BCom ACCOUNTS AND DATA SCIENCE

PROGRAMME AND COURSE OUTCOMES

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Programme Outcomes

PO1	Demonstrate the aptitude of Accounts and Computer Application Skills and Computer based problem solving skills.
PO2	Display the knowledge of appropriate theory, practices and tools for the specification, design, and implementation
PO3	Ability to learn and acquire knowledge through online courses available at different MOOC Providers.
PO4	Ability to link knowledge of Accounts with Data Science and other auxiliary disciplines of study.
PO5	Display ethical code of conduct in usage of Internet and Cyber systems.
PO6	Ability to pursue higher studies of specialization and to take up technical employment
PO7	Ability to formulate, to model, to design solutions, procedure and to use software tools to solve real world problems and evaluate.
PO8	Ability to operate, manages, deploy, configure computer network, hardware, software operation of an organization.
PO9	Ability to present result using different presentation tools.
PO10	Ability to appreciate emerging technologies and tools.
PO11	Acquaint with the contemporary trends in industrial/research settings and thereby innovate novel solutions to existing problems
PO12	The ability to apply the knowledge and understanding noted above to the analysis of a given information handling problem.
PO13	The ability to work independently on a substantial project and as an effective team member.

Course Outcomes

Semester 1

COURSE TYPE	LANGUAGE COURSE I
COURSE NAME	LANGUAGE SKILLS
COURSE CODE	EN1111.3
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Master the language for personal and professional growth.
CO2	Acquire basic language skills through interactive classroom sessions.
CO3	Connect language with literature.

COURSE TYPE	ADDITIONAL LANGUAGE-I
COURSE NAME	GADYASAHITYAM
COURSE CODE	ML 1111.3
CREDIT	3
HOURS	5
COURSE OUTCOMES	
CO1	By getting to know the Malayalam novel, short story, essay, study, biography, autobiography, and travel experience, the various models of Malayalam prose are understood.
CO2	Students analyze the application possibilities of the language and thematic variations.
CO3	Ability to identify and evaluate the aesthetic features of prose literature by interacting with the cultural and social attitudes of the works.
CO4	Students acquire the ability to write good Malayalam through fluency, translation and essay writing. Gain creativity and application skills.

COURSE TYPE	COMMON COURSE - I
COURSE NAME	HINDI GADYA SAHITYA
COURSE CODE	HN 1111.3
CREDIT	4
HOURS	5

COURSE OUTCOMES	
CO1	Understands the difference between different prose forms
CO2	Appreciates prose literature
CO3	Critically evaluates the prose forms
CO4	Elucidates lines from prose with reference to context.

COURSE TYPE	COMMON COURSE I
COURSE NAME	GRAMMAR, COMMUNICATION, POETRY, HISTORY OF SYRIAC LITERATURE
COURSE CODE	SR 1111.3
CREDIT	3
HOURS	5

COURSE OUTCOMES	
CO1	Understands the different parts of speech
CO2	Construct effective conversations
CO3	Critically evaluate the poetic forms
CO4	Differentiate the features of literature of different ages

COURSE TYPE	FOUNDATION COURSE I
COURSE NAME	ENVIRONMENTAL STUDIES
COURSE CODE	COA 1121
CREDIT	2
HOURS	2

COURSE OUTCOMES	
CO1	Remember environmental policies
CO2	Understand different eco systems, environmental movements
CO3	Understand types of natural resources

COURSE TYPE	CORE COURSE I
COURSE NAME	FINANCIAL ACCOUNTING
COURSE CODE	COA 1131
CREDIT	3
HOURS	4
COURSE OUTCOME	
CO1	The students prepare the routine records of business
CO2	The students generate financial statements of sole proprietor, partnership and nonprofit entities
CO3	The students prepare financial statements from incomplete records

COURSE TYPE	CORE COURSE I
COURSE NAME	BUSINESS MATHEMATICS AND STATISTICS
COURSE CODE	COA 1132
CREDIT	3
HOURS	3
COURSE OUTCOMES	
CO1	Able to apply mathematical tools to solve general business problems.
CO2	Able to apply financial analysis with mathematical base.
CO3	Make students able to collect, tabulate and present business data.
CO4	Able to perform analysis and interpretation of business data.

COURSE TYPE	CORE COURSE - II
COURSE NAME	INTRODUCTION TO DATA SCIENCE
COURSE CODE	COA 1141
CREDIT	4
HOURS	6
COURSE OUTCOMES	
CO1	Remember data analytics life cycle
CO2	Understand Data pre-processing concepts
CO3	Apply probability theory for data analysis
CO4	Analyse data using worksheet
CO5	Evaluate formulas with Tables
CO6	Create charts for analysis

Semester 2

COURSE TYPE	LANGUAGE COURSE III
COURSE NAME	ENGLISH GRAMMAR USAGE AND WRITING
COURSE CODE	EN1212.3
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Acquire good understanding of modern English grammar.
CO2	Write grammatically and idiomatically correct language.
CO3	Improve verbal communication skill.
CO4	Minimize mother tongue influence.

COURSE TYPE	ADDITIONAL LANGUAGE II
COURSE NAME	DRISYAKALAASAHITYAM
COURSE CODE	ML 1211.3
CREDIT	3
HOURS	5
COURSE OUTCOMES	
CO1	Understanding the relationship between literary works and the visual arts.
CO2	By observing the visual arts of Kerala, it is possible to find similarities and differences.
CO3	Awakens one's own artistic sensibilities and motivates one to practice and express oneself.
CO4	Willingness to engage in artistic endeavours such as writing, acting and directing.
CO5	Enhances appreciation and critical appreciation of art forms.

COURSE TYPE	COMMON COURSE - II
COURSE NAME	HIDI PADYA SAHITYA
COURSE CODE	HN 1211.3
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Understands the aesthetics of Ancient and modern poetry in Hindi

CO2	Appreciates the creativity of the poets
CO3	Critically evaluates the contribution of the poets to Hindi literature
CO4	Understands the development of poetry in Hindi

COURSE TYPE	COMMON COURSE - II
COURSE NAME	GRAMMAR, COMMUNICATION, PROSE, HISTORY OF SYRIAN PEOPLE IN INDIA
COURSE CODE	SR 1211.3
CREDIT	3
HOURS	5
COURSE OUTCOMES	
CO1	Understands the grammatic functions
CO2	Develops communicative Syriac
CO3	Critically evaluates the prose of Syriac literature
CO4	Understands the development of relation between Indian culture and Syrian heritage

COURSE TYPE	FOUNDATION COURSE II
COURSE NAME	INTRODUCTION TO THE INDIAN CONSTITUTION & HUMAN RIGHTS
COURSE CODE	COA 1221
CREDIT	3
HOURS	2
COURSE OUTCOME	
CO1	Understand the system of political governance in India; appreciate the intent of the Framers of the Constitution and their understanding of Constitutional Values and role of Constitutional Institutions.
CO2	Learn the basic values of the Constitution of India as enacted in the Preamble, Fundamental Rights, Directive Principles of State Policy, and Fundamental Duties Chapter.
CO3	Understand the democratic values that govern the functioning of three arms of government and the ancillary institutions.
CO4	Appreciate the concepts underlying Indian federalism.
CO5	Develop an appreciation for Human Rights values

COURSE TYPE	CORE COURSE I
COURSE NAME	ADVANCED FINANCIAL ACCOUNTING
COURSE CODE	COA 1231
CREDIT	3
HOURS	3
COURSE OUTCOMES	

	COURSE OUTCOMES
CO1	The students apply accounting standards in recording and reporting of financial transactions and events
CO2	The students calculate depreciation in practical situation
CO3	The students prepare accounts of hire purchase system, Branch, Farm and Voyage

COURSE TYPE	CORE COURSE I
COURSE NAME	BUSINESS LAWS
COURSE CODE	COA 1232
CREDIT	3
HOURS	3
COURSE OUTCOMES	

	COURSE OUTCOMES
CO1	Able to identify and understand the fundamental legal principles behind contractual agreements.
CO2	Able to appreciate the relevance of business laws to individuals and business oganisations and the role of the laws in an economic, political and social context.
CO3	Able to develop in the students, acceptable attitudes and viewpoints with respect to business ethics and social responsibility.
CO4	Able to familiarise the students, exercise of proper professional and ethical responsibilities towards the potential clients and the legal system

COURSE TYPE	CORE COURSE II
COURSE NAME	DATA ANALYTICS USING PYTHON
COURSE CODE	COA 1241
CREDIT	4
HOURS	4
COURSE OUTCOMES	

CO1	Remember features of python
CO2	Understand the control flow statements
CO3	Understand NumPy and pandas library
CO4	Understand data structures
CO5	Understand visualization of variables
CO6	Create user defined modules

COURSE TYPE	CORE COURSE II
COURSE NAME	PYTHON PROGRAMING LAB
COURSE CODE	COA 1241.1
CREDIT	2
HOURS	3
COURSE OUTCOMES	
CO1	Remember features of python
CO2	Understand the control flow statements
CO3	Understand NumPy and pandas library
CO4	Understand data structures
CO5	Understand visualization of variables
CO6	Create user defined modules

Semester 3

COURSE TYPE	LANGUAGE COURSE V
COURSE NAME	ENGLISH FOR CAREER
COURSE CODE	EN1311.1
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Introduce students to the language skills required for appearing in career oriented competitive examinations.
CO2	Develop cognitive, logical, verbal and analytical skills necessary to succeed in competitive examinations.
CO3	Provide the pattern of questions based on common models of competitive tests.
CO4	Help students to prepare for and appear in competitive examinations.

COURSE TYPE	CORE COURSE I
COURSE NAME	COA 1331
COURSE CODE	FUNDAMENTALS OF INCOME TAX
CREDIT	4
HOURS	4
COURSE OUTCOMES	
CO1	Acquire knowledge about the basic concepts of Income Tax and heads of income
CO2	Able to compute income from salary by considering allowances, perquisites and profit in lieu of salary
CO3	Able to compute income from house property
CO4	Able to determine taxable profit of business or profession.

COURSE TYPE	CORE COURSE I
COURSE NAME	CORPORATE ACCOUNTING AND AUDIT
COURSE CODE	COA 1332
CREDIT	4
HOURS	6
COURSE OUTCOMES	
CO1	Interpret the provisions in IAS and IFRS
CO2	Apply provisions of IFRS in similar situations

CO3	Prepares financial statements according to the format prescribed by the companies Act and IAS -1 Calculate EPS and related performance indicators from the balance sheets of listed companies
CO4	Prepares consolidated financial statements of group of companies by considering the adjustments. Appreciate the consolidated financial statements
CO5	List out the requirements of audit in companies, qualification and liabilities of company auditor.

COURSE TYPE	CORE COURSE II
COURSE NAME	DATABASE MANAGEMENT SYSTEM AND SQL
COURSE CODE	COA 1341
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Remember components, advantages and disadvantages of DBMS
CO2	Understand data processing concepts
CO3	Apply different normal forms to suitable databases
CO4	Analyse different data models
CO5	Understand relational calculus
CO6	Create queries for relational operations

COURSE TYPE	CORE COURSE II
COURSE NAME	DATA MINING CONCEPTS AND TECHNIQUES
COURSE CODE	COA 1342
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Remember fundamentals of data mining
CO2	Understand need for pre-processing
CO3	Understand data integration, transformation and reduction
CO4	Analyse classification and prediction models
CO5	Understand KNN and support vector machine
CO6	Create association rules

Semester 4

COURSE TYPE	LANGUAGE COURSE VI
COURSE NAME	READINGS IN LITERATURE
COURSE CODE	EN 1411
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Familiarize with various genres of writing.
CO2	Able to effectively read and appreciate literature
CO3	Acquire critical thinking by reading between the lines

COURSE TYPE	CORE COURSE I
COURSE NAME	TAXATION LAW AND ACCOUNTS
COURSE CODE	COA 1431
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Able to compute capital gain and income from other sources
CO2	Able to determine Total income of individual, firms, co- operative society, company and HUF
CO3	Able to explain various income tax authorities and their powers.
CO4	Able to compare tax planning, tax management, tax evasion and tax avoidance.

COURSE TYPE	CORE COURSE I
COURSE NAME	COST ACCOUNTING
COURSE CODE	COA 1432
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	The students have better knowledge about different cost concepts
CO2	The students generate various cost accounting records
CO3	The students able to reconcile cost and financial profits.

COURSE TYPE	CORE COURSE II
COURSE NAME	APACHE HADOOP FOR DATA SCIENCE
COURSE CODE	COA 1441
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	Remember advanced map reduce API concepts
CO2	Understand data processing in Hadoop
CO3	Apply Hive to YARN administration
CO4	Analyse Hadoop User Environment
CO5	Understand HDFS, NoSQl and Apache Spark
CO6	Create cluster management system using Apache Ambari.

COURSE TYPE	CORE COURSE II
COURSE NAME	DATA ANALYSIS WITH R
COURSE CODE	COA 1442
CREDIT	3
HOURS	2
COURSE OUTCOMES	
CO1	Remember primitives of R
CO2	Understand Basic Data Types, Data Structures, Control Structures, Functions
CO3	Apply large data set with R
CO4	Analyse data using R
CO5	Understand functional programming and operations
CO6	Create a R Package

COURSE TYPE	CORE COURSE II
COURSE NAME	R PROGRAMMING LAB
COURSE CODE	COA 1442
CREDIT	2
HOURS	3
COURSE OUTCOMES	
CO1	Remember primitives of R
CO2	Understand Basic Data Types, Data Structures, Control Structures, Functions
CO3	Apply large data set with R
CO4	Analyse data using R
CO5	Understand functional programming and operations
CO6	Create a R Package

Semester 5

COURSE TYPE	CORE COURSE I
COURSE NAME	GOODS AND SERVICES TAX
COURSE CODE	COA 1531
CREDIT	4
HOURS	5
COURSE OUTCOMES	
CO1	The students have better knowledge about different GST concepts
CO2	The students generate Tax Statements for various business firms.
CO3	The students are able to become independent tax practitioners.

COURSE TYPE	CORE COURSE I
COURSE NAME	COMPUTERISED ACCOUNTING
COURSE CODE	COA 1532
CREDIT	4
HOURS	5
COURSE OUTCOME	
CO1	The students have better knowledge about Computerised accounting.
CO2	The students get trained in tally software.
CO3	The students are able to become Tally professional who can also handle GST application in Accounts.

COURSE TYPE	CORE COURSE I
COURSE NAME	INTERNSHIP CUM PROJECT
COURSE CODE	COA 1533
CREDIT	4
HOURS	
COURSE OUTCOMES	
CO1	The "Internship" aims at introducing the student to a range of professions and areas/functions within the company/organization.
CO2	The student might be engaged in a rotation program between different functions, might be invited to participate in seminars and training programs, or might join one or more managers and accompany them in an apprenticeship mode.
CO3	In the Internship the student's competencies are broadened through the activities he or she is engaged in.

COURSE TYPE	CORE COURSE II
COURSE NAME	DATA VISUALIZATION FOR ANALYSIS
COURSE CODE	COA 1541
CREDIT	4
HOURS	5
COURSE OUTCOME	
CO1	Remember physical and abstract types
CO2	Understand Visualization, data maps, time series
CO3	Apply design for visualization
CO4	Analyse different data and image models
CO5	Evaluate exploratory data analysis
CO6	Understand text visualization

COURSE TYPE	CORE COURSE II
COURSE NAME	APPLIED PREDICTIVE ANALYTICS
COURSE CODE	COA 1542
CREDIT	4
HOURS	5
COURSE OUTCOME	
CO1	Remember Mean, Standard Deviation, Skewness, Kurtosis, Rank-Ordered Statistics
CO2	Understand predictive analytics
CO3	Apply data for predictive modelling
CO4	Analyse measures of success for predictive models
CO5	Evaluate data visualisation for different dimensions
CO6	Create decision trees for modelling

COURSE TYPE	CORE COURSE II
COURSE NAME	MODELLING USING AMOS LAB
COURSE CODE	COA 1543
CREDIT	3
HOURS	2
COURSE OUTCOME	
CO1	Construct a data set for analysis
CO2	Create a data set for prediction

COURSE TYPE	OPEN COURSE
COURSE NAME	INTERNET AND WWW
COURSE CODE	COA 1551.2
CREDIT	4
HOURS	3
COURSE OUTCOME	
CO1	Remember network topologies
CO2	Understand modes of connecting internet
CO3	Understand WWW fundamentals
CO4	Understand browsers and search engines
CO5	Understand TCP/IP model
CO6	Remember benefits of web serve

Semester 6

COURSE TYPE	CORE COURSE I
COURSE NAME	APPLIED COST ACCOUNTING
COURSE CODE	COA 1631
CREDIT	4
HOURS	6
COURSE OUTCOME	
CO1	The students are able to ascertain cost of different industries by using appropriate methods
CO2	The students have the skill to use cost accounting techniques for different managerial decisions.

COURSE TYPE	CORE COURSE I
COURSE NAME	MANAGEMENT ACCOUNTING
COURSE CODE	COA 1632
CREDIT	4
HOURS	6
COURSE OUTCOMES	
CO1	The students able to prepare common size statement, comparative statement and Trend analysis.
CO2	The students calculate financial rations and interpret the same
CO3	The students prepare cash flow and fund flow statements
CO4	Students apply various enterprise performance measurement tools.

COURSE TYPE	CORE COURSE II
COURSE NAME	STATISTICAL ANALYSIS SYSTEM SAS
COURSE CODE	COA 1641
CREDIT	3
HOURS	4
COURSE OUTCOMES	
CO1	Remember conditional statement assignments
CO2	Understand SAS data set structure and methods of reading data into SAS
CO3	Understand read and store data
CO4	Understand append and merge data set
CO5	Understand SAS support statements
CO6	Create permanent SAS data set using windows

COURSE TYPE	CORE COURSE II
COURSE NAME	SOCIAL MEDIA ANALYTICS
COURSE CODE	COA 1642
CREDIT	3
HOURS	4

COURSE OUTCOMES	
CO1	Remember web crawling, data aggregation
CO2	Understand foundations of analytics
CO3	Understand the analytics process
CO4	Analyse data integration tools
CO5	Understand types of analytics in social media
CO6	Create a plan to shape data

COURSE TYPE	CORE COURSE II
COURSE NAME	MAJOR PROJECT & VIVA
COURSE CODE	COA1643
CREDIT	4
HOURS	5

COURSE OUTCOMES	
CO1	Apply the knowledge gained through various courses
CO2	Understand structured team work and project management
CO3	Create technical documentation