KONGUNADU ARTS AND SCIENCE COLLEGE
(AUTONOMOUS)
COIMBATORE – 641 029

DEPARTMENT OF B.COM (BUSINESS ANALYTICS)

CURRICULUM AND SCHEME OF EXAMINATIONS (CBCS)

(2025– 2026 and onwards)

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)
COIMBATORE – 641 029

DEPARTMENT OF B.COM (BUSINESS ANALYTICS)

VISION

Our vision is to introduce a leading academic program that shapes future leaders in commerce and business analytics, and empowering them with the knowledge, tools, and mind set to drive transformative change in industries. We aspire to create a learning environment that promotes analytical excellence, ethical decision-making, and responsible leadership in a rapidly evolving digital world.

MISSION

1. To Equip students with a strong foundation in the areas of business principles, advanced data analytics skills, adoptive critical thinking, and innovation in a data-driven world.
2. To Prepare students to be updated and to make ethical decisions in their professional careers.
3. To Contribute to the development of skilled professionals who can positively impact businesses and society.
4. To Cultivate a learning environment that promotes analytical excellence and responsible leadership.

PROGRAMME OUTCOME (PO)

PO 1 Develop a deep understanding of core business principles, including finance, marketing, economics, and management, integrated with the power of data analytics.

PO 2 Acquire the skills to apply statistical, analytical, and computational techniques to solve business problems and make informed decisions using data.

PO 3 Promote the ability to critically assess business challenges, analyze data, and devise innovative solutions based on quantitative and qualitative insights.

PO 4 Enrich the ability to demonstrate commitment to continuous learning.

PO 5 Heighten the capability to make business decisions with integrity, ensuring ethical practices in the use of data, analytics, and technology.

PO 6 Develop strong written and verbal communication skills to present data insights and business strategies clearly to diverse stakeholders.

PO 7 Build leadership skills and the ability to collaborate effectively in diverse teams to achieve common business goals.

PO 8 Adapt to the ever-evolving business and technological landscape, remaining flexible and innovative in solving contemporary business problems.

PO 9 Equip students to understand the broader global and societal context of business decisions, considering the impact of data-driven strategies on various communities and markets.

PO 10 Instill a commitment to continuous learning and professional growth, encouraging students to stay updated with emerging trends in business analytics and related fields.

PROGRAMME SPECIFIC OUTCOME (PSO)

PSO 1: Apply statistical, analytical, and quantitative techniques to solve complex business problems and support data-driven decision-making.

PSO 2: Demonstrate proficiency in using business analytics tools and technologies such as Excel, SQL, Python, R, Tableau, and Power BI for data analysis and visualization. **PSO 3:** Integrate core commerce and management knowledge (e.g., finance, marketing, operations) with data analytics to evaluate and enhance organizational performance.

PSO 4: Collect, clean, manage, and interpret large volumes of business data using appropriate data mining and machine learning techniques.

PSO 5: Exhibit ethical responsibility and strategic insight while making business recommendations based on analytics findings.

KONGUNADU ARTS AND SCIENCE COLLEGE (AUTONOMOUS)

COIMBATORE – 641 029

Programme Name: **B.COM (BA)**

Curriculum and Scheme of Examination under CBCS

(Applicable to the students admitted during the Academic Year 2025-2026)

Semester	Part	Subject Code	Title of the Paper	Instruction hours / cycle	Exam. Marks			Duration of Exam(hours)	Credits
					CIA	ESE	TOTAL		
I	I	25TML101	Language I – Tamil I/ Hindi I/ French I/ Malayalam I/ Sanskrit I@	6	25	75	100	3	3
	II	25ENG101	English - I	6	25	75	100	3	3
	III	25UBU101	Core Paper 1 – Financial Accounting	4	25	75	100	3	4
	III	25UBU102	Core Paper 2 – Fundamentals of Business Analytics	4	25	75	100	3	4
	III	25UBU1A1	Allied Paper 1 – Business Statistics I	6	25	75	100	3	5
	III	25UBU1CL	Core Practical -3- Computer Applications Practical - I –Analysis with Excel	2	20	30	50	3	1
	IV	25EVS101	Environmental Studies **	2	-	50	50	3	2
			Total	**30**	**-**	**-**	**600**	**-**	**22**
II	I	25TML202	Language II – Tamil II/ Hindi II/ French II/ Malayalam II/ Sanskrit II @	6	25	75	100	3	3
	II	25ENG202	English –II	6	25	75	100	3	3
	III	25UBU203	Core Paper 4 - C++	6	25	75	100	3	6
	III	25UBU2CM	Core Practical -5 – Computer Application Practical II – C++	4	20	30	50	3	2
	III	25UBU2A2	Allied Paper 2 – Business Statistics II	6	25	75	100	3	5
	IV	25VED201	Value Education- Moral and Ethics**	2	-	50	50	3	2
			Total	**30**	**-**	**-**	**500**	**-**	**21**
III	I	25TML303	Language III– Tamil III/ Hindi III/ French III/ Malayalam III/ Sanskrit III @	6	25	75	100	3	3
	II	25ENG303	English –III	6	25	75	100	3	3
	III	25UBU304	Core Paper 6– Business Data Mining	3	25	75	100	3	3
	III	25UBU305	Core Paper 7– Security analysis and portfolio management	3	25	75	100	3	3
	III	25UBU306	Core Paper 8 – Database programming	3	25	75	100	3	3
	III	25UBU3A3	Allied 3 – Operation and strategic management	3	25	75	100	3	3
	III	25UBU3CN	Core Paper 9 – Computer Application practical 3-Database programming	4	20	30	50	3	2
	IV	25TBT301/ 25TAT301/ 25UHR3N1	Basic Tamil* / Advanced Tamil**/ Non-Major Elective- I** Human Rights	2	-	75	75	3	2
			Total	**30**	**-**	**-**	**725**	**-**	**22**

IV	I	25TML404	Language IV – Tamil IV/ Hindi IV/ French IV/ Malayalam IV/ Sanskrit IV @	6	25	75	100	3	3
	II	25ENG404	English –IV	6	25	75	100	3	3
	III	25UBU407	Core Paper 10 - R Programming	3	25	75	100	3	3
	III	25UBU408	Core Paper 11 - Business Intelligence	3	25	75	100	3	3
	III	25UBU409	Core Paper 12- Principles of Financial management	3	25	75	100	3	3
	III	25UBU4A4	Allied 4 – Principles of Marketing	3	25	75	100	3	3
	III	25UBU4C0	Core 13- Computer Applications IV – Analysis with SPSS&R	4	20	30	50	3	2
	IV	25TBT402/ 25TAT402/ 25UWR4N2	Basic Tamil* / Advanced Tamil**/ Non - Major Elective- II** Women's Rights	2	-	75	75	3	2
			Total	**30**	**-**	**-**	**725**	**-**	**22**
V	III	25UBU510	Core Paper 14 – Python	6	25	75	100	3	6
	III	25UBU511	Core Paper 15– Cost and Management Accounting	6	25	75	100	3	6
	III	25UBU512	Core Paper 16 - Income Tax	6	25	75	100	3	6
	III	25UBU5CP	Core 17- Computer Applications Practical V: Python	4	40	60	100	3	2
	III	25UBU5E1	Elective Paper 1 A. Business organization and models B. Brand management C. Legal aspects of business	5	25	75	100	3	5
	IV	25UBU5S1	Skill based – SAS & SCI LAB	3	100	-	100	3	3
			Total	**30**	**-**	**-**	**600**	**-**	**28**
VI	III	25UBU613	Core Paper 18 - Hadoop	5	25	75	100	3	4
	III	25UBU614	Core Paper 19 – Computer Applications Practical 6: Hadoop	5	25	75	100	3	3
	III	25UBU6CQ	Core Paper 20 – Practical 7 SAS & SCI LAB	4	25	75	100	3	2
	III	25UBU6E2	Elective Paper II A. Financial market and institutions B. Cyber Law C. Goods and service Tax	5	25	75	100	3	5
	III	25UBU6E3	Elective Paper III A. HR Analytics B. Digital Marketing C. Supply chain and Logistics analytics	5	25	75	100	3	5
	III	25UBU6Z1	Project and Viva -Voce***	6	20	80	100	-	5
			Total	**30**	**-**	**-**	**600**	**-**	**24**
	V	**25NCC $ / NSS / YRC / PYE / ECC / RRC / WEC101#**	**Cocurricular Activities***	**-**	**50**	**-**	**50**	**-**	**1**
Grand Total				**-**	**-**	**-**	**3800**	**-**	**140**

Note :

CBCS – Choice Based Credit system, CIA– Continuous Internal Assessment,
ESE– End of Semester Examinations

$ For those students who opt NCC under Cocurricular activities will be studying the prescribed syllabi of the UGC which will include Theory, Practical & Camp components. Such students who qualify the prescribed requirements will earn an additional 24 credits.

@ Hindi/Malayalam/ French/ Sanskrit – 25HIN/MLM/FRN/SAN101 - 404

***** - No End-of-Semester Examinations. Only Continuous Internal Assessment (CIA)

******- No Continuous Internal Assessment (CIA). Only End-of-Semester Examinations (ESE)

*** Project Report – 60 marks; Viva voce – 20 marks; Internal-20 marks

**** The students shall undergo Internship training / field work for a minimum period of 14 working days at the end of the fourth semester during summer vacation and submit the report in the fifth semester which will be evaluated for 100 marks by the concerned guide and followed by an Internal Viva voce by the respective faculty or HOD as decided by the department. According to their marks, the grades will be awarded as given below.

Marks %	Grade
85 – 100	O
70 – 84	D
60 – 69	A
50 – 59	B
40 – 49	C
< 40	U (Reappear)

Major Elective Papers : (2 papers are to be chosen from the following 6 papers)

List of Elective Papers (College can choose any one of the papers as Elective)		
Elective I	A	Business organization and models
	B	Brand management
	C	Legal aspects of business
Elective II	A	Financial market and institutions
	B	Cyber Law
	C	Goods and service Tax
Elective III	A	HR Analytics
	B	Digital Marketing
	C	Supply chain and Logistics analytics

Non-Major Elective Papers

1. Human Rights
2. Women's Rights

 # List of Cocurricular Activities:

1. National Cadet Corps (NCC)
2. National Service Scheme (NSS)
3. Youth Red Cross (YRC)
4. Physical Education (PYE)
5. Eco Club (ECC)
6. Red Ribbon Club (RRC)
7. Women Empowerment Cell (WEC)

JOB ORIENTED CERTIFICATE COURSES (JOC):

1. JOC – 1: Advanced Excel and Tally – PRACTICALS

- 25 % CIA is applicable to all subjects except JOC, COP and SWAYAM courses which are considered as extra credit courses.

- The students should complete **Health and Wellness Programme (25UHW401)**[###] in the 4th semester and the completion marks should be submitted through the HOD to the Controller of Examinations. Extra credits will be given to the candidates who have successfully completed.

- The students should complete any **MOOC course available for Online learning platforms like SWAYAM, NPTEL, Course era**[$$]**, IIT Bombay Spoken Tutorial, e-Pathshala etc.,** with a minimum of 4 weeks in duration before the completion of the 5th semester and the course completion certificate should be submitted through the HOD to the Controller of Examinations. Extra credits will be given to the candidates who have successfully completed.

[$$]**Note:** One course to be taken from course era for all the under graduate students of self finance stream during the even semester of the I year. Appropriate extra credits and certification as applicable shall be awarded to the students who have completed the course.

- An **Onsite Training** preferably relevant to the course may be undertaken as per the discretion of the HOD.
- Students who successfully complete **Naan Mudhalvan** courses in 3rd and 5th semester will be given 2 extra credits for each course. They are asked to submit the marks to Controller of Examinations through and undersigned by the HOD.

Semester	Naan Mudhalvan Course Title
III	Fundamentals of Internal Audit
V	Internal Audit (Risk & Recovery)

Components of Continuous Internal Assessment

Components		Marks	Total
Theory			
CIA I	75	(75+75=150/10) 15	25
CIA II	75		
Assignment/Seminar		5	
Attendance		5	
Practical			
CIA Practical		25	40
Observation Notebook		10	
Attendance		5	
Practical			
CIA Practical		10	20
Observation Notebook		5	
Attendance		5	
Project			
Review		15	20
Regularity		5	

BLOOM'S TAXONOMY BASED ASSESSMENT PATTERN

K1-Remembering; **K2**-Understanding; **K3**-Applying; **K4**-Analyzing; **K5**-Evaluating

1. ESE Theory Examination:

CIA I & II and ESE: 75 Marks

Knowledge Level	Section	Marks	Description	Total
K1 Q1 to 10	A (Answer all)	10 x 1 = 10	MCQ	75
K1 – K5 Q11 to 15	B (Either or pattern)	5 x 5 = 25	Short Answers	
K2 – K5 Q16 to 20	C (Either or pattern)	5 x 8 = 40	Descriptive / Detailed	

2. ESE Practical Examination:

Knowledge Level	Section	Marks	Total
K3	Experiments	50	60
K4		10	
K5	Record Work		

Knowledge Level	Section	Marks	Total
K3	Experiments	25	30
K4		05	
K5	Record Work		

3. ESE Project Viva Voce:

Knowledge Level	Section	Marks	Total
K3	Project Report	60	80
K4		20	
K5	Viva Voce		

Scheme of Evaluation - Health and Wellness Programme (25UHW401) ###

Part	Description	Mark
A	Report	40
B	Attendance	20
C	Activities (Observation during Practice)	40
Total		**100**

UBU 01

SUBJECT CODE: 25UBU101

FIRST YEAR
SEMESTER – I

CORE PAPER 1 - FINANCIAL ACCOUNTING

Programme Code: 28					Programme Name: B.COM BA				
Subject Code	**L**	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**Employability / Entrepreneurship**
25UBU101	**4**	**-**	**-**	**4**	**60**	**25**	**75**	**100**	

Course Objectives

- To provide a strong foundation in fundamental accounting concepts, various elements of financial statements and relevant accounting standards.
- To be familiar with partnership, companies and inventory accounts.
- To inculcate the knowledge of international financial reporting standards.

CO	Course Outcomes		Knowledge level
CO1	Relate accounting concepts and conversion to prepare financial statements	**K1 to K5**	Remember
CO2	Outline the preparation of final accounts using AS 1 & 5		Understand
CO3	Explain the preparation of Depreciation and Bank Reconciliation statement		Apply
CO4	Examine the concepts of consignment and joint venture.		Analyse
CO5	Outline the preparation of partnership accounts		Evaluate

Unit	Contents	No. of Hours
I	**Introduction** Accounting Concepts and Accounting Conventions – Journal-Ledger - Trial Balance.	**12 Hours**
II	**Final Accounts** Final Accounts -AS 1, 5.	**12 Hours**
III	**Bank Reconciliation Statement** Depreciation – AS6- Bank Reconciliation Statement- AS 27.	**12 Hours**
IV	**Consignment and Joint Venture** Consignment–Joint Venture .	**12 Hours**

V	**Partnership Accounts** Partnership Accounts - Admission , Retirement and Death .	**12 Hours**
	TOTAL HOURS	**60**

THEORY 20% & PROBLEM 80%

***Denotes Self-study and Questions for Examinations May Be taken from the Self Study Portions also.**

Teaching Methods

Smart Class Room /Power Point presentation/Seminar/Quiz/Discussion Blended learning.

TEXT BOOK
1. Advanced Accountancy - Jain S P and Narang K L - Kalyani Publishers 2. Financial Accounting - Reddy T S & Murthy – Margam Publications
REFERENCE BOOK
1. Financial Accounting - Nagarajan K.L., Vinayagam. N & P.L. Mani – Sultan Chand & Sons 2. Advanced Accountancy - S.K. Maheswari, T.S. Reddy -Vikas publishers
WEB SOURCE
1. https://eicmai.in/booksyl2016/Home.aspx
2. https://chetanmalikclasses.com/difference-between-consignment-and-joint-venture-reviewed/
3. https://unacademy.com/content/ca-foundation/study-material/accountancy/partnership-accounts/

NOTE: Latest Edition of Textbooks May be Used

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

CORE PAPER 2: FUNDAMENTALS OF BUSINESS ANALYTICS

Programme Code: 28					**Programme Name: B.COM BA**				
Subject Code	**L**	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**Employability / Entrepreneurship**
25UBU102	**4**	**-**	**-**	**4**	**60**	**25**	**75**	**100**	

Course Objectives

- To achieve and establish vital understanding of big data application in business intelligence.
- To institute the concept of systematic transformation of process-oriented data into information of underlying business process.
- To exhibit knowledge of data analysis techniques and to apply principles of data sciences integrating enterprise reporting.

CO	**Course Outcomes**		**Knowledge level**
CO1	Outline the business analytical role	**K1 to K5**	Remember
CO2	Examine the business view of information technology application		Understand
CO3	Explain the concepts of OLTP, OLAP and BI		Apply
CO4	Demonstrate the data integration and data modelling concepts		Analyse
CO5	List the concepts of Enterprise reporting and BI in real world		Evaluate

Unit	**Contents**	**No. of Hours**
I	**Introduction to the BA Role:** Business Analysis -Business Analyst - The evolving role of the Business Analyst - The BA roadmap: different levels of business analysis - The basic rules of Business & Business Analysis - Classical Requirements and Tasks performed by Business Analysts. Project Definition and Scoping: Aspects - Projects phases - Project approaches (Waterfall, Agile, Iterative, Incremental) - The role of the BA across the project lifecycle.	**12 Hours**
II	**Information Technology Applications** Core business process – Baldrige Business Excellence framework - Key purpose of using IT in business - Enterprise Applications - **Information users and their requirements**. Data Definition: Types of Data – Attributes and Measurement – Types of data sets – Data quality – Types of Digital Data.	**12 Hours**
III	**OLTP and OLAP** OLAP – Different OLAP Architectures – OLTP and OLAP – Data models for OLTP and OLAP – Role of OLAP Tools in BI Architecture. Business Intelligence – Business Intelligence defined – Evolution of BI and Role of DSS, EIS, MIS and Digital Dashboards – Need for BI – BI value chain – Introduction to Business Analytics. BI Definitions and Concepts – BI Component Framework – Need for BI – BI Users – Business Intelligence applications – BI roles and responsibilities.	**12 Hours**

IV	**Data Integration** Data Integration – Data Warehouse – Goals – Data sources – Extract – Transform, Load – Data Integration – Technologies – Data Quality maintenance – Data profiling. Data Modelling – Basics – Types – Techniques – Fact table – Dimension Table – Typical Dimensional Models – Dimensional modeling life cycle – Designing the Dimensional Model.	**12 Hours**
V	**KPIs and Performance Management** Measures, Metrics, KPIs and Performance Management – Definition - **Measurement system terminology** – Role of Metrics and metrics supply chain – fact based decision making and KPIS use of KPIs – potential source for metrics. Enterprise Reporting – Report standardization – Balanced score card – dashboards – scoreboards vs. dashboards. BI in Real world – BI and mobility – BI and cloud computing – BI for ERP systems –Social CRM and BI.	**12 Hours**
TOTAL HOURS		**60**

THEORY 100%

***Denotes Self-study and Questions for Examinations May Be taken from the Self Study Portions also.**

Teaching Methods

Smart Class Room /Power Point presentation/Seminar/Quiz/Discussion Blended learning.

TEXT BOOK
1. Fundamentals of Business Analytics - RN Prasad, Seema Acharya – Wiley 2. Introduction to Data Mining - Pang Ning Tan, Michael Steinbach, Vipin Kumar – Pearson Education
REFERENCE BOOK
1 Haydn Thomas – Demonoid – Business Analysis Fundamentals – Pearson Education
WEB SOURCE
1. Paper-5-Sep-2021.pdf
2. https://www.slideshare.net/ramusakha/basics-of-financial-accounting
3. https://www.accountingtools.com/articles/what-is-a-single-entry-system.html

NOTE: Latest Edition of Textbooks May be Used

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

CORE PRACTICAL 3: COMPUTER APPLICATIONS PRACTICAL – I
ANALYSIS WITH EXCEL

Programme Code: 28					Programme Name: B.COM BA				
Subject Code	L	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**Skill Development**
25UBU1CL	-	**-**	**2**	**1**	**30**	**20**	**30**	**50**	

Course Objectives

- To inculcate the knowledge of MS Excel
- To understand the basic statistics tools & methods
- To apply practical skills in data organization, by using formulas and functions

CO	Course Outcomes		Knowledge level
CO1	To Outline the Analytical commands in Excel	K3 to K5	Apply
CO2	To Identify the statistical tools for problem solving		
CO3	To Analyze a program using appropriate analytical tool		Analyse
CO4	To Learn about various functions in Excel		
CO5	To Introduce the Elements of Excel		Evaluate

LIST OF PRACTICAL

1. Suppose that at the beginning of May 2012 you purchased shares in Apple, Inc. (Nasdaq: AAPL). It is now five years later and you decide to evaluate your holdings to see if you have done well with this investment. The table below shows the market prices of AAPL.

DATE	PRICE
2012	59.77
2013	121.19
2014	188.75
2015	135.81
2016	256.88
2017	337.41

a) Enter the data, as shown, into a worksheet and format the table as shown.
Create a formula to calculate rate of return for each year. Format the results as percentages with two decimal places.

b) Calculate the total return for the entire holding period. What is the compound average annual rate?

c) Create a Line chart showing the stock price from May 2006 to May2011. Make sure to title the chart and label the axes. Now, create an XY Scatter chart of the same data. What are the differences between these types of charts? Which type of chart is more appropriate for this data?

d) Experiment with the formatting possibilities of the chart. For example, you might try changing

it to a 3-D Line chart and fill the plot area with a marble background. Is there any reason to use this type of chart to display this data? Do the "enhancements" help you to understand the data

Fiscal Year	2017	2016	2015	2014	2013
Total Revenue	1,98,198	1,71,636	2,64,958	2,20,904	2,04,892
Net Income	19,024	10,483	23,931	18,688	17,138

2. In your position as research assistant to a portfolio manager, you need to analyze the profitability of the companies in the portfolio. Using the data for Chevron Corporation below:

a) Calculate the net profit margin for each year.

b) Calculate the average annual growth rates for revenue and net income using the GEOMEAN function. Is net income growing more slowly or faster than total revenue? Is this a positive for your investment in the company?

c) Calculate the average annual growth rate of total revenue using the **AVERAGE** function. Is this result more or less accurate than your result in the previous question? Why?

d) Create a Column chart of total revenue and net income. Be sure to

e) change the chart so that the x-axis labels contain the year numbers, and format the axis so that 2017on the far-right side of the axis.

3. Repeat Problem 2 using the data below for Qualcomm Inc. However, this time you should create a copy of your worksheet to use as a template. Replace the data for Chevron with that of Qual comm

Fiscal Year	2017	2016	2015	2014	2013
Total Revenue	10,991	10,416	11,142	8,871	7,526
Net Income	3,247	1,592	3,160	3,303	2,470

a) Do you think that Qualcomm can maintain the current growth rates of sales and net income over the long run? Why or why not?

b) Which company was more profitable in 2010? Which was more profitable if you take a longer view? Would this affect your desire to invest in one company over the other?

4. Using the data for Paychex, Inc. (Nasdaq: PAYX), presented below:

Fiscal Year	2017	2016	2015	2014	2013
Sales	$ 2000.82	$ 2082.76	$ 2066.32	$ 1886.96	$ 1674.60
EBIT	729.31	812.08	854.82	743.27	674.77
Total Net Income	477.00	533.54	576.14	515.45	464.91
Dividends Per Share	1.24	1.24	1.22	1.02	0.69
Basic EPS from total operations	1.32	1.48	1.56	1.35	1.23
Total assets	5,226.30	5,127.42	5,309.79	6,246.52	5,549.30
Accounts payable	37.3	37.33	40.25	46.96	46.67
Total liabilities	3,824.32	3785.94	4113.15	4294.27	3894.46
Retained earnings	856.29	829.50	745.35	1595.10	1380.97
Net cash from operating activity	610.92	688.77	724.67	631.23	569.23

a) Calculate the ratio of each year's data to the previous year for each of the above items for Paychex, Inc. For example, for the year 2010, $2,000.82/$2,082.76 = 0.9607.

b) From your calculations in part a, calculate each year's rate of growth. Using the example in part a, the ratio is 0.9607, so the percentage growth in sales for 2010 is 0.9607 – 1 or – 3.93%.

c) Calculate the average growth rate (using the **AVERAGE** function) of each of the above items
d) using the results you calculated in part b. These averages are arithmetic averages.
e) Use the **GEOMEAN** function to estimate the compound annual average growth rate (CAGR) foreach of the above items using the results that you calculated in part a. Be sure to subtract 1 from the result of the **GEOMEAN** function to arrive at a percent change. These averages are geometric averages.
f) Compare the results from part c (arithmetic averages using the **AVERAGE** function) to those for part d (geometric averages using the **GEOMEAN** function) for each item. Is it true that the arithmetic average growth rate is always greater than or equal to the geometric average (CAGR)?

5. Contrast the results for the geometric averages to those for the arithmetic average for the variables listed below.

i. What do you observe about the differences in the two growth estimates for Sale and Accounts Payable? What do you observe about the differences in the two estimates for Total Assets and Retained Earnings? Hint: Look at the results from part b (the individual yearly growth rates) for each variable to draw some conclusions about the variation between the arithmetic and geometric averages

a) Sales
b) EBIT
c) Total Assets
d) Accounts Payable
e) Retained Earnings

ii Cash budget using What If Analysis

iii Using Goal Seek to calculate Break Even Points

iv Sensitivity analysis of Capital Budgeting – Scenario Analysis, NPV Profile Charts

v Financial Forecasting- Income Statement, Assets and Liabilities on Balance Sheet

vi Analyzing Datasets with Tables and Pivot Tables.

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

UBU 08 SUBJECT CODE:25UBU203

SEMESTER – II

CORE PAPER 4 – C++

Programme Code: 28					Programme Name: B.COM BA				
Subject Code	**L**	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**SKILL DEVELOPMENT**
25UBU203	**6**	**-**	**-**	**6**	**90**	**25**	**75**	**100**	

Course Objectives

- To understand the concepts of object-oriented programming.
- To develop programming skills in C++ language.
- To identify the logical thinking and debugging skills essential for software development.

CO	Course Outcomes		Knowledge level
CO1	Define the concepts of Object-Oriented Programming in C++	K1 to K5	Remember
CO2	Summarize the concepts of tokens, expression and control structures C++		Understand
CO3	Develop program involving classes and objects & other concepts.		Apply
CO4	Apply the concept of operator overloading		Analyse
CO5	Explain the use of pointer in developing c++ program		Evaluate

Unit	Contents	No. of Hours
I	**Introduction To Object Oriented Programming** Principles of Object-Oriented Programming – A Look at Procedure and Object-Oriented Programming Paradigm – Basic Concepts of Objects Oriented Programming – **Benefits of OOP** – Object Oriented Languages – Application of OOP – Beginning with C++ – What is C++ – Application of C++ – C++ Statements – Structure of C++ Program.	**18 Hours**
II	**Operators In C++** Tokens, Expressions and Control Structures – Tokens – Keywords – Identifiers – Basic and User Defined Data Types – Operators in C++ – Operator Overloading – Operator Precedence –Control Structures. Functions in C++ – The Main Function – Function Prototyping – Call by Reference – Return by Reference – Inline Functions	**18 Hours**
III	**Classes and Objects** Classes and Objects – Introduction – Specifying A Class – Defining A Member Function – Static Data Members – Arrays of Objects – Objects as Function Arguments – Friendly Function – Pointers to Members. Constructors and Destructors – Constructors – Copy Constructors – Dynamic Constructors – Destructors.	**18 Hours**
IV	**Operator Overloading** Operator Overloading – Type Conversions – Introduction – Defining Operator Overloading – Overloading: Unary and Binary Operators – Overloading Binary Operators Using Friends – Manipulation of String Using Operators – Rules for Overloading Operators – Types Conversions – Inheritance – Extending Classes –	**18 Hours**

	Defining Derived Classes – Single, Multilevel, Multiple, Hierarchical and Hybrid Inheritance – Virtual Base Classes – Abstract Classes.	
V	**Virtual Functions & Working with Files** Pointers, Virtual Functions and Polymorphism – Pointers to Objects – Pointers to Derived Classes – Virtual Functions. Working With Files – Classes for File Stream Operations – Opening and Closing of a File – File Pointers and their Manipulation – **Sequential I/O Operations.**	**18 Hours**
TOTAL HOURS		**90**

THEORY 100%

***Denotes Self-study and Questions for Examinations May Be taken from the Self Study Portions also.**

Teaching Methods

Smart Class Room /Power Point presentation/Seminar/Quiz/Discussion Blended learning.

TEXT BOOK
1. Object Oriented Programming with C++ - BalaGuruswamy. E -, Tata McGraw Hill Publishing 2. Programming with C++ - Ravichandran.D- Tata McGraw Hill Publishing Co. Ltd
REFERENCE BOOK
1. Mastering C++ - Venugopal K.R., Rajkumar, Ravishankar T. - Tata McGraw Hill Publishing
WEB SOURCE
1. https://www.cet.edu.in/noticefiles/285_OOPS%20lecture%20notes%20Complete.pdf
2. https://cds.iisc.ac.in/wp-content/uploads/DS286.AUG2016.Lab2_.cpp_tutorial.pdf
3. https://gascnagercoil.in/wp-content/uploads/2020/12/Computer-Programming-in-C-SMPH52.pdf

NOTE: Latest Edition of Textbooks May be Used

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

CORE PRACTICAL 5 – COMPUTER APPLICATIONS PRACTICAL II – C++

Programme Code: 28					Programme Name: B.COM BA				
Subject Code	L	T	P	Credits	Total Hours	CIA	External	Total	Skill Development
25UBU2CM	-	-	4	2	60	20	30	50	

Course Objectives

- To inculcate C++ programming ability among the students.
- To provide knowledge about the implementation of C++ concepts in to programming
- To evaluate the I/O introduce exceptions in handling.

CO	Course Outcomes		Knowledge level
CO1	Demonstrate C++ Programming Structure	K3 to K5	Apply
CO2	Apply operators and functions of C++		
CO3	Illustrate the object-oriented concept in programming.		Analyse
CO4	Obtaining the skills to manage the coding.		
CO5	Constructing of classes and objects.		Evaluate

LIST OF PRACTICALS

1. Odd and Even series
2. Maximum and Minimum Numbers
3. Arithmetic operations using member functions
4. Student's details
5. Details of manager using array of objects
6. Computation of mean values using friend function
7. Swapping of two values using friend function
8. Static Member function using static data member
9. Sum of two complex numbers using constructors
10. String Manipulation using dynamic constructors
11. Destroy the object using Destructors
12. Simple and compound interest using Single Inheritance
13. Calculation of Depreciation
14. Hybrid Inheritance
15. Virtual Functions.

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

UBU012

SUBJECT CODE: 25UBU1A1

ALLIED PAPER I: BUSINESS STATISTICS – I

Programme Code : 28					Programme Name: B.COM BA				
Subject Code	**L**	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**SKILL DEVELOPMENT**
25UBU1A1	**6**	**-**	**-**	**5**	**90**	**25**	**75**	**100**	

Course Objectives

- To enrich the knowledge in statistics and to solve the statistical problems in analysis of business problems
- To be familiar with data collection, graphical presentation and classification of tables.
- To inculcate the knowledge of relationship between measures of variation and value deviation.

CO	Course Outcomes		Knowledge level
CO1	Produce appropriate graphical and numerical descriptive statistics for different types of data.	**K1 to K5**	Remember
CO2	Apply statistical concepts to analyse the business problems.		Understand
CO3	Explain the concepts of average and range of data collection		Apply
CO4	Examine the relationship between the variations.		Analyse
CO5	Outline the preparation of graph and table.		Evaluate

Unit	Contents	No. of Hours
I	**INTRODUCTION OF BUSINESS STATISTICS** Introduction of Business Statistics-Functions, Scope, Importance and Limitations of Statistics Meaning of Data and information - Classification and Collection of Primary and Secondary Data Preparing Primary data collection tools- Sampling & Sampling techniques.	**18 Hours**
II	**PRESENTATION OF DATA** Presentation of Data – Formation of Frequency distribution table – Classification and Tabulation Diagrammatic (1D, 2D) and graphical presentation- Graphs of Frequency Distribution –frequency curves – Ogive curve.	**18 Hours**
III	**CENTRAL TENDENCY** Measures of Central tendency – Different methods of calculation of Mean, Median, Mode,Geometric Mean and Harmonic Mean – Empirical Relation.	**18 Hours**
IV	**MEASURES OF DISPERSION** Measures of Dispersion - Different methods of calculation of Range, Quartile deviation, Mean Deviation, Standard deviation (Grouped and Ungrouped data) , Coefficient of Variation – Relationship between measures of variation, Correcting incorrect values of standard deviation,Lorenz curve.	**18 Hours**
V	**CORRELATION** Skewness – Meaning – Measures of skewness- Pearson's and Bowley's coefficient of skewness Correlation- Meaning and Definition- scatter diagram, Karl Pearson's coefficient of correlation, Spearman's Rank correlation, and Methods of Least squares.	**18 Hours**
TOTAL HOURS		**90**

THEORY 20% & PROBLEM 80%

***Denotes Self-study and Questions for Examinations May Be taken from the Self Study Portions also.**

Teaching Methods

Smart Class Room /Power Point presentation/Seminar/Quiz/Discussion Blended learning.

TEXT BOOK

1. S.P. Gupta and M.P. Gupta, Business Statistics– Sultan Chand & Sons Educational Publishers – New Delhi., 18th Edition

REFERENCE BOOK

1. Gupta, S.C, and V.K. Kapoor, Fundamentals of Mathematical Statistics- Cultan Chand & Sons – New Delhi. 2001
2. Mood A.M. Graybill F.A and Boes D.C, Introduction to the Theory of Statistics, Mcgraw Hill

WEB SOURCE

1. https://www.geeksforgeeks.org/maths/business-mathematics
2. https://www.geeksforgeeks.org/maths/business-mathematics/#importance
3. https://www.distanceeducationju.in/pdf/Business%20Mathematics%20(BC%20104).pdf

NOTE: Latest Edition of Textbooks May be Used

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

UBU014

SUBJECT CODE: 25UBU2A2

ALLIED PAPER II: BUSINESS STATISTICS –II

Programme Code : 28					Programme Name: B.COM BA				
Subject Code	**L**	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**SKILL DEVELOPMENT**
25UBU2A2	**6**	**-**	**-**	**5**	**90**	**25**	**75**	**100**	

Course Objectives

- To analysis a data for the purpose of exploration using descriptive and inferential statistics
- To solve the creative application statistical problems
- To enable the students to learn the Statistical methods of inferential statistics.

CO	Course Outcomes		Knowledge level
CO1	Explain the creative application of linear regression in multivariate context for predictive purpose.	**K1 to K5**	Remember
CO2	Understand probability and sampling distribution.		Understand
CO3	Understand the concepts of chi-square test.		Apply
CO4	Understand the statistical tools for multivariate data set.		Analyse
CO5	Examine the data reliability and validity of the data set.		Evaluate

Unit	Contents	No. of Hours
I	**REGRESSION ANALYSIS** Regression Analysis – Meaning of regression and linear prediction- Regression in two variables Regression equation – Regression coefficients, Standard errors of estimates, Coefficient of determination. Time Series- Meaning, Components and models – Business forecasting- Methods of estimating trend Graphic, semi- average, Moving average and Method of Least squares- Different variation (Seasonal, cyclical, irregular).	**18 Hours**
II	**PROBABILITY** Probability – introduction, meaning and application of Probability – Addition and Multiplication theorem- Bayes theorem – Practical problems. Sampling from finite population – simple random sampling, stratified random sampling and systematic sampling- estimation of mean, total and their standard errors. Sampling and non- Sampling errors (concepts only).	**18 Hours**
III	**HYPOTHESIS & STANDARD DEVIATIONS** Test of Hypothesis: Type I error and II errors- one tailed and two tailed test – Test of significance – standard error- large sample tests with respect to mean, standard deviation proportion, difference between means, standard deviations and proportions – Power test – Neyman – Pearson lemma Likelihood ratio tests – concept of most powerful test (statements and results only) – chi- Square test – Applications.	**18 Hours**
III	**HYPOTHESIS & STANDARD DEVIATIONS** Test of Hypothesis: Type I error and II errors- one tailed and two tailed test – Test of significance – standard error- large sample tests with respect to mean, standard deviation proportion, difference between means, standard deviations and	**18 Hours**

	proportions – Power test – Neyman – Pearson lemma Likelihood ratio tests – concept of most powerful test (statements and results only) – chi- Square test – Applications.	
IV	**ANALYSIS OF VARIANCE** Analysis of Variance: one way, two classifications- fundamental principles of experimentation CRD, RBD and LSD, analysis of co-variance.	**18 Hours**
V	**MULTIVARIATE STATISTICS** Multivariate Statistics-validity, Reliability, Types-Multiple regression, Logistic regression- Factor analysis, conjoint analysis, cluster analysis, correspondence analysis, multivariate model building.	**18 Hours**
TOTAL HOURS		**90**

THEORY 20% & PROBLEM 80%

***Denotes Self-study and Questions for Examinations May Be taken from the Self Study Portions also.**

Teaching Methods

Smart Class Room /Power Point presentation/Seminar/Quiz/Discussion Blended learning.

TEXT BOOK

1. S.P. Gupta and M.P. Gupta, Business Statistics– Sultan Chand & Sons Educational Publishers – New Delhi., 18th Edition -2014

REFERENCE BOOK

1. .Gupta, S.C, and V.K. Kapoor, Fundamentals of Mathematical Statistics- Cultan Chand & Sons – New Delhi. 2001
2. Mood A.M. Graybill F.A and Boes D.C, Introduction to the Theory of Statistics, Mcgraw Hill

WEB SOURCE

1. https://en.wikipedia.org/wiki/Business_mathematics
2. https://www.geeksforgeeks.org/maths/business-mathematics
3. https://www.geeksforgeeks.org/maths/business-mathematics/#business-mathematics-topics

NOTE: Latest Edition of Textbooks May be Used

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

UBU016

SUBJECT CODE:25EVS101

ELECTIVE I – ENVIRONMENTAL STUDIES

Programme Code: 28					Programme Name: B.COM BA				
Subject Code	**L**	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**Employability / Entrepreneurship**
25EVS101	**2**	**-**	**-**	**2**	**30**	**-**	**50**	**50**	

Course Objectives

- The Course will provide students with an understanding and appreciation of the complex interactions of man, health and the environment. It will expose students to the multi- disciplinary nature of environmental health sciences
- To inculcate knowledge and create awareness about ecological and environmental concepts, issues and solutions to environmental problems.
- To shape students into good "Eco citizens" thereby catering to global environmental needs.
- This course is designed to study about the types of pollutants including gases, chemicals petroleum, noise, light, global warming and radiation as well as pollutant flow and recycling and principles of environmental pollution such as air, water and soil
- The course will address environmental stress and pollution, their sources in natural and workplace environments, their modes of transport and transformation, their ecological and public health effects, and existing methods for environmental disease prevention and remediation.

CO	Course Outcomes		Knowledge level
CO1	Remember the interactions between organisms and their environments drive the dynamics of individuals, populations, communities and ecosystems	K1 to K5	Remember
CO2	Understand the develop an in-depth knowledge on the interdisciplinary relationship of cultural, ethical and social aspects of global environmental Issues		Understand
CO3	Apply values and attitudes towards complex environmental socio-economic challenges and providing participatory role in solving current environmental problems and preventing the future ones		Apply
CO4	Analyse inherent knowledge on basic concepts of biodiversity in an ecological context and about the current threats of biodiversity		Analyse
CO5	Evaluate appraise the major concepts and terminology in the field of environmental pollutants, its interconnections and direct damage to the wildlife, in addition to human communities and ecosystems		Evaluate

Unit	Contents	No. of Hours
I	**Multidisciplinary Nature of Environment** Definition: Scope and Importance – Need for public awareness - Natural resources – Types of resources – Forest Resources – *Water Resources – Mineral Resources – Food Resources – Energy Resources – Land Resources.	**6 Hours**
II	**Ecosystems** Concept of an ecosystem – Structure and functions of an ecosystem – *Procedures, consumers and decomposers – Energy flow in the ecosystem – Ecological succession – Food chains, food web and ecological pyramids – Structure	**6 Hours**

	and function of the following ecosystem – Forest Ecosystem –Grassland Ecosystem – Desert Ecosystem – Aquatic Ecosystem	
III	**Biodiversity and its Conservation** Introduction – Definition – Genetic – Species and ecosystem diversity- Bio geographical classification of India – Value of biodiversity – Biodiversity at global, national and local levels – India as a mega - diversity Nation - Hot spot of biodiversity – Threats to biodiversity - Endangered and endemic species of India – Conservation of Biodiversity – *Insitu* Conservation of Biodiversity – *Exsitu* Conservation of Biodiversity	**6 Hours**
IV	**Environmental Pollution** Definition - Causes, effects and control measures of : Air Pollution – Water Pollution – Soil Pollution – Marine Pollution – Noise Pollution – Thermal Pollution – Nuclear Pollution – Solid Waste Management: Causes, effects, control measures of urban and industrial wastes – Role of individual in prevention of pollution – Pollution case studies – domestic waste water, effluent from paper mill and dyeing, cement pollution – Disaster Management – Food, Drought, Earthquake, Tsunami, Cyclone and Landslide.	**6 Hours**
V	**Social Issues and the Environment** Sustainable Development – Smart City, Urban planning, Town Planning , Urban problems related to energy – *Water Conservation: Rain Water Harvesting and Watershed Management – Resettlement and rehabilitation of people, its problems and concerns, case studies Narmatha Valley Project – Environmental ethics, issues and possible solutions – Climate change, global warming, ozone layer depletion, acid rain, nuclear accidents and holocaust, case studies – Hiroshima and Nagasaki, Chernobyl – Consumerism and waste products – Environmental Protection Act – Air Pollution Act (Prevention and Control) – Water Pollution Act (Prevention and control) – Wild Life *Protection Act – Forest Conservation Act – Issues involved in enforcement of environmental legislation – Public awareness – Human Population and the environment – Population Growth and Distribution – Population Explosion – Family Welfare Programme – Environment and Human Health – Human Rights – Value Education – HIV/ AIDS – Women and Child Welfare – Role of Information Technology in Environment and Human Health.	**6 Hours**
TOTAL HOURS		**30**

***Denotes Self-study and Questions for Examinations May Be taken from the Self Study Portions also.**

Teaching Methods

Smart Class Room /Power Point presentation/Seminar/Quiz/Discussion Blended learning.

TEXT BOOK
1. A Text Book of Environmental Studies, Environmental Agency, P.Arul, No 27, Nattar street, Velachery main road, Velachery, Chennai – 42, First Edition.
REFERENCE BOOK
1. A text Book of Environmental Sciences, Purohit Shammi Agarwal, Publisher Mrs.Saraswati Prohit, Student Education, Behind Naswan Cinema Chopansi Road, Jodhpur.

2. Environmental Sciences and Engineering, Dr.Suresh and K.Dhameja, Publisher S.K.Kataria & Sons, 424/6, Guru Nanak Street, Vaisarak, Delhi -110 006. 3. Environmental Science and Engineering, J.Glynn Henry and Gary W Heinke, Prentice Hall of India Private Ltd., New Delhi – 110 001
WEB SOURCE
1. https://www.ugc.gov.in/oldpdf/modelcurriculum/env.pdf 2. https://goodwin.libguides.com/c.php?g=29106&p=181274 3. https://www.skkatariaandsons.com/view_book.aspx?productid=8269

NOTE: Latest Edition of Textbooks May be Used

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

Question Paper Pattern (External only)

Duration: 3 Hours **Total Marks: 50**

Answer all Questions (5 x 10 = 50 Marks)

Essay type, either or type questions from each unit.

SUBJECT CODE:25VED201

UBU019

VALUE EDUCATION – MORAL AND ETHICS

Programme Code: 28					**Programme Name: B.COM BA**				
Subject Code	**L**	**T**	**P**	**Credits**	**Total Hours**	**CIA**	**External**	**Total**	**Employability / Entrepreneurship**
25VED201	**2**	**-**	**-**	**2**	**30**	**-**	**50**	**50**	

Course Objectives

- To impart Value Education in every walk of life.
- To help the students to reach excellence and reap success.
- To impart the right attitude by practicing self-introspection.
- To portray the life and messages of Great Leaders.
- To insist the need for universal brotherhood, patience and tolerance.
- To help the students to keep they fit.
- To educate the importance of Yoga and Meditation.

CO	**Course Outcomes**		**Knowledge level**
CO1	Remember to recognize Moral values, Ethics, contribution of leaders, Yoga and its practice	**K1 to K5**	Remember
CO2	Understand the differentiate and relate the day-to-day applications of Yoga and Ethics in real life situations		Understand
CO3	Apply the principled life of great warriors and take it forward as a message to self and the society		Apply
CO4	Analyse the Practical outcome of practicing Moral values in real life Situation		Analyse
CO5	Evaluate and Rank the outcome of the pragmatic approach to further develop the skills		Evaluate

Unit	**Contents**	**No. of Hours**
I	**Moral And Ethics** Introduction – Meaning of Moral and Ethics – *Social Ethics – Ethics and Culture – Aim of Education	**6 Hours**
II	**Life And Teachings of Swami Vivekananda** Birth and Childhood days of Swami Vivekananda – At the Parliament of Religions – Teachings of Swami Vivekananda	**6 Hours**
III	**Warriors of Our Nation** Subhas Chandra Bose – Sardhar Vallabhbhai Patel – Udham Singh – V. O. Chidambaram Pillai – Bhagat Singh – Tiruppur Kumaran – Dheeran Chinnamalai – Thillaiaadi Valliammai – Velu Nachiyar – Vanchinathan	**6 Hours**
IV	**Yoga and Its Benefits** Introduction -yoga and its benefits - Ardhasiddhasana- Yoga for peace- Yoga for health - ***Yoga for wellbeing** - Yoga for success - Brain yoga benefits - The science of Yoga.	**6 Hours**
V	**Yoga Practice** Isha kriya -Surya Shakthi and it's benefits	**6 Hours**
	TOTAL HOURS	**30**

UBU020

***Denotes Self-study and Questions for Examinations May Be taken from the Self Study Portions also.**

Teaching Methods

Smart Class Room /Power Point presentation/Seminar/Quiz/Discussion Blended learning.

TEXT BOOK

1. Value Based Education – Moral and Ethics – Published by Kongunadu Arts and Science College (Autonomous), 3rd Edition.

REFERENCE BOOK

1. Swami Vivekananda – A Biography, Swami Nikhilananda, Advaita Ashrama, India, 24th Reprint Edition.
2. Gandhi, Nehru, Tagore and other eminent personalities of Modern India, Kalpana Rajaram, Spectrum Books Pvt. Ltd., revised and enlarged edition.
3. Freedom Fighters of India, Lion M.G. Agrawal, Isha Books Publisher, First Edition.
4. Easy steps to Yoga by Swami Vivekananda, A Divine Life Society Publication.

WEB SOURCE

1. https://www.e-booksdirectory.com/listing.php?category=311
2. https://www.diva-portal.org/smash/get/diva2:1038976/FULLTEXT01.pdf

NOTE: Latest Edition of Textbooks May be Used

Mapping

PSO / CO	PSO1	PSO 2	PSO 3	PSO 4	PSO 5
CO1	S	S	S	H	S
CO2	S	S	H	S	S
CO3	M	S	S	M	M
CO4	H	H	S	S	S
CO5	S	S	H	S	S

S – Strong **H** – High **M** – Medium **L** – Low

Question Paper Pattern (External only)

Duration: 3 Hours **Total Marks: 50**

Answer all Questions (5 x 10 = 50 Marks)

Essay type, either or type questions from each unit.