integrity, leadership qualities and service mindedness.

B.1. Programme Educational Objectives, Programme Outcomes and Programme Specific Outcomes

It is imperative for the Institution to set the Programme Educational Objectives (PEOs), Programme Outcomes (POs) and Course Outcomes (COs), consistent with its Vision and Mission statements. The PEOs and the POs should be driven by the Mission of the Institution and should provide distinctive paths to achieve the stated goals. The PEOs for each Programme have to fulfill the Vision and Mission of the Department offering the Programme.

Vision of the Department of Commerce

To impart knowledge of Commerce so that the learners can spread the seeds of Commerce throughout the fields of the society.

Mission of the Department of Commerce

- To provide an environment for understanding and learning Commerce.
- To inculcate an aptitude towards research oriented higher studies.
- To motivate the learners to undertake project works and to apply the findings and suggestions for the betterment of the society.
- To transform commerce graduates into dynamic entrepreneurs and potential job providers.

B.1.1. Programme Educational Objectives (PEOs)

PEOs are broad statements that describe the career and professional achievements, that the Programme is preparing the graduates to achieve within the first few years after graduation. PEOs are framed for each Programme and should be consistent with the Mission of the Institution.

Programme Educational Objectives (PEOs) of B.Com. (Computer Applications)

Programme

The students will be able to

- get employment in banks, IT sectors, Educational Institutions and Leading Companies and also to shine as successful entrepreneurs.
- apply the acquired computation and digital skills in wider areas of commerce and Industry.
- engage in lifelong learning and also serve the society with a focus on ethics and values.

Key Components of Mission Statement	PEO1	PEO2	PEO3
Environment for understanding and continuous learning	-	✓	✓
Choice of Higher studies or employment or self employment	✓	✓	✓
Applications for the betterment of the society	✓	✓	✓

B.1.2. Programme Outcomes (POs)

POs shall be based on Graduates Attribute (GAs) of the Programme. The GAs are the attributes expected of a graduate from a Programme in terms of knowledge, skills, attitude and values. The Graduate Attributes include Disciplinary Knowledge, Communication Skills, Critical Thinking, Problem Solving, Analytical Reasoning, Research Related Skills, Co-operation/Team Work, Scientific Reasoning, Reflective Thinking, Information/Digital Literacy, Multicultural Competence, Moral and Ethical Awareness/Reasoning, Leadership Qualities and Lifelong Learning.

On successful completion of the programme, the students will be able to

1. apply effectively the acquired knowledge and skill in the field of Arts, Physical Science, Life Science, Computer Science, Commerce and Management for higher studies and employment. (*Disciplinary Knowledge*)
2. articulate innovative thoughts and ideas proficiently in both in spoken and written forms. (*Communication Skills*)
3. identify, formulate and solve problems in real life situations scientifically / systematically by adapting updated skills in using modern tools and techniques. (*Scientific Reasoning and Problem Solving*)

4. critically analyse, synthesize and evaluate data, theories and ideas to provide valid suggestions through assignments, case studies, Internship and projects for the fulfillment of the local, national and global developmental needs. (*Critical Thinking and Analytical Reasoning*)
5. use ICT in a variety of self-directed lifelong learning activities to face career challenges in the changing environment. (*Digital Literacy, Self - directed and Lifelong Learning*)
6. self-manage and function efficiently as a member or a leader in diverse teams in a multicultural society for nation building. (*Co-operation/Team Work and Multicultural Competence*)
7. uphold the imbibed ethical and moral values in personal, professional and social life for sustainable environment. (*Moral and Ethical Awareness*)

B.1.3. Programme Specific Outcomes (PSO)

Based on the Programme Outcomes, Programme Specific Outcomes are framed for each UG Programme. Programme Specific Outcomes denote what the students would be able to do at the time of graduation. They are Programme-specific and it is mandatory that each PO should be mapped to the respective PSO.

On completion of the B.Com. (C.A) Programme the students will be able to

PO1 - *Disciplinary Knowledge*

PSO 1.a : apply the acquired knowledge of the principles of Accounting, Banking, Law, Marketing and Computer Applications in PG Programmes.

PSO 1.b : apply Computer Application skill with Commerce knowledge not only to cater to the manpower needs of enterprises and institutions to become employable but also to become an entrepreneur/digipreneur.

PO2 - *Communication Skills*

PSO 2.a : draft mails, prepare reports and communicate effectively in oral and written form to employers, officials and others in the institution / organisation.

PSO 2.b : communicate proficiently the complex contents of Commerce and Computer Application procedures in a concise manner to the recipients including learners, peer teams and academicians.

PO3 - *Scientific Reasoning and Problem Solving*

PSO 3 : identify the commerce oriented problems in real-life situations and solve them systematically/scientifically by following business software to face career challenges.

PO4 - Critical thinking and Analytical Reasoning

PSO 4. : critically evaluate commerce related theories, policies and procedures to provide valid conclusions for the betterment of the society.

PSO 4.b : analyse commerce oriented statements/information with appropriate formulae, tools and programmes, interpret the findings and provide need based suggestions leading to Research and Development activities.

PO5 - Digital Literacy, Self - directed and Lifelong learning

PSO 5 : use ICT to adapt to digitalized environment in all fields of Commerce and other fields of their interest and develop software by means of self- directed and lifelong learning for professional growth, environment sustainability and nation building.

PO6 - Cooperation/Team Work and Multicultural Competence

PSO 6 : emerge with Commerce knowledge, Computer Application skills, leadership potentialities, multi cultural competence and team spirit that help them in team work for achieving common goals for the welfare of the institution, business or society.

PO7 - Moral and Ethical awareness

PSO 7: uphold the imbibed legal and moral values in their personal and professional life to function ethically as socially responsible citizen.

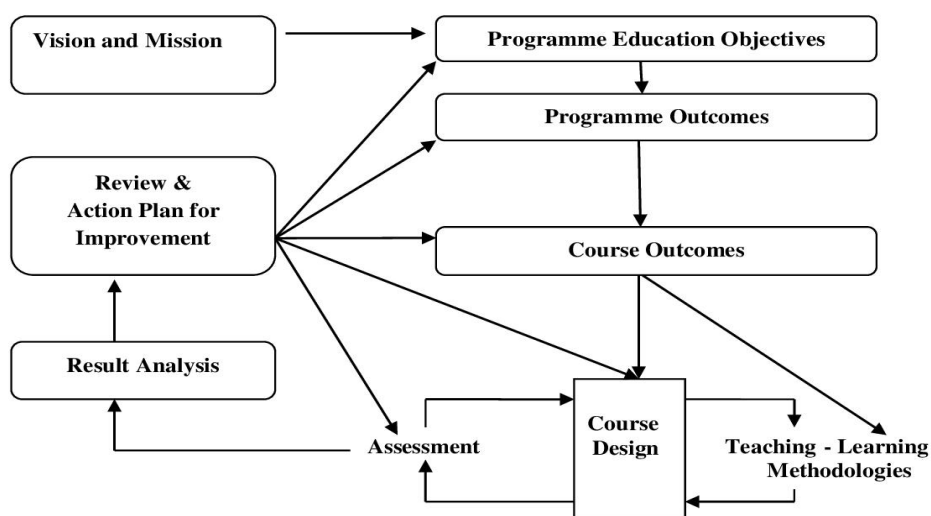
PO-PEO Mapping Matrix

Attainment of PEOs can be measured by a PO-PEO matrix. PEOs should evolve through constant feedback from alumnae, students, industry, management, *etc.* It is mandatory that each PEO should be mapped to at least one of the POs.

PEOs POs/PSOs	PEO1	PEO2	PEO3
PO1/PSO1.a	-	✓	✓
PO1/PSO1.b	✓	✓	✓
PO2/PSO2.a	✓	✓	-
PO2/PSO2.b	✓	✓	-
PO3/PSO3	-	✓	✓
PO4/PSO4.a	-	✓	✓
PO4/PSO4.b	✓	✓	-
PO5/PSO5	✓	✓	-
PO6/PSO6	-	✓	✓
PO7/PSO7	-	-	✓

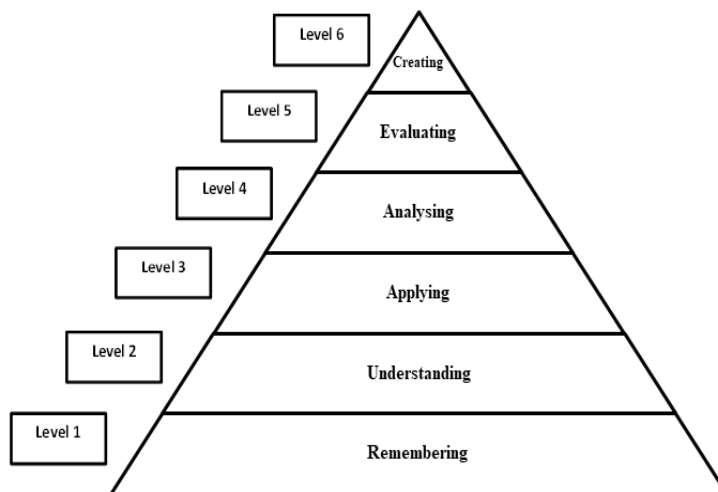
B.1.4. Course Outcomes (COs)

Course Outcomes are narrow statements restricted to the Course contents given in five units. Course Outcomes describe what students would be capable of, after learning the contents of the Course. They reflect the level of knowledge gained, skills acquired and attributes developed by the students after learning of Course contents. COs are measurable, attainable and manageable in number. COs contribute to attain POs in such a way that each CO addresses at least one of the POs and also each PO is reasonably addressed by adequate number of COs.



It is important to determine the methods of assessment. A comprehensive assessment strategy may be outlined using the revised Bloom's Taxonomy levels.

BLOOM'S TAXONOMY



CO – PO Mapping of Courses

After framing the CO statements, the COs framed for each Course is mapped with POs based on the relationship that exists between them. The COs which are not related to any of the POs is indicated with (-), signifying Nil. Measurement Mapping is based on Four Points Scale [High (H), Medium (M), Low (L) and Nil (-)]. For calculating weighted percentage of contribution of each Course in the attainment of the respective POs, the weights assigned for H, M and L are 3, 2 and 1 respectively.

CO-PO/PSO Mapping Table (Course Articulation Matrix)

PO/PSOs	PO1/ PSO1	PO2/ PSO2	PO3/ PSO3	PO4/ PSO4	PO5/ PSO5	PO6/ PSO6	PO7/ PSO7
CO1							
CO2							
CO3							
CO4							
CO5							

ELIGIBILITY FOR ADMISSION

The candidate should have passed the Higher Secondary Examination conducted by the Board of Higher Secondary Education, Tamilnadu or any other equivalent examination accepted by the Academic Council with Commerce as one of the subjects in Higher Secondary Course.

DURATION OF THE PROGRAMME

The candidates shall undergo the prescribed Programme of study for a period of three academic years (six semesters).

MEDIUM OF INSTRUCTION

English

COURSES OFFERED

Part I	:	Tamil/Hindi Course
Part II	:	English
Part III	:	Core Courses
		Elective Courses <ul style="list-style-type: none"> • Generic Elective Courses • Discipline Specific Elective Courses
		Self Study Course - online
Part IV	:	Skill Enhancement Courses (SEC)
		Elective Courses (NMEC)
		Environmental Studies Value Education
		Field Project/Internship
		Self Study Course - online
Part V	:	National Service Scheme/ Physical Education/ Youth Red Cross Society/ Red Ribbon Club/ Science Forum/ Eco Club/ Library and Information Science/ Consumer Club/ Health and Fitness Club/ National Cadet Corps/ Rotaract Club

B.2 EVALUATION SCHEME**B.2.1.PART II**

Components	Internal Assessment Marks	Summative Examination Marks	Total Marks
Theory	15	60	100
Practical	5	15	
Assignment	5	-	

Three Periodic Tests - Average of the best two will be considered

B.2.2.Part I & PART III - Core Courses, Elective Courses (Generic, DSEC)

Components	Internal Assessment Marks	External Examination Marks	Total Marks
Theory	25	75	100

INTERNAL ASSESSMENT**Distribution of Marks**

Mode of Evaluation		Marks
Periodic Test		: 15
Assignment	K3 Level	: 5
Quiz	K1 Level	: 5
Total		: 25

Three Periodic Tests - Average of the best two will be considered

Two Assignments - Better of the two will be considered

Three Quiz Tests - Best of the three will be considered

Practical

Mode of Evaluation		Marks
Practical Test*		: 30
Record & Performance		: 10
Total		: 40

*Average of the Two Practical Tests will be considered

Question Pattern for Internal Tests**Duration: 2 Hours**

Section	Q.No.	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A	1- 4	Multiple Choice	4	4	1	4
B	5-7	Internal Choice - Either ...or Type	3	3	7	21
C	8-9	Internal Choice - Either ...or Type	2	2	10	20
Total						45*

*The total marks obtained in the Periodic Test will be calculated for 15 marks

SUMMATIVE EXAMINATION**Question Pattern****Duration: 3 Hours**

Section	Q.No	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A	1 - 10	Multiple Choice	10	10	1	10
B	11 - 15	Internal Choice – Either ...or Type	5	5	7	35
C	16 - 18	Internal Choice – Either... or Type	3	3	10	30
Total						75

PROJECT**Assessment by Internal Examiner Only****Internal Assessment****Distribution of Marks**

Mode of Evaluation	:	Marks
Project work and Report	:	60
Presentation and Viva –Voce	:	40
Total	:	100

B.2.3 PART IV - Skill Enhancement Courses, Non Major Elective Courses and Foundation Course**B.2.3.1 FOUNDATION COURSE****INTERNAL ASSESSMENT****Distribution of Marks****Theory**

Mode of Evaluation		Marks
Periodic Test	:	15
Assignment	K2 Level	5
Quiz	K1 Level	5
Total	:	25

Three Periodic Tests - Average of the best two will be considered

Two Assignments - Better of the two will be considered

Three Quiz Tests - Best of the three will be considered

Question Pattern for Periodic Tests**Duration: 1 Hour**

Section	Q.No.	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A	1 - 3	Internal Choice - Either ...or Type	3	3	5	15
B	4	Internal Choice – Either ...or Type	1	1	10	10
Total						25*

*The total marks obtained in the Periodic Test will be calculated for 15 marks

SUMMATIVE EXAMINATION

Mode of Evaluation	Marks
Summative Examination	: 50
Online Quiz (Multiple Choice Questions - K2 Level)	: 25
Total	: 75

Question Pattern**Duration: 2 Hours**

Section	Q.No.	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A	1 - 5	Internal Choice - Either ... or Type	5	5	6	30
B	6 - 7	Internal Choice – Either... or Type	2	2	10	20
Total						50

B.2.3.2 Skill Enhancement Course - Entrepreneurial skills**INTERNAL ASSESSMENT ONLY****Distribution of Marks**

Mode of Evaluation	Marks
Periodic Test	: 15
Assignment	: 5
Quiz	: 5
Model Examinations	: 60
Online Quiz(Multiple Choice Questions - K2 Level)	: 15
Total	: 100

Question Pattern for Periodic Tests**Duration: 1 Hour**

Section	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A Q. No.(1- 3)	Internal Choice – Either Or Type	3	3	6	18
B Q. No.(4)	Internal Choice – Either Or Type	1	1	12	12
Total					30

Two Periodic Tests - Better of the two will be considered

Two Assignments - Better of the two will be considered

Two Quiz Tests - Better of the two will be considered

Question Pattern for Model Examination**Duration: 2 Hours**

Section	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A Q. No.(1-5)	Internal Choice – Either Or Type	5	5	6	30
B Q. No.(6- 8)	Internal Choice – Either Or Type	3	3	10	30
Total					60

B.2.3.3 Skill Enhancement Courses/ Non Major Elective Course**INTERNAL ASSESSMENT****Distribution of Marks****Theory**

Mode of Evaluation		Marks
Periodic Test	:	15
Assignment	K3 Level	5
Quiz	K2 Level	5
Total		25

Three Periodic Tests - Average of the best two will be considered

Two Assignments - Better of the two will be considered

Three Quiz Tests - Best of the three will be considered

Question Pattern for Periodic Tests**Duration: 1 Hour**

Section	Q.No.	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A	1 - 3	Internal Choice - Either ...or Type	3	3	5	15
B	4	Internal Choice – Either ...or Type	1	1	10	10
Total						25*

*The total marks obtained in the Periodic Test will be calculated for 15 marks

SUMMATIVE EXAMINATION

Mode of Evaluation		Marks
Summative Examination	:	50
Online Quiz (Multiple Choice Questions - K2 Level)	:	25
Total	:	75

Question Pattern**Duration: 2 Hours**

Section	Q.No.	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A	1 - 5	Internal Choice - Either ... or Type	5	5	6	30
B	6 - 7	Internal Choice – Either... or Type	2	2	10	20
	Total					50

B.2.4 PART IV- ENVIRONMENTAL STUDIES / VALUE EDUCATION**INTERNAL ASSESSMENT ONLY****Evaluation Pattern**

Mode of Evaluation		Marks
Periodic Test	:	15
Assignment (Based on the listed activities) - K3 Level	:	10
Online Quiz (Multiple Choice Questions - K2 Level)	:	25
Poster Presentation - K3 Level		10
Report on student's Awareness creation on Environmental Protection /Ethical Values - K3 Level		10
Model Examination	:	30
Total	:	100

Three Assignment - Best of the three will be considered

Question Pattern for Periodic Tests**Duration: 1 Hour**

Section	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A Q. No.(1- 3)	Internal Choice – Either Or Type	3	3	6	18
B Q. No.(4)	Internal Choice – Either Or Type	1	1	12	12
Total					30*

Two Periodic tests - Better of the two will be considered

The total marks obtained in the Periodic test will be calculated for 15 marks

Question Pattern for Model Examination**Duration: 2 ½ Hours**

Section	Q.No.	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A	1 - 5	Internal Choice - Either ... or Type	5	5	6	30
B	6 - 8	Internal Choice – Either... or Type	3	3	10	30
Total						60*

*The total marks obtained in the Model Examination will be calculated for 30 marks

B.2.5 PART IV- Internship/ Field Project

Internship / Field Project is compulsory for II year UG Science Students

- **Internship:** A designated activity that carries one credit involving not less than 15 days of working in an organization under the guidance of an identified mentor
- **Field Project:** Students comprising of maximum 5 members in a team need to undertake project that involve conducting surveys inside/outside the college premises and collection of data from designated communities or natural places.
- Assessment by Internal Examiner only

Mode of Evaluation		Marks
Onsite Learning/Survey	:	50
Report	:	25
Viva-Voce	:	25
Total		100

B.2.6 SELF STUDY COURSE**B.2.6 .1 PART III - Core & Elective Courses Quiz – Online**

- Assessment by Internal Examiner only
- Question Bank is prepared by the Faculty Members of the Departments for all the Core and Elective Courses offered in all the Semesters.
- No. of Questions to be taken 700.
- Multiple Choice Question pattern is followed.
- Online Test will be conducted in VI Semester for 100 Marks.
- Model Examination is conducted after two periodic tests.

Distribution of Marks

Mode of Evaluation		Marks
Periodic Test	:	25
Model Examination	:	75
Total	:	100

Two Periodic Tests - Better of the two will be considered

B.2.6 .2 PART IV - Practice for Competitive Examinations - Online

Assessment by Internal Examiner only

- Question Bank prepared by the Faculty Members of the respective Departments will be followed.
- Multiple Choice Question pattern is followed.
- Online Test will be conducted in V Semester for 100 Marks.
- Model Examination is conducted after two periodic tests.

Subject wise Allotment of Marks

Subject		Marks
Tamil	:	10
English	:	10
History	:	10
Mathematics	:	10
Current affairs	:	10
Commerce, Law & Economics	:	10
Physical Sciences	:	10
Life Sciences	:	15
Computer Science	:	5
Food and Nutrition	:	5
Sports and Games	:	5
Total	:	100

Distribution of Marks

Mode of Evaluation		Marks
Periodic Test	:	25
Model Examination	:	75
Total	:	100

Two Periodic Tests - Better of the two will be considered

B.2.7. Part V – Extension Activities**INTERNAL ASSESSMENT ONLY****Distribution of Marks**

Mode of Evaluation		Marks
Attendance	:	5
Performance	:	10
Report/Assignment/Project/Camp/Practical	:	10
Total	:	25*

*The marks obtained will be calculated for 100 marks

B.2.8 EXTRA CREDIT COURSES (OPTIONAL)**2.8.1 Extra Credit Course offered by the Department.**

Assessment by Internal Examiner Only (To be conducted along with the III Periodic Test)

Distribution of Marks

Mode of Evaluation		Marks
Quiz (Multiple Choice Questions)	:	25
Model Examination	:	75
Total	:	100

Question Pattern for Model Examination

Section	Types of Question	No. of Questions	No. of Questions to be answered	Marks for each Question	Total Marks
A Q.No.(1-5)	Internal Choice- Either or Type	5	5	7	35
B Q.No.(6-9)	Internal Choice- Either or Type	4	4	10	40
				Total	75

2.8.2 Extra credit Course offered by MOOC (Massive Open Online Course)

- The Courses shall be completed within the first V Semesters of the Programme.
- The allotment of credits is as follows (**Maximum of 10 credits**)

4weeks Course	- 1 credit
8 weeks Course	- 2 credits
12 weeks Course	- 3 credits

ELIGIBILITY FOR THE DEGREE

- The candidate will not be eligible for the Degree without completing the prescribed Courses of study, lab work, *etc.*, and a minimum Pass marks in all Courses.
 - No Pass minimum for Internal Assessment.
 - Pass minimum for External Examination is 27 marks out of 75 marks for Core Courses, Elective Courses (Generic Elective, DSEC Courses)
 - Pass minimum for External Examination is 18 marks out of 50 marks for Skill Enhancement Courses and Non Major Elective Courses (NMEC).
 - The aggregate minimum pass percentage is 40.
 - Pass minimum for External Practical Examination is 21 marks out of 60 marks.
 - Pass minimum for Ability Enhancement Compulsory Courses and Generic Elective Courses is 40 marks.
 - Pass minimum for Self Study Courses is 40 marks.

- Attendance
 - For UG, PG Programmes,
 - a) The students who have attended the classes for 76 days (85%) and above are permitted to appear for the Summative Examinations without any condition.
 - b) The students who have only 60-75 days (66% - 84%) of attendance are permitted to appear for the Summative Examinations after paying the required fine amount and fulfilling other conditions according to the respective cases.
 - c) The students who have attended the classes for 59 days and less – upto 45 days (50% - 65%) can appear for the Summative Examinations only after getting special permission from the Principal.
 - d) The students who have attended the classes for 44 days or less (50%) cannot appear for the Summative Examinations and have to repeat the whole semester.
 - For Part V in UG Programmes, the students require 75 % of attendance to get a credit.

- For Certificate, Diploma, Advanced Diploma and Post Graduate Diploma Programmes, the students require 75% of attendance to appear for the Theory/Practical Examinations. These rules come into effect from 2023-2024 onwards.

B.3 ASSESSMENT MANAGEMENT PLAN

An Assessment Management Plan that details the assessment strategy both at the Programme and the Course levels is prepared. The continuous assessment is implemented using an assessment rubric to interpret and grade students.

B.3.1 Assessment Process for CO Attainment

Assessment is one or more processes carried out by the institution that identify, collect and prepare data to evaluate the achievement of Course Outcomes and Programme Outcomes. Course Outcome is evaluated based on the performance of students in the Continuous Internal Assessments and in End Semester Examination of a Course. Target levels of attainment shall be fixed by the Course teacher and Heads of the respective departments.

Direct Assessment (Rubric based) - Conventional assessment tools such as Term Test, Assignment, Quiz and End Semester Summative Examination are used.

Indirect Assessment – Done through Course Exit Survey.

CO Assessment Rubrics

For the evaluation and assessment of COs and POs, rubrics are used. Internal assessment contributes 40% and End Semester assessment contributes 60% to the total attainment of a CO for the theory Courses. For the practical Courses, internal assessment contributes 50% and Semester assessment contributes 50% to the total attainment of a CO. Once the Course Outcome is measured, the PO can be measured using a CO-PO matrix.

CO Attainment

Direct CO Attainment

Course Outcomes of all Courses are assessed and the CO – wise marks obtained by all the students are recorded for all the assessment tools. The respective CO attainment level is evaluated based on set attainment rubrics.

Target Setting for Assessment Method

For setting up the target of internal assessment tools, 55% of the maximum mark is fixed as target. For setting up the target of End Semester Examination, the average mark of the class shall be set as target.

Formula for Attainment for each CO

Attainment = Percentage of students who have scored more than the target marks

$$\text{Percentage of Attainment} = \frac{\text{Number of Students who scored more than the Target}}{\text{Total Number of Students}} \times 100$$

Attainment Levels of COs

Assessment Methods	Attainment Levels	
Internal Assessment	Level 1	50% of students scoring more than set target marks in Internal Assessment tools
	Level 2	55% of students scoring more than set target marks in Internal Assessment tools
	Level 3	60% of students scoring more than set target marks in internal Assessment tools
End Semester Summative Examination	Level 1	50% of students scoring more than average marks in End Semester Summative Examination
	Level 2	55% of students scoring more than average marks in End Semester Summative Examination
	Level 3	60% of students scoring more than average marks in End Semester Summative Examination

Indirect CO Attainment

At the end of each Course, an exit survey is conducted to collect the opinion of the students on attainment of Course Outcomes. A questionnaire is designed to reflect the views of the students about the Course Outcomes.

Overall CO Attainment= 75% of Direct CO Attainment + 25 % of Indirect CO Attainment

In each course, the level of attainment of each CO is compared with the predefined targets. If the target is not reached, the Course teacher takes necessary steps for the improvement to reach the target.

For continuous improvement, if the target is reached, the Course teacher can set the target as a value greater than the CO attainment of the previous year.

B.3.2 Assessment Process for Overall PO Attainment

With the help of CO - PO mapping, the PO attainment is calculated. PO assessment is done by giving 75% weightage to direct assessment and 25% weightage to indirect assessment. Direct assessment is based on CO attainment, where 75% weightage is given to attainment through End Semester Examination and 25% weightage is given to attainment through Internal assessments. Indirect assessment is done through Graduate Exit Survey and participation of students in Co-curricular/Extra-curricular activities.

PO Assessment Tools

Mode of Assessment	Assessment Tool	Description
Direct Attainment (Weightage -75%)	CO Assessment	This is computed from the calculated CO
Indirect Attainment (Weightage - 25%)	Graduate Exit Survey 10%	At the end of the Programme, Graduate Exit Survey is collected from the graduates and it gives the opinion of the graduates on
	Co-curricular/ Extra-curricular activities 15%	For participation in Co-curricular/Extra-curricular activities during the period of their study.

Programme Articulation Matrix (PAM)

Course Code	Course Title	PO1	PO2	PO3	PO4	PO5	PO6	PO7
Average Direct PO Attainment								
Direct PO Attainment in percentage								

Indirect Attainment of POs for all Courses

POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7
Graduate Exit Survey							
Indirect PO Attainment							

Attainments of POs for all Courses

POs	PO1	PO2	PO3	PO4	PO5	PO6	PO7
Direct Attainment (Weightage - 75%)							
Indirect Attainment (Weightage - 25%)							
Overall PO Attainment							

**Overall PO Attainment= 75% of Direct PO Attainment +
25% of Indirect PO Attainment (Graduate Exit Survey
& Participation in Co- curricular and
Extra curricular Activities)**

Expected Level of Attainment for each of the Programme Outcomes

POs	Level of Attainment
Attainment Value $\geq 70\%$	Excellent
$60\% \leq$ Attainment Value $< 70\%$	Very Good
$50\% \leq$ Attainment Value $< 60\%$	Good
$40\% \leq$ Attainment Value $< 50\%$	Satisfactory
Attainment Value $< 40\%$	Not Satisfactory

Level of PO Attainment

Graduation Batch	Overall PO Attainment (in percentage)	Whether Expected Level of PO is Achieved? (Yes/No)

B.3.3 Assessment Process for PEOs

The curriculum is designed so that all the Courses contribute to the achievement of PEOs. The attainment of PEOs is measured after 5 years of completion of the Programme only through Indirect methods.

Target for PEO Attainment

Assessment Criteria	Target (UG)	Target (PG)
Record of Employment	15% of the class strength	30% of the class strength
Progression to Higher	50% of the class strength	5% of the class strength
Record of Entrepreneurship	2% of the class strength	5% of the class strength

Attainment of PEOs

Assessment Criteria & Tool	Weightage
Record of Employment	10
Progression to Higher Education	20
Record of Entrepreneurship	10
Feedback from Alumnae	30
Feedback from Parents	10
Feedback from Employers	20
Total Attainment	100

$$\text{Percentage of PEO Attainment from Employment} = \frac{\text{Number of Students who have got Employment}}{\text{Target}} \times 100$$

$$\text{Percentage of PEO Attainment from Higher Education} = \frac{\text{Number of Students who pursue Higher Education}}{\text{Target}} \times 100$$

$$\text{Percentage of PEO Attainment from Entrepreneurship} = \frac{\text{Number of Students who have become Entrepreneurs}}{\text{Target}} \times 100$$

Expected Level of Attainment for each of the Programme Educational Objectives

POs	Level of Attainment
Attainment Value $\geq 70\%$	Excellent
$60\% \leq \text{Attainment Value} < 70\%$	Very Good
$50\% \leq \text{Attainment Value} < 60\%$	Good
$40\% \leq \text{Attainment Value} < 50\%$	Satisfactory
Attainment Value $< 40\%$	Not Satisfactory

Level of PEO Attainment

Graduation Batch	Overall PEO Attainment (in percentage)	Whether Expected Level of PEO is Achieved? (Yes/No)

C. PROCESS OF REDEFINING THE PROGRAMME EDUCATIONAL OBJECTIVES

The College has always been involving the key stakeholders in collecting information and suggestions with regard to curriculum development and curriculum revision. Based on the information collected, the objectives of the Programme are defined, refined and are inscribed in the form of PEOs. The level of attainment of PEOs defined earlier will be analysed and will identify the need for redefining PEOs. Based on identified changes in terms of curriculum, regulations and PEOs, the administrative system like Board of Studies, Academic Council and Governing Body may recommend appropriate actions. As per the Outcome Based Education Framework implemented from the Academic Year 2020 -2021, the following are the Programme Structure, the Programme Contents and the Course Contents of B.Com. (Computer Applications) Programme.



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VIRUDHUNAGAR

Quality Education with Wisdom and Values

BACHELOR OF COMMERCE (COMPUTER APPLICATIONS) - (4028)

B.Com. (CA)

Outcome Based Education with Choice Based Credit System

Programme Structure - Allotment of Hours and Credits

For those who join in the Academic Year 2023-2024

Components	Semester						Total Number of Hours (Credits)
	I	II	III	IV	V	VI	
Part I : Tamil/Hindi	6(3)	6(3)	6(3)	6(3)	-	-	24(12)
Part II : English	6(3)	6(3)	6(3)	6(3)	-	-	24(12)
Part III : Core Courses, Elective Courses & Self Study Course							
Core Course	5(5)	5(5)	5(5)	5(5)	6(4)	6(4)	32 (28)
Core Course	5(5)	5(5)	5(5)	4(4)	6(4)	6(4)	31 (27)
Core Course	-	-	-	-	5(3)	6(4)	11 (7)
Core Course	-	-	-	-	-	-	-
Core Course Project	-	-	-	-	1(3)		1 (3)
Elective Course (DSEC)	-	-	-	-	5(3)	5(4)	10 (7)
Elective Course (DSEC)	-	-	-	-	5(3)	5(4)	10 (7)
Elective Course (Allied)	4(3)	4(3)	4(3)	4(3)	-	-	16 (12)
Self Study Course	-	-	-	-	-	0(1)	0 (1)
Part IV : Skill Enhancement Courses, Elective Courses, Environmental Studies, Value Education, Self Study Course & Internship/ Field Project							
SEC	2(2)	-	1(1)	2(2)	-	-	5 (5)
SEC	-	2(2)	2(2)	2(2)	-	2(2)	8 (8)
Elective Course(NME)	2(2)	2(2)	-	-	-	-	4 (4)
Value Education	-	-	-	-	2(2)	-	2 (2)
Environmental Studies	-	-	1(0)	1(2)			2 (2)
Self Study Course	-	-	-	-	0(1)		0 (1)
Internship/ Field Project	-	-	-	-	0 (1)	-	0 (1)
Part V : Extension Activities	-	-	-	-	-	0(1)	0 (1)
Total	30(23)	30(23)	30(22)	30(24)	30(24)	30(24)	180(140)
Extra Credit Course (Self Study Course)	-	-	-	-	0(2)	-	0(2)

DSEC: Discipline Specific Elective Course

SEC: Skill Enhancement Course

NMEC: Non Major elective Course



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VIRUDHUNAGAR

Quality Education with Wisdom and Values

BACHELOR OF COMMERCE (COMPUTER APPLICATIONS)

Programme Code – 4028

PROGRAMME CONTENT

SEMESTER I

2023-2024 onwards

S. No.	Components	Title of the Course	Course Code	Hours Per Week	Credits	Exam. Hours	Marks			
							Int.	Ext.	Total	
1.	Part I	Tamil / Hindi	23UTAG11/ 23UHDG11	6	3	3	25	75	100	
2.	Part II	English –I	23UENG11	6	3	3	25	75	100	
3.	Part III	Core Course -1	Financial Accounting – I	23UCOC11	5	5	3	25	75	100
4.		Core Course -2	Principles of Management	23UCOC12	5	5	3	25	75	100
5.		Elective Course	Programming in C	23UCCA11	4	3	3	25	75	100
6.	Part IV	NME-1	Practical Banking / Self-Employment and Startup Business	23UCON11/ 23UCCN11	2	2	3	25	75	100
7.		SEC-1 Foundation Course	Fundamentals of Commerce with Computer Applications	23UCCF11	2	2	3	25	75	100
Total				30	23				700	

B.Com. (Computer Applications) - SEMESTER II

S.No.	Components		Title of the Course	Course Code	Hours Per Week	Credits	Exam. Hours	Marks		
								Int.	Ext.	Total
1.	Part I		Tamil / Hindi	23UTAG21/ 23UH DG21	6	3	3	25	75	100
2.	Part II		English –II	23UENG21	6	3	3	25	75	100
3.	Part III	Core Course -3	Financial Accounting - II	23UCOC21	5	5	3	25	75	100
4.		Core Course -4	Banking Theory, Law and Practice	23UCOC22	5	5	3	25	75	100
5.		Elective Course	Introduction to PC Software	23UCCA21	4	3	3	25	75	100
6.	Part IV	NME -2	Basic Accounting Principles / Fundamentals of Marketing	23U CON21/ 23UCCN21	2	2	3	25	75	100
7.		SEC-2	Business Analytics using Excel Practical	23UCCS21P	2	2	3	40	60	100
Total					30	23				700

BACHELOR OF COMMERCE (COMPUTER APPLICATIONS)**Programme Code – 4028****PROGRAMME CONTENT****B.Com. (Computer Applications) - SEMESTER III**

S.No	Components		Title of the Course	Course Code	Hours Per Week	Credits	Exam. Hours	Marks		
								Int.	Ext.	Total
1.	Part I		Tamil – III / Hindi – III	23UTAG31/ 23UH DG31	6	3	3	25	75	100
2.	Part II		English –III	23UENG31	6	3	3	25	75	100
3.	Part III	Core Course -5	Corporate Accounting I	23UCOC31	5	5	3	25	75	100
4.		Core Course -6	Business Mathematics and Statistics	23UCCC31	5	5	3	25	75	100
5.		Elective Course -3	Programming in Java Practical	23UCCA31P	4	3	3	40	60	100
6.	Part IV	SEC – 3	Entrepreneurial Skill Development	23UCOS31	1	1	2	100	-	100
7.		SEC – 4	Soft Skill Development	23UCOS32	2	2	2	25	75	100
8.			Environmental Studies	23UGES41	1	-		-		-
Total					30	22				700

B.Com. (Computer Applications) - SEMESTER IV

S.No.	Components		Title of the Course	Course Code	Hours Per Week	Credits	Exam. Hours	Marks		
								Int.	Ext.	Total
1.	Part I		Tamil – IV / Hindi – IV	23UTAG41/ 23UHGD41	6	3	3	25	75	100
2.	Part II		English –IV	23UENG41	6	3	3	25	75	100
3.	Part III	Core Course -7	Corporate Accounting II	23UCOC41	5	5	3	25	75	100
4.		Core Course -8	Company Law	23UCCC41	4	4	3	25	75	100
5.		Elective Course -4	Relational Database Management System Practical	23UCCA41P	4	3	3	40	60	100
6.	Part IV	SEC - 4	Desktop Publishing Practical	23UCCS41P	2	2	3	40	60	100
7.		SEC - 5	AI Tools for Businessmen	23UCCS42	2	2	2	25	75	100
8.			Environmental Studies	23UGES41	1	2	2	100	-	100
Total					30	24				800

B.Com. (Computer Applications) - SEMESTER V

S.No.	Components	Title of the Course	Course Code	Hours Per Week	Credits	Exam. Hours	Marks			
							Int.	Ext	Total	
1.	Part III	Core Course -9	Cost Accounting	23UCOC51	6	4	3	25	75	100
2.		Core Course -10	Business Law	23UCOC52	6	4	3	25	75	100
3.		Core Course -11	Income Tax Law and Practice I	23UCOC53	5	3	3	25	75	100
4.		Core Course Project	Project	23UCOC54PR	1	3	-	100	-	100
5.		Elective Course DSEC-1	Indirect Taxation and GST/ Financial Services	23UCCE51/ 23UCCE52	5	3	3	25	75	100
6.		Elective Course DSEC-2	Software Engineering Practical / Object oriented Analysis and Design Practical	23UCCE53P/ 23UCCE54P	5	3	3	40	60	100
7.	Part IV		Value Education	23UGVE51	2	2	3	25	75	100
8.		Self Study Course	Practice for Competitive Examinations - Online	23UGCE51	-	1	-	100	-	100
9.		Internship / Field Project	Summer Internship / Industrial Training	23UCCI51G	-	1	-	100	-	100
Total					30	24				900
10.		Extra Credit Course (Self Study Course)	Principles of Marketing	23UCCO51	-	2	3	100	-	100

B.Com. (Computer Applications) - SEMESTER VI

S.No.	Components	Title of the Course	Course Code	Hours Per Week	Credits	Exam. Hours	Marks			
							Int.	Ext.	Total	
1.	Part III	Core Course -13	Auditing and Corporate Governance	23UCOC61	6	4	3	25	75	100
2.		Core Course -14	Management Accounting	23UCOC62	6	4	3	25	75	100
3.		Core Course -15	Income Tax Law and Practice - II	23UCOC63	6	4	3	25	75	100
4.		Elective Course DSEC-3	Tally ERP.9 with GST Practical / Web Designing Practical	23UCCE61P/ 23UCCE62P	5	4	3	40	60	100
5.		Elective Course DSEC-4	Vector Graphics Practical/ R Language Practical	23UCCE63P/ 23UCCE64P	5	4	3	40	60	100
6.		Self Study Course	Core Course Quiz - Online	23UCOQ61	-	1	2	40	60	100
7.	Part IV	SEC-7	Mobile Application Development Practical	23UCCS61P	2	2	2	40	60	100
8.	Part V		Extension Activity		-	1	-	100	-	100
Total					30	24				800



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)
(2023 - 24 onwards)

Semester I	FINANCIAL ACCOUNTING - I	Hours/Week: 5	
Core Course-1		Credits: 5	
Course Code: 23UCOC11		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of accounting concepts. [K1]

CO2: describe the methods of preparing various accounts of trading concern. [K2]

CO3: explain the basis for calculating profits. [K2]

CO4: calculate the amount of depreciation, profit and insurance claims and average due date.
[K3]

CO5: apply the rules for preparing final accounts, insurance claims, royalties and depreciation. [K3]

UNIT I

Fundamentals of Financial Accounting

Financial Accounting – Meaning, Definition, Objectives, Basic Accounting Concepts and Conventions – Journal, Ledger Accounts – Subsidiary Books – Trial Balance – Classification of Errors – Rectification of Errors – Preparation of Suspense Account – Need and Preparation - Bank Reconciliation Statement. (15 Hours)

UNIT II

Final Accounts

Final Accounts of Sole Trading Concern – Capital and Revenue Expenditure and Receipts – Preparation of Trading, Profit and Loss Account and Balance Sheet with Adjustments. (15 Hours)

UNIT III

Depreciation and Bills of Exchange

Depreciation – Meaning – Objectives – Accounting Treatments – Types – Straight Line Method – Diminishing Balance method – Conversion method. Annuity Method – Depreciation Fund Method – Insurance Policy Method – Revaluation Method – Depletion Method – Sum of Digits Method – Machine Hour Rate Method.

Bills of Exchange – Definition – Specimens – Discounting of Bills – Endorsement of Bill – Collection – Noting – Renewal – Retirement of Bill under rebate – Insolvency of Acceptor – Accommodation. (15 Hours)

UNIT IV

Accounting from Incomplete Records

Incomplete Records – Meaning and Features – Limitations – Difference between Incomplete Records and Double Entry System – Methods of Calculation of Profit – Statement of Affairs Method – Preparation of final statements by Conversion method.

Average Due Date and Account Current. (15 Hours)

UNIT V

Royalty and Insurance Claims

Meaning – Minimum Rent – Short Working – Recoupment of Short Working – Lessor and Lessee – Sublease – Accounting Treatment.

Insurance Claims – Calculation of Claim amount – Average clause (Loss of Stock only).

(15 Hours)

NOTE:

Composition of the Question Paper:

Theory	: 20 %
Problems	: 80 %

SELF STUDY:

1. Account Current – Red Ink Interest Method
2. Distinguish between Double entry and Single Entry System

TEXT BOOKS

1. Reddy, T.S. & Murthy. A. (2023). Chennai: Margham Publications.
2. Jain S. P. & Narang K. L. (2016). *Financial Accounting*, Delhi :Kalyani Publishers.
3. Maheswari S.N. (2018), *Financial Accounting*, Noida : Vikas Publications,.
4. Shukla Grewal and Gupta. (2017) *Advanced Accounts* volume 1, Delhi: S.Chand and Sons,19th edition.
5. Gupta, R.L., & Radhasamy, M. (2009). *Advanced Accountancy*, Volume-I, Delhi:Sultan Chand & Sons, 11th Revised Edition.
6. Gupta R.L.& GuptaV.K. (2016) *Financial Accounting*, Delhi: Sultan Chand&Sons.

REFERENCE BOOKS

1. Arulanandam, M.A. & Raman, K.S. (2015). *Advanced Accountancy*, Mumbai: Himalaya Publishing House, Revised Edition.
2. Tulsian. (1997).*Advanced Accounting*, Noida :Tata McGraw Hills.
3. Charumathi and Vinayagam.(2002).*Financial Accounting*, Delhi :S.Chand and Sons.
4. Goyal and Tiwari(2022).*Financial Accounting*, Delhi: Taxmann Publications,10th Edition.
5. Robert N Anthony, David Hawkins, Kenneth A. Merchant (2017). *Accounting: Text and Cases*, Noida :McGraw-Hill Education,13th Edition.

WEB RESOURCES

1. <https://www.slideshare.net/mcsharma1/accounting-for-depreciation-1>
2. <https://www.slideshare.net/ramusakha/basics-of-financial-accounting>
3. <https://www.accountingtools.com/articles/what-is-a-single-entry-system.html>

Course Code 23UCOC11	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	1	1	2	3	1	1	-	-	-
CO2	3	3	3	3	3	2	3	2	-	-
CO3	3	3	3	3	3	3	3	2	-	2
CO4	3	1	3	3	3	2	3	2	-	-
CO5	3	1	3	3	3	3	3	2	-	-

Strong - 3**Medium – 2****Low – 1**

Dr.M.PonnienSelvi
Head of the Department

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 Dr.V.Shanthameena
 Dr.B.JeyaSudha
Course Designers



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)

(2023-2024 onwards)

Semester I	PRINCIPLES OF MANAGEMENT	Hours/Week: 5	
Core Course-2		Credits: 5	
Course Code 23UCOC12		Internal 25	External 75

COURSE OUTCOMES

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

CO1: define the basic concepts related to principles of management. [K1]

CO2: describe the duties and responsibilities of managers, process and techniques in planning, decision making and organizing [K2]

CO3: explain the methods, theories, types and process in staffing, directing, coordination and control [K2]

CO4: present the process in planning, decision making, departmentalization [K3]

CO5: apply the modern techniques of recruitment, 360 appraisal, work from home, directing, coordination and control [K3]

UNIT I

Introduction to Management

Meaning – Definitions – Nature and Scope – Levels of Management – Importance - Management Vs. Administration – Management: Science or Art – Evolution of Management Thoughts – F. W. Taylor, Henry Fayol, Peter F. Drucker, Elton Mayo – Functions of Management – Trends and Challenges of Management. Managers – Qualification – Duties & Responsibilities. (15 Hours)

UNIT II

Planning

Planning – Meaning – Definitions – Nature – Scope and Functions – Importance and Elements of Planning – Types – Planning Process – Tools and Techniques of Planning – Management by Objective (MBO). Decision Making: Meaning – Characteristics – Types – Steps in Decision Making – Forecasting. (15 Hours)

UNIT III

Organizing

Meaning – Definitions – Nature and Scope – Characteristics – Importance – Types – Formal and Informal Organization – Organization Chart – Organization Structure: Meaning and Types – Departmentalization – Authority and Responsibility – Span of Management.

(15 Hours)

UNIT IV

Staffing

Introduction – Concept of Staffing – Staffing Process – Recruitment – Sources of Recruitment – Modern Recruitment Methods – Selection Procedure – Test- Interview – Training: Need – Types – Promotion – Management Games – Performance Appraisal – Meaning and Methods – 360 Performance Appraisal – Work from Home – Managing Work from Home [WFH].

(15 Hours)

UNIT V

Directing

Motivation – Meaning – Theories – Communication – Types – Barriers to Communications – Measures to Overcome the Barriers. Leadership – Nature – Types and Theories of Leadership – Styles of Leadership – Qualities of a Good Leader – Successful Women Leaders. Supervision.

Co-ordination and Control

Co-ordination – Meaning – Techniques of Co-ordination Control – Characteristics – Importance – Stages in the Control Process – Requisites of Effective Control and Controlling Techniques – Management by Exception [MBE].

(15 Hours)

SELF STUDY:

1. Centralization and Decentralization
2. Management by Objective Vs Management by Exception

TEXT BOOKS

1. Prasad L.M, (2020). *Principles and Practices in Management*, Sultan Chand & Sons, 10th Edition 2020
2. Gupta. C.B. (2017). *Management Theory & Practice*, Sultan Chand & Sons, 19th Edition 2017,
3. Dinkar Pagare, (2011). *Principles of Management*, New Delhi: Sultan Chand & Sons Publications 6th Edition 2018.
4. P.C. Tripathi & P.N Reddy, (2013). *Principles of Management*, Noida: Tata McGraw Hill.

5.R.K. Sharma, Shashi K. Gupta, Rahul Sharma, (2016). *Business Management*, New Delhi: Kalyani Publications.

REFERENCE BOOKS

1. K Sundhar, (2015) *Principles of Management*, Chennai: Vijay Nichole Imprints Limited.
2. Harold Koontz, Heinz Weirich, (2006). *Essentials of Management*, New Delhi: McGraw Hill, Sultan Chand and Sons.
3. Griffffin, (2012) *Management principles and Applications*, India: Cengage learning, 10th edition.
4. H.Mintzberg - *The Nature of Managerial Work*, New York: Harper & Row,.
5. Eccles, R. G. & Nohria, N. *Beyond the Hype: Rediscovering the Essence of Management*, India: Boston the Harvard Business School Press.

WEB RESOURCES

- 1 <http://www.universityofcalicut.info/sy1/management>
- 2 <https://www.managementstudyguide.com/manpower-planning.htm>
- 3 <https://www.businessmanagementideas.com/notes/management-notes/coordination/coordination/21392>

Course Code 23UCOC12	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	2	1	2	3	1	-	-	-	2	-
CO2	3	1	3	2	1	-	-	-	1	-
CO3	3	2	3	3	1	-	-	-	2	2
CO4	3	2	3	2	1	-	-	-	1	-
CO5	3	2	3	2	1	-	-	-	1	-
	Strong - 3			Medium – 2		Low – 1				

Dr. M. Ponnien Selvi
Head of the Department

Dr. R. Panchavarnam Dr. V. Sakthidevi
Mrs. J.Babitha
Course Designers



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)
(2023 - 24 onwards)

Semester I	PROGRAMMING IN C	Hours/Week: 4	
Elective Course		Credits: 3	
Course Code 23UCCA11		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of basic concepts of C language. [K1]

CO2: describe the various data types, operators and decision making statements in C language. [K2]

CO3: explain with illustration the syntax for programs in C language. [K2]

CO4: write programs in C language. [K3]

CO5: use functions, pointers, structure and union in programming in C language. [K3]

UNIT I

Introduction to C Language: C Language Introduction – Features of C Language –Benefits of other languages – Compilation of C Program – First Program in C Pre-processor in C Pre-processor directives. Cover

(8 Hours)

UNIT II

Variables, Data Types & Operators: Variables and Keywords in C-Scope rules in C-Data Types in C – Operators & Its Types – Typecasting in C.

(10 Hours)

UNIT III

Control Flow Statements: Decision Making Statements-Switch Statement in C – C Loops & Control Structure Practice problems – Continue Statement, Break Statement.

Array & String Handling in C: Arrays in C – Strings in C.

(14 Hours)

UNIT IV

Multidimensional Arrays in C – String functions in C – Practice problems

Functions in C: Function Prototype – Parameter Passing Techniques in C – Storage

Classes in C – Recursion Concept – Functions in C Practice problems. (14 Hours)

UNIT V

Pointers, Structures, and Unions: Pointers in C – Structures – Union – Enumeration (or enum) in C
– Pointer vs Array in C – C application programs (Sorting, Matrix manipulations, student' mark list preparation). (14 Hours)

LIST OF PRACTICAL

1. Write a C program to find roots of a Quadratic equation.
2. Write a C program to find the total no. of digits and the sum of individual digits of a positive integer.
3. Write a C program to generate the Fibonacci sequence of first N numbers.
4. Write a C program to sum the series $S=1 - x + (x^2/2!) - (x^3/3!) + \dots - (x^n/n!)$
5. Write a C program to arrange the elements of an integer array using Bubble Sort algorithm.
6. Write a C program to input two matrices and perform matrix multiplication on them
7. Write a C program to check whether the given string is palindrome or not without using Library functions.
8. Write a C program to count the number of lines, words and characters in a given text.
9. Write a C program to generate Prime numbers in a given range using user defined function.
10. Write a C program to find factorial of a given number using recursive function.
11. Write a C program to maintain a record of n student details using an array of structures with four fields - Roll number, Name, Marks and Grade. Calculate the Grade according to the following conditions.

Marks Grade

≥ 80 A

≥ 60 B

≥ 50 C

≥ 40 D

< 40 E

Print the details of the student, given the student Roll number as input.

SELF STUDY

1. Difference between while and do-while loop. .
2. Student's mark list preparation using structure.

TEXT BOOKS

1. Balaguruswamy, E. (2019). *Programming in ANSI C*, McGraw Hill Education, 8th Edition, ISBN: 978-93-5316-513-0.
2. Pradip Dey, Manas Ghosh, (2018). *Programming in C*, Oxford University Press, 2nd Edition, ISBN: 978-01-9949-147-6.
3. Kernighan, B.W and Dennis M. Ritchie (2015). *The C Programming Language*, Pearson Education India, 2nd Edition, ISBN: 978-93-3254-944-9.

REFERENCE BOOKS

1. Yashavant P. Kanetkar (2019). *Let Us C*, BPB Publications, 16th Edition ISBN: 978- 93-8728-449-4.
2. Jacqueline A Jones and Keith Harrow, *Problem Solving with C*, Pearson Education, ISBN: 978-93-325-3800-9.
3. Dr. Guruprasad Nagraj, *C Programming for Problem Solving*, Himalaya Publishing House. ISBN-978-93-5299-361-1.

Web Resources

1. <http://elearning.vtu.ac.in/econtent/courses/video/BS/14CPL16.html>
2. <https://nptel.ac.in/courses/106/105/106105171/>

Course Code 23UCCA11	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	2	3	–	2	2	–	–
CO2	3	3	3	2	2	–	2	2	–	–
CO3	3	3	2	2	3	–	–	2	–	–
CO4	3	2	2	1	–	–	2	2	–	–
CO5	3	3	3	1	1	–	–	2	–	–

Strong - 3**Medium – 2****Low – 1**

Dr.M.PonnienSelvi
Head of the Department

Mrs.T.Veiluvanthal
Dr.P.Sudha
Course Designers



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)
(2023 - 24 onwards)

Semester I	PRACTICAL BANKING	Hours/Week: 2	
NME -1		Credits: 2	
Course Code 23UCON11		Internal 25	External 75

COURSE OUTCOMES

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

- CO1: state the basic concepts of banking and electronic payment system. [K1]
 CO2: describe the relevant provisions of Act regarding banking and Electronic payment system.[K1]
 CO3: classify the types of deposits, negotiable instruments, forms of advances and electronicpayment systems. [K2]
 CO4: apply the procedures and principles involved in banking and Electronic payment [K2]
 CO5: fill up of Account Opening Form and draw a cheque and show the features, advantages anddisadvantages of Mobile Banking and Green Banking. [K3]

UNIT I

Banking: Definition- Meaning: Bank – Banking – Banker – Customer - Procedure for Opening anAccount. (6 Hours)

UNIT II

Deposits: Types – Savings – Current – Fixed –Recurring. (5 Hours)

UNIT III

Negotiable Instruments: Draft –Cheque– Definition –Specimen Form – Drawing of a Cheque– Electronic Cheques (E-Cheque) – Features – Advantages– Electronic Cash (E-Cash) –Features. (6 Hours)

UNIT IV

Loan and Advances: Principles of Sound Lending - Secured and Unsecured Advances – Forms of Advances – canons of a good banking security. (5 Hours)

UNIT V**Electronic Payment System:** ATM – Debit Card – Credit Card, Smart Card, NEFT, RTGS.

(8 Hours)

SELF STUDY :

1. Filling up of Account Opening Form and Writing of Cheque.
2. Mobile Banking and Green Banking

TEXT BOOK

Study Material Prepared by the Course Teachers.

REFERENCE BOOKS

1. Gordon &Natarajan, (2017). *Banking Theory Law and Practice*, Mumbai: HimalayaPublishing House, 26th Revised Edition.
2. Rama, A., &Aruna Devi, A. (2019). *Banking Technology*, Chennai: New Century Book House (P) Ltd., 5th Revised Edition.

Web Resources

- 1 <https://www.rbi.org.in/>
- 2 <https://businessjargons.com/e-banking.html>
- 3 <https://www.wallstreetmojo.com/endorsement/>

Course Code 23UCON11	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7
CO1	3	2	1	2	2	-	-
CO2	3	1	1	-	1	-	-
CO3	3	2	1	2	1	-	-
CO4	3	1	1	3	1	-	-
CO5	3	1	1	1	2	-	-

Strong - 3**Medium – 2****Low – 1**

Dr. M. Ponnien Selvi
Head of the Department

Dr M.Annam
Course Designer



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)

(2023-2024 onwards)

Semester I	SELF-EMPLOYMENT AND START-UP BUSINESS	Hours/Week: 2	
NME-1		Credits: 2	
Course Code 23UCCN11		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the basic concepts related to self-employment, organisation, MSME, agency and financial institutions [K1]

CO2: describe the benefits, limitations and types related to self-employment, organization and agency. [K1]

CO3: explain the qualities of self-employed person, procedure to start small scale business. [K2]

CO4: compare self-employment and entrepreneurship and categorise the package for MSMEs and assistance from institutions for start-ups. [K2]

CO5: apply the concepts and procedures to start new business and agency with ethical principles. [K3]

UNIT I

Self-Employment: Concept – Characteristics – Opportunities – Benefits – Limitations – Qualities for Successfully Self-Employed Person – Self-Employment Vs. Entrepreneurship – Ethical Principles for Self-Employment.

(6 Hours)

UNIT II

Selection of Types of Organisation: Sole Proprietorship – Partnership Firm – Limited Liability Partnership – Joint Stock Company – Choice of form of Organisation.

(6 Hours)

UNIT III

Start-up of MSME: Meaning – Definition – Documents required for MSME registration – Procedure to start MSME for Small Scale Business – Project Preparation. (6 Hours)

UNIT IV

Agency Business: Meaning – Types – Procedure to Start an Agency Business – Procedure to Start Digital Agency Business in India. (6 Hours)

UNIT V

Financial Institutions: Supporting Institutions for Small Scale Industries in Tamil Nadu – DIC - TIIIC – SIDBI (6 Hours)

SELF STUDY FOR ASSIGNMENT

1. Prospects and Challenges of Small Scale Business in India
2. Scope and Opportunities to Become Women Entrepreneurs

TEXT BOOK

Study material prepared by Course Designer

REFERENCE BOOKS

1. Gupta,C.B., &Srinivasan,N.P., *Entrepreneurial Development*, New Delhi, Sultan Chand &Sons,Revised Edition, 2020.
2. Rengarajan, L.,(2008) *Entrepreneurial Development*, Rajapalayam, Sree Renga Publications

Course Code 23UCCN11	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7
CO1	3	2	1	2	2	-	-
CO2	3	1	1	-	1	-	-
CO3	3	2	1	2	1	-	-
CO4	3	1	1	3	1	-	-
CO5	3	1	1	1	2	-	-

Strong - 3**Medium – 2****Low – 1**

Dr. M. Ponnien Selvi
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Dr.K.Nivetha
Course Designers



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B.Com. (Computer Applications)

(2023 – 24 onwards)

Semester I	FUNDAMENTALS OF COMMERCE WITH COMPUTER APPLICATIONS	Hours/Week: 2	
SEC-1 Foundation Course		Credits: 2	
Course Code 23UCCF11		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of the fundamental concepts related to computer, programming and network

[K1]

CO2: enumerate the basic tax, statistical techniques and principles of banking and insurance. [K1]

CO3: explain the applications of computers and computer network. [K2]

CO4: describe the statistical techniques, filing of tax return, functions of banking and types of insurance. [K2]

CO5: make a comparison between computer sub-systems, components of computer system, computer software, statistical techniques, types of accounting and types of insurance. [K2]

Unit I

Fundamentals of Computer: Introduction – Computing Concepts – Computer System: Hardware – Software – Applications of Computer – Computer Organisation and Architecture: Central Processing Unit – Computer Software: System Software – Application Software – Language Translators – Algorithms – Flowcharts – Programming Languages: High-level Languages. (6 Hours)

Unit II

Computer Network : Local Area Network-Wide Area Network –Metropolitan Area Network -Intranet- Application of network – Internet – Internet Applications – World Wide Web – Web browsers – Using a Search Engine – Email Service.

(5 Hours)

Unit III

Accounting and Auditing

Financial Accounting: Meaning – Definition – Objectives – Basic Accounting Concepts – Company – Meaning – Definition – Characteristics – Tally – Features of Tally.

Cost Accounting: Definition – Principles of Cost Accounting.

Management Accounting: Meaning – Scope – Importance.

Auditing: Definition – Features – Objectives – Basic Principles of Audit.

(7 Hours)

Unit IV

Statistical Techniques in Business and Taxation :

Statistics: Meaning– Importance – Functions – Sources of Data –Presentation of Data – Measures of Central Tendency: Arithmetic Mean - Median – Mode – Measures of dispersion: Standard Deviation uses of Spreadsheet in statistics(formulae, chart) - Meaning and Types of Taxation- Tax rates- Filing of Tax returns.

(6 Hours)

Unit V

Banking and Insurance

Banking: Meaning- Definition- Functions of Banking- Classification of Banks – E-Banking-Meaning-Services.

Insurance: Definition of Insurance - Characteristics of Insurance – Types of Insurance.

(6 Hours)

SELF STUDY

1. Computer Architecture.
2. Principles of Insurance.

TEXT BOOKS

1. Balagurusamy, E. (2009). *Fundamentals of Computers*, Tata McGraw Hill Education Pvt.Ltd., ISBN: 9780070141605.
2. Jain,S.P.& Narang, K.L.(2018). *Financial Accounting- I*, Kalyani Publishers, New Delhi.
3. Xavier C. (2015). *World Wide Web design with HTML*, Mc Graw Hill Education(India) Private Limited, New Delhi, ISBN: 978-0-07-463971-9.
4. Tandon B.N.,& Sudharsanam S,& Sundharabahu S (2021)-*Practical Auditing*, Sultan Chand & Sons, New Delhi Hall of India.

5. Pillai R.S.N, & Bagavathi V (2019) *Cost Accounting*, Sultan Chand & Sons, New Delhi Hall of India.
6. Gupta M. P, & Gupta, S.P (2019). *Business Statistics* Sultan Chand & Sons, New Delhi Hall of India
7. Gordon, E & Natarajan, K. (2022). *Banking Theory, Law and Practice*, Mumbai: Himalaya Publishing House, 29th Revised Edition.
8. Periyasamy, P. (2017). *Principles and Practice of Insurance*, Mumbai: Himalaya Publishing House, 2nd Revised Edition.

REFERENCE BOOK

Dinkar Pagare,(2021). *Principles and Practice of Auditing*, Sultan Chand & Sons, New Delhi.

WEB RESOURCES

1. <https://study.com/learn/lesson/commerce-importance-and-branches>
2. <https://www.vedantu.com/commerce/concept-of-auditing>
3. <https://www.vedantu.com/commerce/concept-of-Banking-insurance>

Course Code 23UCCF11	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	–	1	–	–	–	1	–	–
CO2	3	3	–	1	2	–	2	2	1	–
CO3	3	3	–	2	–	–	–	2	2	2
CO4	3	–	3	3	2	2	2	2	2	2
CO5	3	3	2	2	2	2	2	2	2	2

Strong - 3

Medium – 2

Low – 1

Dr.M.PonnienSelvi
Head of the Department

Dr.P.Saritha
Dr.B.Suganya
Course Designers



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)

(2023 – 2024 onwards)

Semester II	FINANCIAL ACCOUNTING- II	Hours/Week: 5	
Core Course -3		Credits: 5	
Course Code 23UCOC21		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the features of branch and departmental accounts, consignment, joint venture,

hire purchase and instalment purchase system. [K1]

CO2: describe basic accounting treatment and compare consignment and sales, partnership

and joint venture, branch and departmental accounting and hire purchase and

instalment purchase system. [K2]

CO3: explain the accounting principles to find out profit or loss from concerned accounts

and ventures. [K2]

CO4: illustrate goods sent at an invoice price, joint bank transactions, inter branch/

department transfer and the apportionment of indirect expenses among various

departments. [K3]

CO5: calculate the value of abnormal loss, closing stock in consignment and repossessed

stock in case of default, present branch and departmental accounts in final accounts

format. [K3]

UNIT I

Branch Accounts: Meaning – Objects – Types of Branches – Dependent Branches –

Features of Dependent Branches – Accounting in respect of dependent Branches

(Excluding Stock and Debtors System and Wholesale Branch System) – Selling goods

only for Cash – Branches Selling goods both for Cash and Credit – Goods Invoiced to

Branches at Selling Price.

(15 Hours)

UNIT II

Departmental Accounting: Meaning – Need and Advantages of Departmental Accounting

– Methods and Techniques of Departmental Accounting – Departmental Trading and Profit & Loss Account – Departmentalization of Expenses – Accounting for Inter-departmental Transfers both at Cost Price and Invoice Price. (10 Hours)

UNIT III

Hire Purchase and Instalment Purchase Systems:

Hire Purchase System: Definition – Features – Accounting Treatment – Calculation of Interest – Calculation of Cash Price – Default and Repossession – Complete and Partial Repossession (Hire Purchase Trading Account – Methods of Computation of Profit – Theory only)

Instalment Purchase System: Accounting Treatment. (20 Hours)

UNIT IV

Consignment: Meaning – Features – Distinction between Consignment and Sale – Proforma Invoice – Account Sales – Overriding Commission – Delcredere Commission – Losses in Consignment – Pricing of goods sent on Consignment – Valuation of Stock – Journal Entries and Ledger Accounts in the Books of Consignor and Consignee. (15 Hours)

UNIT V

Joint Venture: Meaning – Features – Joint Venture and Partnership – Methods of Recording Joint Venture Transactions: a) When Separate Set of Books are Maintained b) When Separate Set of Books are not maintained. (Complete Record Method) (15 Hours)

SELF STUDY FOR ASSIGNMENT

1. Distinction between Departments and Branches; Hire Purchase and Instalment Purchase System.
2. Joint Venture Accounting under Partial Record Method.

NOTE:**Composition of the Question Paper:****Theory : 40 %****Problems : 60 %****TEXT BOOK**

Reddy, T.S., & Murthy, A. (2011). *Financial Accounting*, Chennai: Margham Publications, 6th Revised Edition.

REFERENCE BOOKS

1. Arulanandam, M.A., & Raman, K.S.(2015). *Advanced Accountancy*, Mumbai: Himalaya Publishing House, Revised Edition.
2. Gupta, R.L., & Radhasamy, M. (2009). *Advanced Accountancy*, Volume-I, Delhi: Sultan Chand & Sons, 11th Revised Edition.

Course Code 23UCOC21	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4 .a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	–	–	–	–	–	1	---
CO2	3	3	3	–	–	2	–	–	1	---
CO3	3	3	2	1	2	2	3	2	1	1
CO4	3	3	3	–	3	–	2	1	1	1
CO5	3	3	2	2	3	–	3	1	1	1
	Strong - 3			Medium – 2		Low – 1				

Dr.M.Ponnien Selvi
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B.Com. (Computer Applications) (2023 – 2024 onwards)

Semester II	BANKING THEORY, LAW AND PRACTICE	Hours/Week: 5	
Core Course-4		Credits: 5	
Course Code 23UCOC22		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of various concepts related to banking theory, law & practice and e-banking. [K1]

CO2: describe the types of deposits, forms of advances and the features of negotiable instruments. [K2]

CO3: explain the advantages and disadvantages of e-banking and electronic payment and duties of paying banker and collecting banker. [K2]

CO4: apply the provisions related to paying banker, collecting banker and negotiable instruments. [K3]

CO5: illustrate the precautions to be taken by bankers and customers in any banking and e-banking transactions. [K3]

UNIT I

Introduction: Banking – Definition – Meaning of Banker and Customer – Relationship between a Banker and a Customer – Special Types of Customers – Minor, Lunatic, a Partnership Firm and a Joint Stock Company – General Precautions for Opening an Account – Types of Deposits - Current Deposit, Savings Deposit, Fixed Deposit and Recurring Deposit.

(15 Hours)

UNIT II

Negotiable Instruments : Features – Cheque – Meaning – Definition – Features – Drawing of a Cheque – Crossing of a Cheque and its Significance – Kinds of Crossing – Endorsement – Meaning – Definition – Kinds of Endorsement – Regularity of Endorsement.

(15 Hours)

UNIT III

Paying Banker: Precautions before Honouring a Cheque – Payment in Due Course – Holder in Due Course – Statutory Protection to a Paying Banker.

Collecting Banker: Holder for Value – Statutory Protection – Duties of a Collecting Banker.
(15 Hours)

UNIT IV

Loans and Advances : Principles of Sound Lending –Forms of Advances – Modes of Charging Security – Mortgage, Hypothecation, Pledge and Lien. (15 Hours)

UNIT V

Electronic Banking and Electronic Payments: Electronic Banking – Advantages and Disadvantages – Core Banking Solutions – Features – Advantages and Disadvantages – Cheque Truncation System – Real Time Gross Settlement – National Electronic Fund –Cash Deposit Machine – Automated Teller Machine –Debit Card –Credit Card – Smart Card.
(15 Hours)

SELF STUDY FOR ASSIGNMENT

1. Current Deposit Vs Savings Deposit.
2. Impact of Technology on Banking System.

TEXT BOOKS

1. Gordon, E., & Natarajan, K.(2017). *Banking Theory Law and Practice*, Mumbai: Himalaya Publishing House Pvt.Ltd., 26thRevised Edition.(Unit I –IV).
2. Rama, A., & Aruna Devi, A.(2019). *Banking Technology*, Chennai: New Century Book House (P) Ltd. 5th Revised Edition. (Unit V).

REFERENCE BOOKS

1. Varshney, P.N. (2014). *Banking Law and Practice*, New Delhi: Sultan Chand and Sons.
2. Kandasami, K.P., Natarajan, S., & Parameswaran, R. (2009). *Banking Law and Practice*, New Delhi : S.Chand and Company Ltd. 4th Revised Edition, Reprint 2013.

Course Code 20UCOC22	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	1	1	1	-	-	2	-	-
CO2	3	3	1	1	1	-	-	2	-	2
CO3	3	3	1	1	1	1	1	2	2	-
CO4	3	3	1	1	-	-	-	2	-	2
CO5	3	3	1	1	1	1	1	3	-	-

Strong - 3**Medium - 2****Low - 1**

Dr.R.Ponnien Selvi
Head of the Department

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Course Designers



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)

(2023 – 2024 onwards)

Semester II	INTRODUCTION TO PC SOFTWARE	Hours/Week: 4	
Elective Course		Credits: 3	
Course Code 23UCCA21		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the basic concepts of computers and MS Office. [K1]

CO2: describe the fundamentals of computers and the features of MS-Word, MS-Excel and MS-Access. [K2]

CO3: describe the creation of power point presentation and its features. [K2]

CO4: apply the features of computer organization, MS-Word, MS-Excel.[K3]

CO5: illustrate the functions of MS-PowerPoint and MS-Access. [K3]

UNIT I

Introduction to Computers: History and Development of Computers – Characteristics of Computer – Limitations of Computers – Types of Computers – Generations of Computers – Computer Organization. (8 Hours)

UNIT II

Word: Special Features of Microsoft Word 2007 – Opening Screen – Home Panel – Insert Panel – Page Layout Panel – Mailings Panel – Review Panel, Reference Panel – Saving, Opening, Closing and Printing a Document – Editing the Document: Auto Correct, Auto Format, Find and Replace – Formatting the Text – Using Office Button. (17 Hours)

UNIT III

Excel: Creating a Worksheet in Excel 2007 – Formula: Copying Formula, Formulas that Make Decisions and Auto Calculate – Creating Charts – Goal Seeking – Creating a Pivot Table Report – Formatting Numbers and Labels – Changing the Size of Rows and Columns – Adding and Deleting Rows and Columns – Applying Themes – Add or Remove a Worksheet Background – Convert Text to Columns – Protecting Worksheet – Functions in Excel. (20 Hours)

UNIT IV

Power Point: Creating a New Presentation – Power Point Views – Entering and Moving the Text – Adding Graphics to a Slide – Adding an Animated Cartoon, Movie and Sound to a Slide – Adding Slide Transitions and Text Transitions, Reordering & Duplicating Slides – Making Slide Shows. (15 Hours)

UNIT V

Access: New Features of MS – Access 2007 – Creating a Database: New Database, Design Template – Creating a Table: Design View, Datasheet View, Data Types, Setting Primary Key, Table Relationships, Managing Data – Creating a Query: Design View, Query Wizard – Creating Forms – Generating Reports. (15 Hours)

SELF STUDY FOR ASSIGNMENT

1. Applications of Computers .
2. Auditing the Work Book.

TEXT BOOKS

1. Dinesh Maidasani, (2013). *Learning Computer Fundamentals, MS Office and Internet & Web Technology*, New Delhi: Firewall Media, 3rd Edition. (Unit – I to IV)
2. Sanjay Saxena, (2011). *MS Office 2007 in a Nutshell*, New Delhi: Vikas Publishing House Private Limited. (Unit – V)

REFERENCE BOOKS

1. Jerry Joyce Marianne Moon, (2007). *Plain & Simple 2007 Microsoft Office System*, New Delhi: Prentice Hall of India Private Limited.
2. Michael Price, (2010). *Office 2007*, New Delhi: Tata McGraw Hill Education Private Limited.

Course Code 23UCCA21	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	2	3	–	2	2	–	–
CO2	3	3	3	2	2	–	2	2	–	–
CO3	3	3	2	2	3	–	–	2	–	–
CO4	3	2	2	1	–	–	2	2	–	–
CO5	3	3	3	1	1	–	–	2	–	–

Strong - 3**Medium – 2****Low – 1**

Dr. M.Ponnien Selvi

Head of the Department

Mrs. T. Veiluvanthan

Dr. P. Sudha

Course Designers



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications) (2023 - 24 onwards)

Semester II	BASIC ACCOUNTING PRINCIPLES	Hours/Week: 2	
NME - 2		Credits: 2	
Course Code 23UCON21		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the classification of accounts and accounting terminology. [K1]

CO2: mention the rules and procedure in accounting. [K1]

CO3: apply the rules for journalising and balancing the accounts. [K2]

CO4: prepare the trial balance and final accounts. [K2]

CO5: integrate the trial balance and balance sheet. [K3]

UNIT I

Introduction: Book Keeping –Accounting–Single Entry System - Double Entry System –
Classification of Accounts. Accounting Standards: Meaning – Definition – Significance.
(5 Hours)

UNIT II

Journal Entry: Rules for Journalising – Passing of Journal Entries. (5 Hours)

UNIT III

Ledger: Purpose – Posting in the Ledger – Balancing an Account. (5 Hours)

UNIT IV

Trial Balance: Preparation of Trial Balance. (5 Hours)

UNIT V

Final Accounts: Preparation of Trading Account – Preparation of Profit and Loss –
Preparation of Balance Sheet (Problems with adjustments related to closing stock only).
(10 Hours)

Note:

Composition of the Question Paper:

Theory : 20%

Problems : 80%

SELF STUDY:

1. Distinction between Book keeping and Accounting.
2. Preparation of Journal Entries, Ledger Accounts, Trial Balance and Final Accounts with the given five maximum transactions.

TEXT BOOK

1. Nagarajan, K.L., Vinayagam, N., & Mani, P.L. (2013). *Principles of Accountancy*, New Delhi: Eurasia Publishing House Pvt. Ltd. Reprint.

REFERENCE BOOKS

1. Reddy, T.S., & Murthy. A. (2011). *Financial Accounting*, Chennai: Margham Publications, 6th Revised Edition, Reprint 2018.
2. Arulanandam, M.A., & Raman, K.S. (2014). *Advanced Accountancy*, Mumbai: Himalaya Publishing House, 9th Revised Edition, Reprint 2022.

WEB RESOURCES

- 1 <https://www.slideshare.net/ramusakha/basics-of-financial-accounting>
- 2 https://www.icai.org/post.html?post_id=17882
- 3 <https://in.indeed.com/career-advice/career-development/what-is-a-trial-balance>

Course Code	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7
23UCON21	1	2	3	4	5	6	7
CO1	3	3	-	-	-	-	-
CO2	3	3	-	-	-	-	1
CO3	3	3	1	1	-	-	1
CO4	3	3	1	1	-	-	1
CO5	3	3	1	1	-	1	1

Strong - 3**Medium – 2****Low – 1**

Dr.M.PonnienSelvi
Head of the Department

Dr. M.Annam
Course Designer



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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)

(2023– 2024 onwards)

Semester II	FUNDAMENTALS OF MARKETING	Hours/Week: 2	
NME – 2		Credits: 2	
Course Code 23UCCN21		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state basic concepts related to market, marketing and social media marketing [K1]

CO2: describe the classifications, importance, characteristics of to market, marketing and social media marketing. [K1]

CO3: interpret the characteristics of market, marketing and social media marketing.[K2]

CO4: explain the marketing strategies for new product with ethical principles. [K2]

CO5: apply the marketing strategies for new product in social media marketing [K3]

UNIT I

Market: Meaning – Definition – Classification of Market – Marketing – Meaning – Definition
— Objectives – Importance – Marketing Mix – Elements of Marketing Mix. (6 Hours)

UNIT II

Product: Introduction and Important features of product - Product Life Cycle – Different Stages – Advantages of Product Life Cycle – New product development planning process. Pricing: Meaning - Importance – Objectives – Kinds of Pricing (6 Hours)

UNIT III

Promotion: Meaning – Importance – Objectives – Forms of Promotion – Sales promotion – Objectives– Advantages – Limitations of Sales promotion. (6 Hours)

UNIT IV

Channels of Distribution:Meaning – Definition – Importance – Factors determining choice of channel of distribution–Consumer Goods – Characteristics – Classification – Marketing Channel

for Consumer Goods – Industrial Goods - Characteristics – Classification – Marketing Channel of Industrial Goods. (6 Hours)

UNIT V

Social Media Marketing: Importance – Goals and Strategies – Advantages and Disadvantages – Security Measures – Ethics – Determine Common Social Media Pitfalls to Avoid – Tips to Use Social Media Marketing Tools: Twitter – LinkedIn – Snapchat – YouTube –Pinterest – Instagram. (6 Hours)

SELF STUDY FOR ASSIGNMENT

1. Selection of Channel of Distribution for Given Product
2. Selection of Social Media for Given Product

TEXT BOOK

Study material prepared by Course Designer

REFERENCE BOOKS

1. Pillai, R.S.N & Bagavathi, (2016) *Marketing Management*, New Delhi, New Delhi S.Chand & Company Ltd.
2. Varshney, R.L. & Gupta, S.L., (2016) New Delhi S.Chand & Company Ltd.

Course Code 23UCCN21	PO1	PO2	PO3	PO4	PO5	PO6	PO7
CO1	3	3	-	-	2	-	-
CO2	3	3	-	-	2	-	-
CO3	3	3	-	-	2	-	2
CO4	3	3	2	1	2	-	-
CO5	3	3	2	1	2	1	-

Dr.M.PonnienSelvi
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VIRUDHUNAGAR - 626 001

B.Com. (Computer Applications)
(2023 – 2024 onwards)

Semester II	Business Analytics using Excel Practical	Hours/Week: 2	
SEC -2		Credits: 2	
Course Code 23UCCS21P		Internal 40	External 60

COURSE OUTCOMES

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

- CO1: write the basic steps to create excel worksheet. [K2]
 CO2: mention the specific procedures for the required lab practical in MS-Excel. [K2]
 CO3: draft the various advanced excel functions. [K3]
 CO4: create the required worksheet, chart and use of various advanced excel functions. [K3]
 CO5: display and explain the output. [K3]

LIST OF PRACTICAL

MS Excel

1. Preparation of Inventory Details using Multiple worksheet.
2. Preparation of Employee Details using VLOOKUP.
3. Preparation of Employee Pay details using HLOOKUP.
4. Preparation of Sales Details using XLOOKUP.
5. Creation of Gantt Chart for Company Project Details.
6. Preparation of Company Details using Index and Match function.
7. Creation of Dashboard for Company Expenses Details.
8. Preparation of Product Details using Advanced Pivot Table.
9. Create a Macro for Employee Details of various departments.
10. Creation of Sparkline for Product Details

Course Code 22UCCS21P	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO 1	3	3	3	1	1	–	–	1	–	–
CO 2	3	2	2	1	–	–	2	1	–	–
CO 3	3	3	3	2	2	–	2	2	–	–
CO 4	3	3	3	1	2	–	1	2	2	–
CO 5	3	3	2	1	2	–	–	2	2	–

Strong - 3**Medium – 2****Low – 1**

Dr. M.Ponnien Selvi
Head of the Department

Mrs. T. Veiluvanthal
 Dr.E. Synthiya Judith Gnanaselvi
Course Designers



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VIRUDHUNAGAR

Quality Education with Wisdom and Values

B.Com. (Computer Applications) (for those who join in 2023 - 2024)

Semester III	CORPORATE ACCOUNTING-I	Hours/Week:5	
Core Course		Credits:5	
Course Code 23UCOC31		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of accounting concepts relating to issue and redemption of shares and debentures and financial statements. [K1]

CO2: describe the format and procedure for preparing the final accounts of a company as per Companies Act 2013. [K2]

CO3: explain the accounting treatment regarding the Issue & Redemption of Preference Shares & Debentures and the methods of valuation of shares and goodwill. [K2]

CO4: prepare company final accounts. [K3]

CO5: Compute the value of goodwill and shares under different methods and assess its applicability. [K3]

UNIT I

Issue of Shares

Issue of Shares: Meaning – Divisions of share capital – Issue of Shares at Par-Premium – Discount – Under Subscription and Over Subscription – Pro-rata Allotment Forfeiture of shares – Reissue of shares – Rights Issue and Bonus Shares – Underwriting of Shares and Debentures – Underwriting Commission – Types of Underwriting. (15 Hours)

UNIT II

Issue & Redemption of Preference Shares & Debentures

Preference Shares: Meaning – Types – Issue of Preference Shares – Redemption of Preference Shares – Provisions of Companies Act – Capital Redemption Reserve – Minimum Fresh Issue – Redemption at Par, Premium and Discount.

Debentures: Meaning – Types – Issue of Debentures – Redemption – Methods – In-One lot-in Instalment – Purchase in the Open Market includes Ex-Interest and Cum-Interest – Sinking Fund Investment Method. (15 Hours)

UNIT III

Final Accounts

Introduction: Final Accounts – Form and Contents of Financial Statements as Per Schedule III of Companies Act 2013 – Part I Form of Balance Sheet – Part II Form of Statement of Profit and Loss – Ascertaining Profit for Managerial Remuneration – Profit Prior to Incorporation.

(15 Hours)

Unit IV

Valuation of Goodwill & Shares

Valuation of Goodwill: Meaning – Features – Need for Valuation of Goodwill – Methods of Valuing Goodwill – Average Profit – Super Profit – Annuity and Capitalisation Method.

Valuation of Shares: Factors – Need for Valuation of Shares – Methods of Valuation of Shares – Net Assets Method – Yield and Fair Value Methods. (15 Hours)

Unit V

Indian Accounting Standards

International Financial Reporting Standard (IFRS): Meaning and its Applicability in India – Indian Accounting Standards – Meaning – Objectives – Significance – Procedures for Formulation of Standards – Ind AS – 1 Presentation of Financial Statement, Ind AS – 2 Valuation of Inventories, Ind AS – 7 Cash Flow Statement, Ind AS – 8 Accounting Policies, Changes in Accounting Estimate and Errors, Ind AS – 16 – Property, Plant & Equipment, Ind AS 38 – Intangible Assets Ind AS – 103, Business Combinations Ind AS 110, Consolidated Financial Statement. (Theory Only) (15 Hours)

SELF STUDY FOR ASSIGNMENT

1. Provisions and Accounting Treatment for the issue of Bonus Shares.
2. Indian Accounting Standards VS International Financial Reporting Standard VS Generally Accepted Accounting Principles (GAAP)

Note:**Composition of the Question Paper:****Theory: 20%****Problems: 80%****TEXT BOOKS**

1. T.S. Reddy, A. Murthy (2022), *Corporate Accounting*, Margham Publication, Chennai.
2. S.P. Jain and N.L. Narang, (2021), *Advanced Accounting*, Vol II, Kalyani Publication, New Delhi.

REFERENCE BOOKS

1. R.L. Gupta and M. Radhaswamy (2019), *Corporate Accounting* ,Vol I, Sultan Chand, New Delhi.
2. Shukla, Grewal and Gupta (2017) ,*Advanced Accounts*,Vol I, S.Chand, New Delhi, 19th edition
3. M.C.Shukla, (2019), *Advanced Accounting*, Vol I, S.Chand, New Delhi.
4. Prasanth Athma, (2016), *Corporate Accounting I*, Himalaya Publishing house, Mumbai.

WEB RESOURCES

1. <https://www.tickertape.in/blog/issue-of-shares/>
2. https://www.taxmann.com/bookstore/bookshop/bookfiles/chapter12valuationofgoodwillandsha_res.pdf
3. <https://www.mca.gov.in/content/mca/global/en/acts-rules/ebooks/accounting-standards.html>

Course Code 23UCOC31	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4 .a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	3	3	–	–	–	–	–
CO2	3	3	3	3	3	–	–	–	–	–
CO3	3	3	3	3	3	–	–	–	–	–
CO4	3	3	3	3	2	1	1	1	–	3
CO5	3	3	3	3	2	2	2	1	–	–

Strong-3**Medium– 2****Low– 1**

Dr.M.Ponnien Selvi
Head of the Department

Dr.R.Panchavarnam
Mrs.J.Babitha
Ms.S.Uva Dharshini
Course Designers



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VIRUDHUNAGAR

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B.Com. (Computer Applications) (for those who join in 2023 - 2024)

Semester III	BUSINESS MATHEMATICS & STATISTICS	Hours/Week: 5	
Core Course		Credits: 5	
Course Code 23UCCC31		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of basic concepts related to the prescribed contents of business mathematics and statistics. [K1]

CO2: describe the formulae related to the prescribed contents of business mathematics and statistics. [K2]

CO3: explain the types of interest, annuity, measures of central tendency, correlation, regression, and index numbers. [K2]

CO4: solve the problems related to ratio, proportion, variations, indices, logarithms, interests, annuity, and progression. [K3]

CO5: solve the problems related to measures of central tendency, correlation, regression, time series analysis and index numbers. [K3]

UNIT I

Ratio, Proportion and Variations, Indices and Logarithms. (15 Hours)

UNIT II

Interest and Annuity: Banker's Discount – Simple and Compound Interest – Arithmetic, Geometric and Harmonic Progressions. Annuity – Meaning – Types of Annuity Applications – Ethical Guidelines in Business Statistics and Mathematics.

(15 Hours)

UNIT III

Business Statistics Measures of Central Tendency: Arithmetic Mean, Geometric Mean – Harmonic Mean – Mode and Median – Quartiles – Deciles – Percentiles. Measures of Variation – Range – Quartile Deviation and Mean Deviation –

Variance and Standard Deviation & Co-efficient – Measures of Central Tendency and Dispersion using MS Excel.

(15 Hours)

UNIT IV

Correlation and Regression: Correlation–Karl Pearson’s Coefficient of Correlation– Spearman’s Rank Correlation – Regression Lines and Coefficients.

(15 Hours)

UNIT V

Time Series Analysis and Index Numbers

Time Series Analysis: Secular Trend – Seasonal Variation – Cyclical variations–Index Numbers –Aggregative and Relative Index – Chain and Fixed Index –Wholesale Index – Cost of Living Index.

(15 Hours)

SELF STUDY FOR ASSIGNMENT

1. Collection of Data
2. Consumer Price Index

TEXT BOOKS

1. Pillai, R.S.N., (2019).*Statistics Theory and Practice*, S.Chand & Company Ltd, New Delhi
2. Manoharan,M, Elango, C., Eswaran, K.L.(2013).*Business Mathematics*, Palani Paramount
3. Gupta B.N., *Business Mathematics & Statistics*, Shashibhawan publishinghouse, Chennai
4. Asim Kumar Manna, *Business Mathematics & Statistics*, McGraw hill education, Noida
5. Vittal, P.R. *Business Mathematics Statistics*, Margham Publications, Chennai.
6. Gupta, S.P.(2020),*Statistical Methods*,Sultan Chand & Son, New Delhi.

REFERENCE BOOKS

- 1.J.K. Sharma, *Fundamentals of Business Statistics*, Vikas publishing, Noida
2. Peter Waxman, *Business Mathematics & Statistics*, Prentice Hall, New York.

Course Code 23UCCC31	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	2	1	–	–	1	1	–	–	–
CO2	3	2	1	2	1	2	2	–	–	–
CO3	3	3	1	3	2	2	2	2	–	2
CO4	3	3	2	2	–	3	2	–	–	–
CO5	3	3	2	3	–	2	3	–	–	–

Strong – 3**Medium – 2****Low – 1**

Dr.M.Ponnien Selvi
Head of the Department

Mrs.R.Atheeswari
Mrs.S.Vijayalakshmi
Course Designers



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Semester III	PROGRAMMING IN JAVA PRACTICAL	Hours/Week: 4	
Elective Course		Credits: 3	
Course Code 23UCCA31P		Internal 40	External 60

COURSE OUTCOMES

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

CO1: describe the meaning of concepts related to Java programming. [K2]

CO2: describe about the structure of Java programming. [K2]

CO3: make use of multithreading, adapter class and applet in Java programming. [K3]

CO4: write programs in Java programming using data types, array, inheritance and package. [K3]

CO5: use multithreading, adapter classes and applets in Java programming. [K3]

UNIT I

Introduction: Review of Object–Oriented concepts – Java buzzwords (Platform independence, Portability, Threads)– JVM architecture –Java Program structure – Java main method – Java Console output(System.out) – simple java program – Data types – Variables – type conversion and casting– Java Console input: Buffered input – operators – control statements – Static Data – Static Method – String and String Buffer Classes .

(8 Hours)

UNIT II

Java user defined Classes and Objects – Arrays – constructors – Inheritance: Basic concepts – Types of inheritance – Member access rules – Usage of this and Super key word – Method Overloading – Method overriding – Abstract classes – Dynamic method dispatch – Usage of final keyword. (10 Hours)

UNIT III

Packages: Definition – Access Protection – Importing Packages – Interfaces: Definition – Implementation – Extending Interfaces Exception Handling: try – catch

– throw – throws – finally – Built-in exceptions – Creating own Exception classes –
garbage collection, finalise. (14 Hours)

UNIT IV

Multithreaded Programming: Thread Class – Runnable interface –Synchronization –
Using synchronized methods – Using synchronized statement – Interthread
Communication – Deadlock. (14 Hours)

UNIT V

Adapter classes – Inner classes –Java Util Package / Collections Frame work:
Collection & Iterator Interface– Enumeration– List and Array List– Vector–
Comparator – Applets: Applets – Advantages and Disadvantages of Applet – HTML
Tags – Life Cycle of an Applet – Applet Tags in HTML. (14 Hours)

LIST OF PRACTICAL

1. Write a Java program that prompts the user for an integer and then prints out all the prime numbers up to that Integer.
2. Write a Java program to multiply two given matrices.
3. Write a Java program that displays the number of characters, lines and words in a text.
4. Generate random numbers between two given limits using Random class and print messages according to the range of the value generated.
5. Write a program to do String Manipulation using Character Array and perform the following string operations:
 - a) String length
 - b) Finding a character at a particular position
 - c) Concatenating two strings
6. Write a program to perform the following string operations using String class:
 - a) String Concatenation
 - b) Search a substring
 - c) To extract substring from given string
7. Write a program to perform string operations using StringBuffer class:
 - a) Length of a string
 - b) Reverse a string
 - c) Delete a substring from the given string

8. Write a java program that implements a multi-thread application that has three threads. First thread generates random integer every 1 second and if the value is even, second thread computes the square of the number and prints. If the value is odd, the third thread will print the value of cube of the number.
9. Write a threading program which uses the same method asynchronously to print the numbers 1 to 10 using Thread1 and to print 90 to 100 using Thread2.
1. Write a program to demonstrate the use of following exceptions.
 - a) Arithmetic Exception
 - b) Number Format Exception
 - c) Array Index Out of Bound Exception
 - d) Negative Array Size Exception
2. Displaying a Message in Applet.
3. Designing Shapes in Applet.

SELF STUDY FOR ASSIGNMENT

1. Input / Output Exceptions.
2. Graphics Programming

TEXT BOOKS

1. Balagurusamy, E. *Programming with Java*, New Delhi: Tata McGraw Hill Publishing Company Limited, 5rd Edition.
2. Herbert Schildt, (2010). *The Complete Reference*, Tata McGraw Hill, New Delhi, 7th Edition.
3. Gary Cornell, (1999). *Core Java 2 Volume I – Fundamentals*, Addison Wesley.

REFERENCE BOOK

1. Head First Java, O’Rielly Publications, Y. Daniel Liang, Introduction to Java Programming, 7th Edition, Pearson Education India, 2010.

WEB RESOURCES

Web resources from NDL Library, E-content from open-source libraries

Course Code 23UCCA31P	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO3	PSO 4.a	PSO 4.b	PSO5	PSO6	PSO7
CO1	3	3	1	2	1	–	–	2	–	–
CO2	3	3	–	2	1	–	–	2	–	–
CO3	3	3	–	–	1	–	–	2	–	–
CO4	3	3	–	–	–	–	–	2	–	–
CO5	3	3	1	–	–	–	–	2	–	1

Strong – 3**Medium – 2****Low – 1**

Dr.M.Ponnien Selvi

Head of the Department

Mrs.T.Veiluvanthal

Dr.P.Sudha
Course Designers



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B.Com. (Computer Applications)

(for those who join in 2023 - 2024)

Semester III	ENTREPRENEURIAL SKILL DEVELOPMENT	Hours/Week: 1
Skill Enhancement Course		Credits: 1
Course Code 23UCOS31		Internal 100

COURSE OUTCOMES

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

CO1: state the meaning of concepts related to entrepreneurship and entrepreneurial projects. [K1]

CO2: mention the characteristics, functions, qualities and types of Entrepreneur . [K1]

CO3: explain about entrepreneurial ideas and entrepreneurial projects. [K2]

CO4: describe the institutional finance to entrepreneurs. [K2]

CO5: prepare project reports for traditional and digital entrepreneurship. [K3]

UNIT I

Entrepreneur: Definition – Characteristics – Functions – Qualities – Types – Role of Entrepreneurship in Economic Development. (3 Hours)

UNIT II

Women Entrepreneurs and Digital Entrepreneurship

Women Entrepreneurs (10) – Digital Entrepreneurship – Types – Steps to Start a Digital Business – Difference Between Traditional and Digital Entrepreneurship. (3 Hours)

UNIT III

Entrepreneurial Ideas: Search for Business Idea – Sources of Ideas – Idea processing and Selection.

(3 Hours)

UNIT IV

Entrepreneurial Projects:

Classification of Projects – Project Identification – Project Formulation: Elements – Project Selection: Criteria – Preparation of Project Report –Project Implementation.

(3 Hours)

UNIT V

Institutional finance to Entrepreneurs: DIC - TIIC – SIDBI- SFC – SIPCOT – EXIM BANK Entrepreneurial Assistance under MSMED Act. (3 Hours)

SELF STUDY FOR ASSIGNMENT

1. Stages of Project Life Cycle.
2. Challenges Faced by Women Entrepreneurs in India.

TEXT BOOK

Gupta, C.B., & Srinivasan, N.P., (2020). *Entrepreneurial Development*, New Delhi: Sultan Chand & Sons, Revised Edition.

REFERENCE BOOKS

1. Khanka, S.S. (2012). *Entrepreneurial Development*, New Delhi: S.Chand & Company Ltd., 4th Revised Edition.
2. Gordon. E. & Natarajan. K., (2018). *Entrepreneurship Development*, Mumbai: Himalaya Publishing House Pvt. Ltd., 16th Revised Edition.

Course Code 23UCOS31	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	3	–	–	–	1	1	–
CO2	3	3	3	3	–	–	–	–	–	–
CO3	3	3	3	3	–	2	2	1	2	1
CO4	3	3	3	3	2	2	2	1	2	–
CO5	3	3	2	3	2	3	3	1	2	1

Strong – 3**Medium – 2****Low – 1**

Dr.M.Ponnien Selvi
Head of the Department

Mrs.R.Atheeswari
 Dr.P.Saritha
 Dr.V.Shanthameena
 Dr.K.Nivedha
Course Designers



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Semester III	SOFT SKILL DEVELOPMENT	Hours/Week: 2	
Skill Enhancement Course		Credits: 2	
Course Code 23UCOS32		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of basic concepts of soft and hard skills. [K1]

CO2: mention the importance and components of soft skills. [K1]

CO3: explain the various factors influencing soft skills. [K2]

CO4: describe the various techniques of soft skills in stress management, preparation of resume

and interview. [K2]

CO5: identify the good manners and develop the soft skills. [K3]

UNIT I

Soft Skills : Meaning – Definition – Soft Skills Vs Hard Skills – Significance of Soft Skills – Components of Soft Skills – Practice of Soft Skills – Factors Determining Soft Skill – Biological Factors – Family and Social Factors – Situational Factors – Cultural Factors. (6 Hours)

UNIT II

Art of Listening: Principles of Listening – Types of Listening – Tips to Improve Listening.

Art of Speaking: Features of Speaking –Activities that Improve Speaking

Art of Reading: Importance of Reading – Types of Reading –Tips for Effective Reading.

Art of Writing: Importance of Writing Skills – Tips for Improving Writing.

(6 Hours)

UNIT III

Interpersonal Behaviour: Meaning – Types – Co-operative Behaviour–Conflicting Behaviour - Strategies of Interpersonal Conflict Resolution

Time Management: Meaning – Secrets of Time Management – Difficulties in Time Management –Tips for Successful Time Management.

Stress Management: Meaning – Effects of Stress – Kinds of Stress – Tips for Effective Stress Management.

(6 Hours)

UNIT IV

Preparing Curriculum Vitae, Resume: Meaning of Resume, CV and Bio-Data, Tips for Writing an Application Letter – Specimen of Solicited and Unsolicited Application Letter – Preparation of CV –Tips for Preparation of CV – Specimen of CV, Bio-Data and Resume.

Group Discussion: Meaning, Purpose of Group Discussion – Tips for Group Discussion.

(6 Hours)

UNIT V

Interview: Meaning – Job Interview – Preparations to Face Interview – Preparation Before, During and After Interview – Role of Interviewer.

Telephonic Interview: Tips for the Preparation of Telephonic Interview – Practice for Telephonic Interview – Points Considered During and After Telephonic Interview – Virtual Interview.

Job Fair: Meaning – Tips to attend Job Fair.

(6 Hours)

SELF STUDY FOR ASSIGNMENT

1. Self-introduction, Conversation with your Senior College Mate about the College Environment.
2. Good Manners and Conduct.

TEXT BOOK

Rama, A., Kanthimathi, P.T., & Subasini, M.(2019). *Soft Skills*, Chennai: New Century Book House (P) Ltd., First Edition.

REFERENCE BOOKS

1. Alex, K. (2011). *Soft Skills*, New Delhi: S.Chand Company Limited, 2nd Revised Edition.
2. Natarajan.L., & Santhakumari, P. (2018). *Soft Skills Development*, Chennai: Margham Publication, 1st Edition.

Course Code 23UCOS32	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	1	2	3	3	–	–	–	2	2	–
CO2	1	2	3	3	–	–	–	2	2	–
CO3	3	2	3	3	–	1	1	2	3	1
CO4	2	2	3	3	–	–	–	2	2	–
CO5	2	2	3	3	2	–	–	1	2	1

Strong – 3 Medium – 2 Low – 1

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V.V.VANNIAPERUMAL COLLEGE FOR WOMEN

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VIRUDHUNAGAR

Quality Education with Wisdom and Values

B.Com. (Computer Applications) (for those who join in 2023 - 2024)

Semester IV	CORPORATE ACCOUNTING - II	Hours/Week: 5	
Core Course		Credits: 5	
Course Code 23UCOC41		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of accounting concepts relating to amalgamation, absorption, alteration of share capital, internal and external reconstruction, banking companies, insurance companies, holding and subsidiary company and liquidation of companies. [K1]

CO2: describe the methods of purchase consideration, accounting treatment with regard to alteration of share capital, banking and insurance companies and Legal proceedings relating to winding up. [K2]

CO3: describe the accounting procedure of amalgamation, absorption and external reconstruction, conversion of stock, holding and subsidiary company and statement of affairs and deficiency accounts. [K2]

CO4: calculate purchase consideration, and prepare the liquidator's Final Statements. [K3]

CO5: prepare the final accounts of companies. [K3]

UNIT I

Amalgamation and Absorption: Amalgamation and Absorption – Meaning – Purchase Consideration – Lump sum Method, Net Assets Method, Net Payment Method, Intrinsic Value Method – Types of Methods of Accounting for Amalgamation – The Pooling of Interest Method – The Purchase Method (Excluding Inter-Company Holdings).

Alteration of Share Capital, Internal and External Reconstruction: Alteration of Share Capital – Modes of Alteration – Internal Reconstruction – Conversion of Stock – Increase and Decrease of Capital – Reserve Liability. (15 Hours)

REFERENCE BOOKS

1. Arulanandam, M.A. & Raman. K.S., (2014). *Advanced Accountancy*, Mumbai: Himalaya Publishing House.
2. Shukla, M.C. & Grewal, T.S. (2019). *Advanced Accounts*, Volume II, New Delhi: Sultan Chand & Sons, Nineteenth Edition.

WEB RESOURCES

1. <https://www.accountingnotes.net/amalgamation/amalgamation-absorption-and-reconstruction-accounting/126>
2. <https://www.slideshare.net/debchat123/accounts-of-banking-companies>
3. <https://www.accountingnotes.net/liquidation/liquidation-of-companies-accounting/12862>

Course Code 23UCOC41	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	3	2	-	-	-	-	-
CO2	3	3	3	3	2	-	-	-	-	-
CO3	3	3	3	3	2	-	-	3	-	-
CO4	3	3	3	3	2	2	2	-	-	-
CO5	3	3	3	3	2	2	2	2	-	3

Strong – 3 Medium – 2 Low – 1

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VIRUDHUNAGAR

Quality Education with Wisdom and Values

B.Com. (Computer Applications)

(for those who join in 2023 - 2024)

Semester IV	COMPANY LAW	Hours/Week:4	
Core Course		Credits:4	
Course Code 23UCCC41		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the basic provisions in company law related to company, its formation, meeting, resolution, auditor, management, and winding up. [K1]

CO2: explain the classification of companies, procedure for formation of company and types of company meetings. [K2]

CO3: explain about the board of directors, National Company Law Tribunal, National Company Law Appellate Tribunal, Modes of Winding Up, and company liquidator. [K2]

CO4: highlight the differences between types of companies, various documents, shares, meetings, and resolutions. [K3]

CO5: summarise the procedure for appointment and removal of directors and the procedure for winding up. [K3]

UNIT I

Introduction to Company law

Companies Act 2013 – Definition of a Company, Characteristics of Company – Lifting or Piercing the Corporate Veil – Company Distinguished from Partnership and Limited Liabilities Partnerships – Classification of Companies – Based on Incorporation, Liability, Number of Members, Control – Distinguish between public company and private company. (12 Hours)

UNIT II

Formation of Company

Formation of a Company – Promoter – Incorporation Documents e-filing – Memorandum of Association – Contents – Alteration – Legal Effects – Articles of

Association – Difference between Memorandum of Association and Articles of Association – Certificate of Incorporation – Prospectus – Contents – Kinds – Liabilities – Share Capital – Kinds – Issue – Alteration – Dividend – Debentures.

(12 Hours)

UNIT III

Meeting

Meeting and Resolution – Types – Requisites – Voting & Poll – Quorum – Proxy – Resolution – Ordinary & Special – Audit & Auditors – Qualification, Disqualification, Appointment and Removal of an Auditor .

(12 Hours)

UNIT IV

Management & Administration

Management & Administration – Directors – Legal Position – Board of Directors – Appointment/ Removal – Disqualification – Director Identification Number – Directorships – Powers – Duties – Board Committees – Related Party Transactions – Contract by One Person Company – Insider Trading– Managing Director – Manager – Secretarial Audit – Administrative Aspects and Winding Up – National Company Law Tribunal (NCLT) – National Company Law Appellate Tribunal (NCLAT) Special Courts.

(12 Hours)

UNIT V

Winding up

Meaning – Modes – Compulsory Winding Up – Voluntary Winding Up – Consequences of Winding Up Order – Powers of Tribunal – Petition for Winding Up – Company Liquidator.

(12 Hours)

SELF STUDY FOR ASSIGNMENT

1. Issue of bonus shares
2. Procedure for payment of dividend

TEXT BOOKS

1. Kapoor N.D., (2021). *Elements of Company Law*, Sultan Chand & Sons, Chennai ,31st Revised Edition 2021.
2. Kapoor N.D., (2021).*Business law* , Sultan Chand & Sons Chennai , 7th Revised Edition .

3. Pillai & Bagavathi R.S.N., (2015). *Business Law*, Sultan Chand & Sons, Chennai ,1st Edition.

REFERENCE BOOKS

1. Kapoor N.D., (2021). *Elements of Mercantile Law*, Sultan Chand Sons, Chennai ,37th Revised Edition 2017.
2. Preethi Agarwal, *Business Law*, CA foundation study material .

Web Resources

1. <https://www.mca.gov.in/content/mca/global/en/acts-rules/companies-act/companies-act-2013.html>.
2. <https://vakilsearch.com/blog/explain-procedure-formation-company>
3. <https://www.investopedia.com/terms/w/windingup.asp>

Course Code 23UCCC41	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	3	–	1	–	–	–	1
CO2	3	3	3	3	–	1	–	1	–	1
CO3	3	3	3	3	–	1	–	–	2	–
CO4	3	3	3	3	–	1	–	–	–	–
CO5	3	3	3	3	–	1	–	–	–	1
	Strong – 3			Medium – 2		Low – 1				

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VIRUDHUNAGAR

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B.Com. (Computer Applications)

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Semester IV	RELATIONAL DATABASE MANAGEMENT SYSTEM PRACTICAL	Hours/Week: 4	
Elective Course		Credits: 3	
Course Code 23UCCA41P		Internal 40	External 60

COURSE OUTCOMES

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

CO1: describe the meaning of basic concepts of Relational Database Management System.[K2]

CO2: explain the procedure of DBMS, ER diagram Relational database and normalization. [K2]

CO3: make use of DDL & DML Command, join operators, queries and SQL Functions.[K3]

CO4: apply the procedure of ER diagram, normalization in database management system. [K3]

CO5: use various SQL queries in RDBMS. [K3]

UNIT I

Introduction to DBMS– Data and Information – Database – Database Management System – Objectives– Advantages – Components – Architecture. ER Model: Building blocks of ERDiagram (8 Hours)

UNIT II

Relationship Degree – Classification – ER diagram to Tables – ISA relationship – Constraints –Aggregation and Composition – Advantages.

Structure of Relational Database: Introduction to Relational Database Design – Objectives – Tools –Redundancy and Data Anomaly (10 Hours)

UNIT III

Functional Dependency – Normalization – 1NF – 2NF – 3NF–BCNF. Transaction Processing – Database Security. (14 Hours)

UNIT IV

Introduction to SQL: Data Definition Commands – Data Manipulation Commands – SELECT Queries – Additional Data Definition Commands – Additional SELECT Query Keywords – Joining Database Tables. Advanced SQL: Relational SET Operators: UNION – UNION ALL – INTERSECT – MINUS. (14 Hours)

UNIT V

SQL Join Operators: Cross Join – Natural Join – Join USING Clause – JOIN ON Clause – Outer Join.

Sub Queries and Correlated Queries: WHERE – IN – HAVING – ANY and ALL – FROM.

SQL Functions: Date and Time Function – Numeric Function – String Function –

Conversion Function.

(14 Hours)

LIST OF PRACTICAL

1. DDL and DML Commands on Employee table.
2. Transaction Control Statements in the Student table.
3. Aggregate Functions on Student table.
4. SQL Operators.
5. SET Operators.
6. Customer details having various Joins.
7. Student table using Correlated Queries.
8. Library table using Sub Query.
9. Numeric Functions.
10. String Functions.

SELF STUDY FOR ASSIGNMENT

1. PL/SQL Exceptions
2. PL/SQL Triggers

TEXT BOOKS

1. S. Sumathi, S. Esakkirajan, (2007). *Fundamentals of Relational Database Management System*, Springer International Edition .
2. Alexis Leon., & Mathews Leon, *Data Base Management System*, Chennai: Vijay Nicole Imprints Pvt. Ltd.

REFERENCE BOOKS

1. Abraham Silberchatz, Henry F. Korth, S. Sudarshan, (2019). *Database System Concepts*, McGraw Hill, 7th Edition.
2. Alexis Leon & Mathews Leon, (2014). *Fundamentals of DBMS* Vijay Nicole Publications , 2nd Edition.

Web Resources

1. <https://nptel.ac.in/courses/106106093/>
2. <https://nptel.ac.in/courses/106106095/>
3. NPTEL & MOOC courses titled Relational Database Management Systems

Course Code 23UCCA41P	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO3	PSO 4.a	PSO 4.b	PSO5	PSO6	PSO7
CO1	3	3	1	–	–	–	–	1	–	–
CO2	3	3	–	–	–	–	–	1	–	–
CO3	3	3	–	–	–	–	–	2	–	–
CO4	3	3	–	–	–	–	–	2	2	–
CO5	3	3	1	–	–	–	–	2	2	–

Strong – 3**Medium – 2****Low – 1**

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Semester IV	DESKTOP PUBLISHING PRACTICAL	Hours/Week: 2	
Skill Enhancement Course		Credits: 2	
Course Code 23UCCS41P		Internal 40	External 60

COURSE OUTCOMES

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

- CO1: write the basic steps to create flash, Photoshop and PageMaker. [K2]
 CO2: mention the specific procedures for the required lab practical in Multimedia. [K2]
 CO3: apply the elements of multimedia in flash and pagemaker. [K3]
 CO4: prepare photoshop document using tools in multimedia. [K3]
 CO5: display and explain the output. [K3]

LIST OF PRACTICAL

Flash

1. Designing a Flash Program for Text Effects
2. Designing Flash Animation using Tweening Techniques
3. Designing Flash Animation using Morphing Techniques
4. Designing Flash Animation using Masking Techniques
5. Designing Flash Animation using Action Script

Photoshop

1. Creating an Image using Photoshop
2. Creating a Mirror Effect for Text and Picture using Photoshop
3. Creating a Rain Effect using Photoshop
4. Colouring an Image using Photoshop
5. Designing an Image using Brush Tool

PageMaker

- 1.Designing a Visiting Card using PageMaker
- 2.Designing an Invitation Card using PageMaker
- 3.Designing a Page of Images using PageMaker

Course Code 23UCCS41P	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO 1	3	3	1	2	1	–	–	3	3	1
CO 2	3	3	1	2	3	–	–	3	3	–
CO 3	3	3	1	–	2	–	–	3	3	–
CO 4	3	3	–	–	–	–	–	3	3	–
CO 5	3	3	2	2	1	–	–	3	3	–

Strong – 3**Medium – 2****Low – 1**

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VIRUDHUNAGAR

Quality Education with Wisdom and Values

B.Com. (Computer Applications) (for those who join in 2023 - 2024)

Semester IV	AI TOOLS FOR BUSINESSMEN	Hours/Week: 2	
Skill Enhancement Course		Credits: 2	
Course Code 23UCCS42		Internal 25	External 75

COURSE OUTCOMES

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

CO1: state the meaning of basic concepts related to AI. [K1]

CO2: mention the AI practical applications of AI. [K1]

CO3: explain the AI tools and techniques for business operations, data management and decision making. [K2]

CO4: describe the steps involved in AI implementation.[K2]

CO5: highlight the ethical and legal considerations in AI adoption. [K3]

UNIT I

Introduction to AI for Business: Overview of Artificial Intelligence (AI) and its Relevance to Business Operations - **Understanding basic AI Concepts:** Machine Learning, Deep Learning, and Natural Language Processing – Importance of AI in Enhancing Decision – making and Competitiveness in Business – Big Data Analysis using AI .

(6 Hours)

UNIT II

Practical Applications of AI in Business: Exploration of AI Tools and Techniques Applicable to Business Operations – Case Studies showcasing Successful AI Implementations in Various Industries – Identifying Opportunities for Leveraging AI in Optimizing Business Processes and Improving Efficiency – Sending Message using AI .

(6 Hours)

UNIT III

Implementing AI Solutions: Steps involved in Implementing AI Solutions in a Business Context – Selecting Appropriate AI Tools and Technologies based on Business Needs – Overcoming Common Challenges and Pitfalls in AI Adoption – Implementation of Voice using AI. (6 Hours)

UNIT IV

Data Management for AI driven Decision Making: Importance of Data Quality and Data Governance in AI Projects – Data Collection, Preprocessing, and Feature Engineering for AI Applications – Leveraging Data Analytics to Extract Actionable Insights for Informed Decision-Making – Automated Decision Making Technology. (6 Hours)

UNIT V

Ethical and Legal Considerations in AI Adoption: Ethical Implications of AI in Business Decision-making and Operations – Ensuring Fairness, Transparency, and Accountability in AI Systems – Compliance with relevant Regulations and Laws Governing AI usage in Business. (6 Hours)

SELF STUDY FOR ASSIGNMENT

1. AI and Predictive analysis
2. Applications of Recommendation Engines in Business

TEXT BOOKS

1. Rajendra Akerkar, R. (2019). AI for Business: A Primer on Data Science, Artificial Intelligence, and Machine Learning, Kindle 1st Edition.
2. Peter Cochrane. Artificial Intelligence: A Guide for Thinking Businessmen

REFERENCE BOOK

Jason L. Anderson & Jeffrey L. Coveyduc (2020). Artificial Intelligence for Business: A Roadmap for Getting Started with AI, John Wiley & Sons Ltd. United Kingdom.

Web Resources

Online courses and tutorials on AI tools and their business applications, such as those available on platforms like Coursera and Udemy.

Course Code 23UCCS42	PO1		PO2		PO3	PO4		PO5	PO6	PO7
	PSO 1.a	PSO 1.b	PSO 2.a	PSO 2.b	PSO 3	PSO 4.a	PSO 4.b	PSO 5	PSO 6	PSO 7
CO1	3	3	3	3	–	–	–	–	–	–
CO2	3	3	3	3	–	–	–	–	–	–
CO3	3	2	3	3	–	–	–	1	–	1
CO4	3	3	3	3	–	–	2	–	–	–
CO5	3	3	2	3	–	–	2	–	–	–

Strong – 3**Medium – 2****Low – 1**

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Course Designers