

## SEMESTER – IV

Sl. NO	Course Code	Title of the Course	Category of Course	Teaching Hours per Week (L+T+P)	SEE	CIE	Total Marks	Credits
28	Lang.4.1	Language -I	AECC	3+1+0	60	40	100	3
29	Lang.4.2	Language – II	AECC	3+1+0	60	40	100	3
30	B.Com.DA.4.1	Human Resource Management	DSC- 10	3+0+2	60	40	100	4
31	B.Com.DA.4.2	Principles of Marketing	DSC- 11	3+0+2	60	40	100	4
32	B.Com.DA.4.3	Data Science life cycle	DSC- 12	4+0+0	60	40	100	4
33	B.Com.DA.4.4	Constitution of India	AECC	2+0+0	30	20	50	2
34	B.Com.DA.4.5	Any one of the following: a. Banking Operations b. Principles of Event Management	OEC-4	3+0+0	60	40	100	3
35	B.Com.DA.4.6	Sports	SEC-VB	0+0+2	-	25	25	1
36	B.Com.DA.4.7	NCC/NSS/R&R(S&G)/ Cultural	SEC-VB	0+0+2	-	25	25	1
<b>SUB TOTAL (D)</b>					<b>390</b>	<b>310</b>	<b>700</b>	<b>25</b>

<b>Name of the Program: B.com (Data Analytics)</b> <b>Course Code: 4.1</b> <b>Name of the Course: HUMAN RESOURCE MANAGEMENT</b>		
COURSE CREDITS	NO. OF HOURS PER WEEK	TOTAL NO. OF TEACHING HOURS
4 CREDITS	4 HOURS	56 HOURS
<b>Pedagogy: Classroom lectures, tutorials, Group discussion, Seminar, Case studies &amp; field work etc.,</b>		
<b>Course Outcomes:</b> On successful completion of the course, the students will be able to <ol style="list-style-type: none"> <li>Ability to describe the role and responsibility of Human resources management functions on business</li> <li>Ability to describe HRP, Recruitment and Selection process</li> <li>Ability to describe to induction, training, and compensation aspects.</li> <li>Ability to explain performance appraisal and its process.</li> <li>Ability to demonstrate Employee Engagement and Psychological Contract.</li> </ol>		
<b>SYLLABUS:</b>		<b>HOURS</b>
<b>Module No. 1: Introduction to Human Resource Management</b>		<b>10</b>
Meaning and Definition of HRM – Features Objectives, Differences between Human Resource Management and Personnel Management, Importance, Functions and Process of HRM, Role of HR Manager, Trends influencing HR practices		
<b>Module No. 2: Human Resource Planning, Recruitment &amp; Selection</b>		<b>14</b>
Human Resource Planning: Meaning and Importance of Human Resource Planning, Process recruitment of HRP; HR Demand Forecasting- Meaning and Techniques (Meanings Only) and HR supply forecasting; Succession Planning – Meaning and Features Job Analysis: Meaning and Uses of Job Analysis, Process of Job Analysis – Job Description, Job Specification, Job Enlargement, Job Rotation, Job Enrichment (Meanings Only) Recruitment – Meaning, Methods of Recruitment, Factors affecting Recruitment, Sources of Recruitment; Selection – Meaning, Steps in Selection Process, Psychometric tests for Selection, Barriers to effective Selection, Making Selection effective; Placement, Gamification – Meaning and Features		
<b>Module No. 3: Induction, Training and Compensation</b>		<b>10</b>
Induction: Meaning, Objectives and Purpose of Induction, Problems faced during Induction, Induction Program Planning. Training: Need for training, Benefits of training, Assessment of Training Needs and Methods of Training and Development; Kirkpatrick Model; Career Development. Compensation: Direct and Indirect forms of Compensation (Meaning Only), Compensation Structure.		

<b>Module No. 4: Performance Appraisal, Promotion &amp; Transfers</b>	<b>14</b>
Performance appraisal: Meaning and Definition, Objectives and Methods of Performance Appraisal – Uses and Limitations of Performance Appraisal, Process of Performance Appraisal; Promotion: Meaning and Definition of Promotion, Purpose of Promotion, Basis of promotion; Transfer: Meaning of Transfer, Reasons for Transfer, Types of Transfer, Right Sizing of Work Force, Need for Right Sizing	
<b>Module No. 5: Employee Engagement and Psychological Contract</b>	<b>08</b>
Employee Engagement (EE): Meaning and Types of EE, Drivers of Engagement - Measurement of EE, Benefits of EE. Psychological contract: Meaning and features	
<b>Skill Development Activities:</b>	
<ol style="list-style-type: none"> <li>1. Preparation of Job Descriptions and Job specifications for a Job profile</li> <li>2. Choose any MNC and present your observations on training program</li> <li>3. Develop a format for performance appraisal of an employee.</li> <li>4. Discussion of any two Employee Engagement models.</li> <li>5. Analysis of components of pay structure based on the CTC sent by the Corporate to the institute for the various jobs of different sectors.</li> </ol>	
<b>Books for Reference:</b>	
<ol style="list-style-type: none"> <li>1. Aswathappa, Human Resource Management, McGraw Hill</li> <li>2. Edwin Flippo, Personnel Management, McGraw Hill</li> <li>3. C.B.Mamoria, Personnel Management, HPH</li> <li>4. Subba Rao, Personnel and Human Resources Management, HPH</li> <li>5. Reddy &amp; Appanainah, Human Resource Management, HPH</li> <li>6. Madhurimalal, Human Resource Management, HPH</li> <li>7. S.Sadri &amp; Others: Geometry of HR, HPH</li> <li>8. Rajkumar: Human Resource Management I.K. Intl</li> <li>9. Michael Porter, HRM and Human Relations, Juta &amp; Co.Ltd.</li> <li>10. K. Venkataramana, Human Resource Management, SHBP</li> <li>11. Chartered Accountants of India, New Delhi.</li> </ol>	

<b>Name of the Program:</b> Bachelor of Commerce (Data Analytics) <b>Course Code:</b> B.Com. DA 4.2 <b>Name of the Course:</b> PRINCIPLES OF MARKETING		
COURSE CREDITS	NO. OF HOURS PER WEEK	TOTAL NO. OF TEACHING HOURS
4 CREDITS	4 HOURS	56 HOURS
<b>Pedagogy:</b> Classroom lectures, tutorials, Group discussion, Seminar, Case studies & field work etc.,		
<b>Course Outcomes:</b> On successful completion of the course, the students will be able to <ul style="list-style-type: none"> <li>a. Understand the basic concepts of marketing and assess the marketing environment.</li> <li>b. Discover the new product development &amp; identify the factors affecting the price of a Product in the present context.</li> <li>c. Judge the impact of promotional techniques on the customers &amp; importance of channels of distribution.</li> <li>d. Outline the recent developments in the field of marketing.</li> <li>e. Analyze the consumer behavior in the present scenario and marketing segmentation</li> </ul>		
<b>SYLLABUS:</b>		<b>HOURS</b>
<b>Module 1: Introduction to Marketing</b>		<b>12</b>
<b>Marketing:</b> Introduction- Meaning- Nature - Scope-Importance of Marketing; Concepts & Approaches of Marketing; Concept of Need-Want-Demand - Customer Value - Customer Creation; Differences between Selling vs. Marketing; Marketing Management (concept only). <b>Marketing Environment:</b> Meaning-importance-Micro and Macro Environment in Marketing. <b>Marketing Mix</b> – Product – Price - Place & Promotion.		
<b>Module 2: Consumer Behaviour &amp; Market Segmentation</b>		<b>12</b>
<b>Consumer Behaviour:</b> Meaning and importance of consumer behaviour-Consumer buying decision process; Factors influencing consumer buying behavior. <b>Market Segmentation:</b> Meaning, importance and bases of market segmentation.		
<b>Module 3: Product and Pricing</b>		<b>12</b>
<b>Product:</b> Meaning and features - product classification- Concept of product line, product mix, Branding, Packaging and labelling; Product Life Cycle – meaning and Stages in Product Life Cycle - New product Development- Meaning and stages in NPD <b>Pricing:</b> Meaning and Significance; Factors affecting price of a product; Types of Pricing and pricing strategies.		
<b>Module 4: Promotion and Distribution</b>		<b>12</b>
<b>Promotion:</b> Meaning and importance of promotion; Types of promotion: advertising, personal selling and sales promotion and their distinctive characteristics. Promotion Mix and factors affecting promotion mix decisions. <b>Distribution:</b> Meaning and types of channels of distribution, Factors affecting choice of distribution channel.		
<b>Module 5: Recent Developments in Marketing</b>		<b>08</b>

Online marketing, direct marketing, services marketing, green marketing, Rural marketing; Search Engine Marketing-Mobile Marketing- Social Media Marketing-Email Marketing-Network Marketing (concepts only).

**Skill Development Activities:**

- a. Analyse the consumer behaviour of people in your locality and identify their needs, wants & purchasing power as customers.
- b. Collect information on consumer behaviour towards home appliances in your locality.
- c. Visit any departmental store and collect the information on quantity pricing (Eg: one unit vs. multiple units or 1 kg vs. 5, 10 or 100 kgs.) of any two home consumption products.
- d. Develop a logo, Tag line and an advertisement for your own clothing brand.
- e. Identify some of the recent promotion strategies adopted by a few large companies.
- f. List out the salient features of a good advertisement copy.

**Books for Reference:**

1. Philip Kotler (2015), Principles of Marketing. 13th edition. Pearson Education.
2. Saxena Rajan, (2017) Marketing Management, Tata McGraw-Hill Publishing Company Ltd., New Delhi. Fifth Edition.
3. Kumar Arun & Meenakshi N (2016), Marketing Management, Vikas Publishing House Pvt. Ltd., New Delhi. Third Edition
4. Panda Tapan (2008), Marketing Management, Excel books, New Delhi, Second Edition.
5. Michael, J. Etzel, Bruce J. Walker, William J Stanton and Ajay Pandit. Marketing: Concepts and Cases. (Special Indian Edition), McGraw Hill Education
6. William D. Perreault, and McCarthy, E. Jerome., Basic Marketing. Pearson Education.
7. Majaro, Simon. The Essence of Marketing. Pearson Education, New Delhi.
8. Iacobucci and Kapoor, Marketing Management: A South Asian Perspective. Cengage Learning.
9. Chhabra, T.N., and S. K. Grover. Marketing Management. Fourth Edition.

<b>Name of the Program:</b> Bachelor of Commerce (Data Analytics) <b>Course Code:</b> B.Com. DA 4.3 <b>Name of the Course:</b> DATA SCIENCE LIFE CYCLE		
COURSE CREDITS	NO. OF HOURS PER WEEK	TOTAL NO. OF TEACHING HOURS
4 CREDITS	4 HOURS	56 HOURS
<b>Pedagogy:</b> Classroom lectures, Case studies, Tutorial classes, Group discussion, Seminar & field work etc.,		
<b>Course Outcomes:</b> On successful completion of the course, the students will be able to: <ol style="list-style-type: none"> <li>1. Understand the Concept of Data Science and its Life Cycle.</li> <li>2. Prepare the Visualization of Data.</li> <li>3. Understand the concept of Hadoop and HDFS</li> <li>4. Understand the concept of Machine Learning and Algorithm.</li> <li>5. Understand the basics of NLP.</li> </ol>		
<b>SYLLABUS:</b>		<b>HOURS</b>
<b>Module No. 1: Introduction to Data Science</b>		<b>12</b>
What is Data Science? What does Data Science involve? Data science process – roles, stages in data science, Era/History of Data Science, Business Intelligence v/s Data Science, Life cycle of Data Science, Tools of Data Science, Data Extraction & Exploration, Data Analysis Pipeline, Types of Data Raw and Processed Data, Exploratory Data Analysis		
<b>Module No. 2: Visualization of Data</b>		<b>12</b>
Introduction to Visualization, Human Perception and Information Processing, Graphical perception (the ability of viewers to interpret visual (graphical) encodings of information and thereby decode information in graphs Color for information display, Color management systems, Picture visualization and end result, Data Transformation into sources of knowledge through visual representation, Requirements and heuristics for high-quality visualizations. Charts and standard views: relevance and appropriateness. Advanced and innovative tools for data visualization and advanced quantitative analysis, the evaluation of the quality of visualizations and info-graphics		
<b>Module No. 3: Hadoop and HDFS</b>		<b>12</b>
<b>History</b> of Hadoop, Apache Hadoop, Analysing Data with Hadoop, Hadoop Streaming, Hadoop Echo System, IBM Big Data Strategy, Introduction to Info-sphere Big-Insights and Big Sheets. <b>HDFS (Hadoop Distributed File System):</b> The Design of HDFS, HDFS Concepts, Command Line Interface, Hadoop file system interfaces, Data flow, Data Ingest with Flume and Scoop and Hadoop archives, Hadoop I/O: Compression, Serialization, Avro and File-Based Data structures		

<b>Module No. 4: Basics of Machine Learning</b>	<b>12</b>
<p>What is Machine Learning? Types of Machine Learning, How does a Machine Learning Algorithm works, Parametric and Non-Parametric Algorithms, Regression and Classification:- Linear regression, cost function, gradient descent, polynomial regression, cost function for logistic regression, regularization, evaluation of machine learning model. Clustering, Preparing Data, Outliers, Problems of Under-fitting and Over- fitting, the bias – Variance trade-off, Data science packages</p>	
<b>Module No. 5: Basics of Natural Language Processing (NLP)</b>	<b>08</b>
<p><b>Overview:</b> Origins and challenges of NLP- Theory of Language - Features of Indian Languages – Issues in Font –Models and Algorithms- NLP Applications.  <b>Morphology And Parts-of-Speech:</b> Phonology – Computational Phonology - Words and Morphemes – Segmentation – Categorization and Lemmatization – Word Form Recognition – Valency -Agreement - Regular Expressions – Finite State Automata – Morphology- Morphological issues of Indian Languages – Transliteration.</p>	
<p><b>Books for Reference:</b></p> <ol style="list-style-type: none"> <li>1. Chris Eaton, Dirk Deroos, Tom Deutsch et al., “Understanding Big Data”, McGrawHill, 2012.</li> <li>2. Alberto Cordoba, “Understanding the Predictive Analytics Lifecycle”, Wiley, 2014.</li> <li>3. Eric Siegel, Thomas H. Davenport, “Predictive Analytics: The Power to Predict Who Will Click, Buy, Lie, or Die”, Wiley, 2013.</li> <li>4. James R Evans, “Business Analytics – Methods, Models and Decisions”, Pearson 2013.</li> <li>5. R. N. Prasad, Seema Acharya, “Fundamentals of Business Analytics”, Wiley, 2015.</li> <li>6. S M Ross, “Introduction to Probability and Statistics for Engineers and Scientists”, Academic Foundation, 2011.</li> <li>7. David Hand, Heiki Mannila, Padhria Smyth, “Principles of Data Mining”, PHI 2013.</li> <li>8. Spyros Makridakis, Steven C Wheelwright, Rob J Hyndman, “Forecasting methods and applications”, Wiley 2013( Reprint).</li> <li>9. David Hand, Heikki Mannila, Padhraic Smyth, “Principles of Datamining”, PHI 2013.</li> <li>10. <a href="http://cran.r-project.org/doc/manuals/R-intro.html">http://cran.r-project.org/doc/manuals/R-intro.html</a></li> <li>11. W.N. Venables, D.M Smith, “An introduction to R”,</li> <li>12. R in Nutshell , O Reilly,</li> </ol>	

<b>Name of the Program:</b> Bachelor of Commerce (Data Analytics) <b>Course Code:</b> B.Com. 4.5 b (OEC) <b>Name of the Course: BANKING OPERATIONS</b>		
<b>Course Credits</b>	<b>No. of Hours per Week</b>	<b>Total No. of Teaching Hours</b>
<b>3 Credits</b>	<b>3 Hrs.</b>	<b>42 Hrs.</b>
<b>Pedagogy:</b> Classroom lectures, Case studies, Group discussion & Seminar etc.,		
<b>Course Outcomes: On successful completion of the course, the students will be able to</b> <ol style="list-style-type: none"> <li>1. Understand the concept of banks and banking and its operations</li> <li>2. Comprehend the procedures and risks involved in different types of accounts</li> <li>3. Utilize the knowledge for bank operations</li> <li>4. Comprehend the recent banking practices</li> </ol>		
<b>Syllabus:</b>		<b>Hours</b>
<b>Module No. 1: Introduction to Banking</b>		<b>10</b>
<b>Introduction to Banking:</b> Meaning, Importance, Types of banks in India, Functions of Banks - Primary, Secondary & Modern functions of banks; <b>RBI</b> -Role & Functions of RBI.		
<b>Module No. 2: Different types of Accounts</b>		<b>10</b>
<b>Different types of Accounts</b> – Savings Account, Current Account, Fixed Deposit Account, Recurring Deposit account- Features and Procedure for opening and operating these accounts. <b>Special types of accounts:</b> Procedure for opening and operating the accounts of Sole proprietorship, partnership accounts, Joint Stock Companies, Minor, illiterates, joint account holders, clubs and associations, Hindu Undivided family. <b>Cheques:</b> Meaning, Definition and features of Cheques; Crossing of Cheques – Types of Crossing; Endorsements: Meaning, Kinds of Endorsement.		
<b>Module No. 3: Loans and Advances</b>		<b>08</b>
<b>Loans and Advances;</b> Different types of loans, Kinds of lending facilities- Loans and advances, Cash Credit, Overdraft and Bills discounting, Procedure for borrowing and lending, precautions to be taken by the banker and customer, documents to be submitted for borrowing loans.		
<b>Module No. 4: Innovations in Banking Operations</b>		<b>08</b>
<b>Technologies in Banking Operations:</b> Debit and Credit Cards, Internet banking, M-Banking, ATM, Electronic fund transfer, MICR, RTGS, NEFT, Digital Platforms.		
<b>Skill Development Activities:</b> <ol style="list-style-type: none"> <li>1. Collect and fill dummy account opening form for a savings account and fixed deposit account of any bank.</li> <li>2. Draft specimen of a cheque and fill up the details with imaginary names.</li> <li>3. List out some of the recent banking practices in India</li> <li>4. Collect and fill dummy RTGS/ NEFT form of any bank.</li> </ol>		

**Books for Reference:**

1. Nagarajan. G, Sudesh and Raju. G.S (2021); Law and Practice of Banking, Jayvee International Publications, Bangalore.
2. Gordon & Natarajan, Banking Theory Law and Practice, HPH, 24th Edition
3. S. P. Srivastava (2016), Banking Theory & Practice, Anmol Publications
4. Maheshwari. S.N. (2014), Banking Law and Practice, Kalyani Publishers, 11 Edition
5. Shekar. K.C (2013), Banking Theory Law and Practice, Vikas Publication, 21st Edition.
6. Dr. Alice Mani (2015), Banking Law and Operation, SBH.

<b>Name of the Program:</b> Bachelor of Commerce (Data Analytics) <b>Course Code:</b> B.Com. 4.6 (OEC) <b>NAME OF THE COURSE: PRINCIPLES OF EVENT MANAGEMENT</b>		
<b>Course Credits</b>	<b>No. of Hours per Week</b>	<b>Total No. of Teaching Hours</b>
<b>3 Credits</b>	<b>3 Hrs.</b>	<b>42 Hrs.</b>
Pedagogy: Classroom lectures, Case studies, Group discussion & Seminar etc.,		
<b>Course Outcomes:</b> On successful completion of the course, the students will be able to <ol style="list-style-type: none"> <li>1. Understand the significance of various events</li> <li>2. Demonstrate the ability to organize the event.</li> <li>3. Demonstrate the ability to conduct the event.</li> <li>4. Prepare the budget require for conducting an event.</li> </ol>		
<b>Syllabus:</b>		<b>Hours</b>
<b>Module No. 1: Introduction to Event Management</b>		<b>12</b>
Event- Meaning, Importance and Types of Events, Analysis of Event, Event Management- Meaning, Decision Makers and their Roles and Responsibilities, 5 Cs of Event Management.		
<b>Module No. 2: Event Management Planning and Procedure</b>		<b>12</b>
Establishing of Policies & Procedures, Steps in Planning the event, Principles of Event Management, Permissions and Licenses from Government and Local Authorities.		
<b>Module No. 3: Conduct of an Event.</b>		<b>12</b>
Preparing a Planning Schedule, Steps in Organizing an event, Assigning Responsibility, Event Safety and Security, Conducting the Event-Checklist (Pre, during and post event check list), Communication- channels of communications for different types of events,		
<b>Module No. 4: Budgeting and Reporting</b>		<b>10</b>
Preparation of Event Budget-Items of expenditure for various events, managing the event budget. Reporting of event- organizing the event report, steps in preparing the event report.		
<b>Skill Development</b> <ol style="list-style-type: none"> <li>1. Preparation of Event Plan for a Wedding.</li> <li>2. Preparing Budget for conduct of National level sports meet of a college.</li> <li>3. Preparation of Event Check List for College Day Celebrations</li> <li>4. Preparation of Budget for Conducting inter collegiate fest.</li> <li>5. Prepare a brief report of a student's seminar conducted in your college.</li> </ol>		

### **Book for References:**

1. Event Entertainment and Production – Author: Mark Sonderm CSEP Publisher: Wiley & Sons, Inc. ISBN: 0-471-26306-0
2. Anne Stephen – Event Management
3. Special Event Production – Doug Matthews – ISBN 978-0-7506-8523-8
4. The Complete Guide to successful Event Planning – Shannon Kilkenny
5. Human Resource Management for Events – Lynn Van der Wagen (Author)
6. Successful Team Management (Paperback) – Nick Hayed (Author)
7. Event Management & Public Relations by Savita Mohan – Enkay Publishing House
8. Event Management & Public Relations by Swarup K. Goyal – Adhyayan Publisher – 2009
9. Principle of Event Management – Shrikant S., Skyward Publisher.