



M.Com.Business Intelligence (Two-Year) Programme

Regulations & Curriculum-2019

Department of Commerce



ANNAMALAI UNIVERSITY
REGULATIONS FOR THE TWO-YEAR POST GRADUATE PROGRAMMES
UNDER CHOICE BASED CREDIT SYSTEM (CBCS)

These Regulations are common to all the students admitted to the Two-Year Master's Programmes in the Faculties of Arts, Science, Indian Languages, Education, Marine Sciences, and Fine Arts from the academic year 2019-2020 onwards.

1. Definitions and Nomenclature

- 1.1 University** refers to Annamalai University.
- 1.2 Department** means any of the academic departments and academic centres at the University.
- 1.3 Discipline** refers to the specialization or branch of knowledge taught and researched in higher education. For example, Botany is a discipline in the Natural Sciences, while Economics is a discipline in Social Sciences.
- 1.4 Programme** encompasses the combination of courses and/or requirements leading to a Degree. For example, M.A., M.Sc., M.Com.,
- 1.5 Course** is an individual subject in a programme. Each course may consist of Lectures/Tutorials/Laboratory work/Seminar/Project work/Experiential learning/ Report writing/viva-voce etc. Each course has a course title and is identified by a course code.
- 1.6 Curriculum** encompasses the totality of student experiences that occur during the educational process.
- 1.7 Syllabus** is an academic document that contains the complete information about an academic programme and defines responsibilities and outcomes. This includes course information, course objectives, policies, evaluation, grading, learning resources and course calendar.
- 1.8 Academic Year** refers to the annual period of sessions of the University that comprises two consecutive semesters.
- 1.9 Semester** is a half-year term that lasts for a minimum duration of 90 days. Each academic year is divided into two semesters.
- 1.10 Choice Based Credit System** A mode of learning in higher education that enables a student to have the freedom to select his/her own choice of elective courses across various disciplines for completing the Degree programme.
- 1.11 Core Course** is mandatory and an essential requirement to qualify for the Degree.
- 1.12 Elective Course** is a course that a student can choose from a range of alternatives.
- 1.13 Value-added Courses** are optional courses that complement the students' knowledge and skills and enhance their employability.
- 1.14 Credit** refers to the quantum of course work in terms of number of class hours in a semester required for a programme. The credit value reflects the content and duration of a particular course in the curriculum.
- 1.15 Credit Hour** refers to the number of class hours per week required for a course in a semester. It is used to calculate the credit value of a particular course.

- 1.16 Programme Outcomes (POs)** are statements that describe crucial and essential knowledge, skills and attitudes that students are expected to achieve and can reliably manifest at the end of a programme.
- 1.17 Programme Specific Outcomes (PSOs)** are statements that list what the graduate of a specific programme should be able to do at the end of the programme.
- 1.18 Learning Objectives also known as Course Objectives** are statements that define the expected goal of a course in terms of demonstrable skills or knowledge that will be acquired by a student as a result of instruction.
- 1.19 Course Outcomes (COs)** are statements that describe what students should be able to achieve/demonstrate at the end of a course. They allow follow-up and measurement of learning objectives.
- 1.20 Grade Point Average (GPA)** is the average of the grades acquired in various courses that a student has taken in a semester. The formula for computing GPA is given in section 11.3
- 1.21 Cumulative Grade Point Average (CGPA)** is a measure of overall cumulative performance of a student over all the semesters. The CGPA is the ratio of total credit points secured by a student in various courses in all semesters and the sum of the total credits of all courses in all the semesters.
- 1.22 Letter Grade** is an index of the performance of a student in a particular course. Grades are denoted by the letters S, A, B, C, D, E, RA, and W.

2. Programme Offered and Eligibility Criteria

The Department of Commerce offers Two year M.Com Programmes - M.Com. (Business Intelligence).

Faculty of Arts	
Programme	Eligibility
M.Com. Business Intelligence	A pass in B.Com. or B.B.A. or B.A. Corporate Secretaryship or B.B.M. or B.Com (Co-operation) or B.A.(Co-operation) or B.A. (Bank Management) or BBA degree examination or any other examination accepted by the Syndicate as equivalent thereto, with not less than 40% of marks in the main subjects.

2.1 In the case of SC/ST and Differently-abled candidates, a pass is the minimum qualification for all the above Programmes.

3. Reservation Policy

Admission to the various programmes will be strictly based on the reservation policy of the Government of Tamil Nadu.

4. Programme Duration

4.1 The Two Year Master's Programmes consist of two academic years.

4.2 Each academic year is divided into two semesters, the first being from July to November and the second from December to April.

4.3 Each semester will have 90 working days (18 weeks).

5 Programme Structure

5.1 The Two Year Master's Programme consists of Core Courses, Elective Courses (Departmental & Interdepartmental), and Project.

5.2 Core courses

5.2.1 These are a set of compulsory courses essential for each programme.

5.2.2 The core courses include both Theory (Core Theory) and Practical (Core Practical) courses.


Annamalai University
Department of Commerce
M.Com., Business Intelligence (Two Year) Programme
Programme Code: ACOM23
Programme Structure

(For students admitted from the academic year 2019-2020)

Course Code	Course Title	Hours /Week		C	Marks		
		L	P		CIA	ESE	Total
Semester-I							
19CBIC101	Core 1: Business Environment	5		5	25	75	100
19CBIC102	Core 2: Advanced Financial Accounting	5		5	25	75	100
19CBIC103	Core 3: Banking and Insurance	4		4	25	75	100
19CBIC104	Core 4: Digital Marketing	5		5	25	75	100
	Elective 1: Interdepartmental Elective	3		3	25	75	100
Total Credit from Semester I		22		22	125	375	500
Semester-II							
19CBIC201	Core 5: Human Resource Management	5		5	25	75	100
19CBIC202	Core 6: Financial Management	5		5	25	75	100
19CBIC203	Core 7: Business Research Methods	4		4	25	75	100
19CBIC204	Core 8: Business Analytics	5		5	25	75	100
	Elective 1: Department Elective	3		3	25	75	100
	Elective 2: Interdepartmental Elective	3		3	25	75	100
Total Credit from Semester II		25		25	150	450	600
Semester-III							
19CBIC301	Core 9: Organizational Behaviour	5		5	25	75	100
19CBIC302	Core 10: Business Data Mining	5		5	25	75	100
19CBIC303	Core 11: Data Base Management System	5		5	25	75	100
19CBIP304	Core 12: Institutional Training/Internship	5		5	25	75	100
	Elective 2: Department Elective	3		3	25	75	100
	Elective 3: Interdepartmental Elective	3		3	25	75	100
Total Credit from Semester III		26		26	150	450	600
Semester-IV							
19CBIC401	Core 13: Business Intelligence Strategies and Process	5		5	25	75	100
19CBIC402	Core 14: E-Customer Relationship Management	4		4	25	75	100
19CBIC403	Core 15: Business Visualisation Analysis	5		5	25	75	100
19CBIP404	Practical – Business Visualization Analysis	8	8	8	40	60	100
Total Credit from Semester IV		22	8	22	115	285	400
Overall Total Credits from Semester I to IV				95	540	1560	2100
Value Added Courses							

L- Lectures; P- Practical; C- Credits; CIA- Continuous Internal Assessment;
ESE- End-Semester Examination

Note:

1. Students shall take both Department Electives (DEs) and Interdepartmental Electives (IDEs) from a range of choices available.
2. Students may opt for any Value-added Courses listed in the University website.

5.3 Elective courses

5.3.1 **Departmental Electives (DEs)** are the Electives that students can choose from a range of Electives offered within the Department.

Elective Courses

Department Electives (DE)

S. No	Course Code	Course Title	Hours/week	C	Marks		
			L		CIA	ESE	Total
1.	19CODE205.1	Corporate Social Responsibility	3	3	25	75	100
2.	19CODE205.2	International Finance and Foreign Exchange	3	3	25	75	100
3.	19CODE205.3	International Logistics Management	3	3	25	75	100
4.	19CODE305.1	Goods and Services Tax	3	3	25	75	100
5.	19CODE305.2	Marketing of Financial Services	3	3	25	75	100
6.	19CODE305.3	Project Finance and Management	3	3	25	75	100

5.3.2 **Interdepartmental Electives (IDEs)** are Electives that students can choose from amongst the courses offered by other departments of the same faculty as well as by the departments of other faculties.

Electives Offered to Other Departments

S. No	Course Code	Course Title	Hours/week	C	Marks		
			L		CIA	ESE	Total
1.	19CIDX105.1	Marketing Management	3	3	25	75	100
2.	19CIDX105.2	Business Communication & Report Writing	3	3	25	75	100
3.	19CIDX105.3	Digital Banking	3	3	25	75	100
4.	19CIDX205.1	Income Tax and GST Assessment Methods	3	3	25	75	100
5.	19CIDX205.2	Office Management	3	3	25	75	100
6.	19CIDX205.3	Stock Market Investing	3	3	25	75	100
7.	19CIDX305.1	Accounting for Managerial Decisions	3	3	25	75	100
8.	19CIDX305.2	Integrated Agriprenurship Development	3	3	25	75	100
9.	19CIDX305.3	Advertising Management	3	3	25	75	100

5.3.3 Students shall take a combination of both DEs and IDEs.

5.4 Experiential Learning

- 5.4.1 Experiential learning provides opportunities to students to connect principles of the discipline with real-life situations.
- 5.4.2 In-plant training/field trips/internships/industrial visits (as applicable) fall under this category.
- 5.4.3 Experiential learning is categorised as Core.

5.5 Project

- 5.5.1 Each student shall undertake a Project in the final semester.
- 5.5.2 The Head of the Department shall assign a Research Supervisor to the student.
- 5.5.3 The Research Supervisor shall assign a topic for research and monitor the progress of the student periodically.
- 5.5.4 Students who wish to undertake project work in recognised institutions/industry shall obtain prior permission from the University. The Research Supervisor will be from the host institute, while the Co-Supervisor shall be a faculty in the parent department.

5.6 Value added Courses (VACs)

- 5.6.1 Students may also opt to take Value added Courses beyond the minimum credits required for award of the Degree. VACs are outside the normal credit paradigm.
- 5.6.2 These courses impart employable and life skills. VACs are listed in the University website and in the Handbook on Interdepartmental Electives and VACs.
- 5.6.3 Each VAC carries 2 credits with 30 hours of instruction, of which 60% (18 hours) shall be Theory and 40% (12 hours) Practical.
- 5.6.4 Classes for a VAC are conducted beyond the regular class hours and preferably in the II and III Semesters.

Value Added Course

Course Code	Course Title	Hours/week			Marks		
		L	P	C	CIA	ESE	Total
19CVAC210	CRM in e- BANKING	3	0	3	25	75	100
19CVAC310	Artificial Intelligence and its Applications in Business	3	0	3	25	75	100

5.7 Online Courses

- 5.7.1 The Heads of Departments shall facilitate enrolment of students in Massive Open Online Courses (MOOCs) platform such as SWAYAM to provide academic flexibility and enhance the academic career of students.
- 5.7.2 Students who successfully complete a course in the MOOCs platform shall be exempted from one elective course of the programme.

5.8 Credit Distribution

The credit distribution is organised as follows:

	Credits
Core Courses	72
Elective Courses	15
Project	8
Total	95

5.9 Credit Assignment

Each course is assigned credits and credit hours on the following basis:

1 Credit is defined as

1 Lecture period of one hour per week over a semester

1 Tutorial period of one hour per week over a semester

1 Practical/Project period of two or three hours (depending on the discipline) per week over a semester.

6 Attendance

- 6.1 Each faculty handling a course shall be responsible for the maintenance of *Attendance and Assessment Record* for candidates who have registered for the course.
- 6.2 The Record shall contain details of the students' attendance, marks obtained in the Continuous Internal Assessment (CIA) Tests, Assignments and Seminars. In addition the Record shall also contain the organisation of lesson plan of the Course Instructor.
- 6.3 The record shall be submitted to the Head of the Department once a month for monitoring the attendance and syllabus coverage.
- 6.4 At the end of the semester, the record shall be duly signed by the Course Instructor and the Head of the Department and placed in safe custody for any future verification.
- 6.5 The Course Instructor shall intimate to the Head of the Department at least seven calendar days before the last instruction day in the semester about the attendance particulars of all students.
- 6.6 Each student shall have a minimum of 75% attendance in all the courses of the particular semester failing which he or she will not be permitted to write the End-Semester Examination. The student has to redo the semester in the next year.
- 6.7 Relaxation of attendance requirement up to 10% may be granted for valid reasons such as illness, representing the University in extracurricular activities and participation in NCC/NSS/YRC/RRC.

7 Mentor-Mentee System

- 7.1 To help the students in planning their course of study and for general advice on the academic programme, the Head of the Department will attach certain number of students to a member of the faculty who shall function as a Mentor throughout their period of study.
- 7.2 The Mentors will guide their mentees with the curriculum, monitor their progress, and provide intellectual and emotional support.
- 7.3 The Mentors shall also help their mentees to choose appropriate electives and value-added courses, apply for scholarships, undertake projects, prepare for competitive examinations such as NET/SET, GATE etc., attend campus interviews and participate in extracurricular activities.

8 Examinations

- 8.1 The examination system of the University is designed to systematically test the student's progress in class, laboratory and field work through Continuous Internal Assessment (CIA) Tests and End-Semester Examination (ESE).

8.2 There will be two CIA Tests and one ESE in each semester.

- 8.3 The Question Papers will be framed to test different levels of learning based on Bloom's taxonomy viz. Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation/Creativity.

8.4 Continuous Internal Assessment Tests

- 8.4.1 The CIA Tests shall be a combination of a variety of tools such as class tests, assignments, seminars, and viva-voce that would be suitable to the course. This requires an element of openness.

8.4.2 The students are to be informed in advance about the assessment procedures.

8.4.3 The pattern of question paper will be decided by the respective faculty.

8.4.4 CIA Test-I will cover the syllabus of the first two units while CIA Test-II will cover the last three units.

8.4.5 CIA Tests will be for two to three hours duration depending on the quantum of syllabus.

8.4.6 A student cannot repeat the CIA Test-I and CIA Test-II. However, if for any valid reason, the student is unable to attend the test, the prerogative of arranging a special test lies with the teacher in consultation with the Head of the Department.

8.5 End Semester Examinations (ESE)

8.5.1 The ESE for the first/third semester will be conducted in November and for the second/fourth semester in May.

8.5.2 A candidate who does not pass the examination in any course(s) of the first, second and third semesters will be permitted to reappear in such course(s) that will be held in April and November in the subsequent semester/year.

8.5.3 The ESE will be of three hours duration and will cover the entire syllabus of the course.

9 Evaluation

9.1 Marks Distribution

9.1.1. Each course, both Theory and Practical as well as Project/Internship/Field work/In-plant training shall be evaluated for a maximum of 100 marks.

9.1.2 For the theory courses, CIA Tests will carry 25% and the ESE 75% of the marks.

9.1.3 For the Practical courses, the CIA Tests will constitute 40% and the ESE 60% of the marks.

9.2. Assessment of CIA Tests

9.2.1 For the CIA Tests, the assessment will be done by the Course Instructor

9.2.2 For the Theory Courses, the break-up of marks shall be as follows:

	Marks
Test-I & Test-II	15
Seminar	05
Assignment	05
Total	25

9.2.3 For the Practical Courses (wherever applicable), the break-up of marks shall be as follows:

	Marks
Test-I	15
Test-II	15
Viva-voce and Record	10
Total	40

9.3 Assessment of End-Semester Examinations

9.3.1 Evaluation for the ESE is done by both External and Internal examiners (Double Evaluation).

9.3.2 In case of a discrepancy of more than 10% between the two examiners in awarding marks, third evaluation will be resorted to.

9.4 Assessment of Project/Dissertation

9.4.1 The Project Report/Dissertation shall be submitted as per the guidelines laid down by the University.

9.4.2 The Project Work/Dissertation shall carry a maximum of 100 marks.

9.4.3 CIA for Project will consist of a Review of literature survey, experimentation/field work, attendance etc.

9.4.4 The Project Report evaluation and viva-voce will be conducted by a committee constituted by the Head of the Department.

9.4.5 The Project Evaluation Committee will comprise the Head of the Department, Project Supervisor, and a senior faculty.

9.4.6 The marks shall be distributed as follows:

Continuous Internal Assessment (25 Marks)		End Semester Examination (75 Marks)	
Review-I 10	Review-II: 15	Project / Dissertation Evaluation	Viva-voce
		50	25

9.5 Assessment of Value-added Courses

9.5.1 Assessment of VACs shall be internal.

9.5.2 Two CIA Tests shall be conducted during the semester by the Department(s) offering VAC.

9.5.3 A committee consisting of the Head of the Department, faculty handling the course and a senior faculty member shall monitor the evaluation process.

9.5.4 The grades obtained in VACs will not be included for calculating the GPA.

9.6 Passing Minimum

9.6.1 A student is declared to have passed in each course if he/she secures not less than 40% marks in the ESE and not less than 50% marks in aggregate taking CIA and ESE marks together.

9.6.4 A candidate who has not secured a minimum of 50% of marks in a course (CIA + ESE) shall reappear for the course in the next semester/year.

10. Conferment of the Master's Degree

A candidate who has secured a minimum of 50% marks in all courses prescribed in the programme and earned the minimum required credits shall be considered to have passed the Master's Programme.

11. Marks and Grading

11.1 The performance of students in each course is evaluated in terms Grade Point (GP).

11.2 The sum total performance in each semester is rated by Grade Point Average (GPA) while Cumulative Grade Point Average (CGPA) indicates the Average Grade Point obtained for all the courses completed from the first semester to the current semester.

11.3 The GPA is calculated by the formula

$$GPA = \frac{\sum_{i=1}^n C_i G_i}{\sum_{i=1}^n C_i}$$

where, C_i is the Credit earned for the Course i in any semester;

G_i is the Grade Point obtained by the student for the Course i

and

n is the number of Courses passed in that semester.

11.4 CGPA is the Weighted Average Grade Point of all the Courses passed starting from the first semester to the current semester.

$$CGPA = \frac{\sum_{i=1}^m \sum_{i=1}^n C_i G_i}{\sum_{i=1}^m \sum_{i=1}^n C_i}$$

where, C_i is the Credit earned for the Course i in any semester; G_i is the Grade Point obtained by the student for the Course i and n is the number of Courses passed in that semester. m is the number of semesters

11.5 Evaluation of the performance of the student will be rated as shown in the Table.

Letter Grade	Grade Points	Marks %
S	10	90 and above
A	9	80-89
B	8	70-79
C	7	60-69
D	6	55-59
E	5	50-54
RA	0	Less than 50
W	0	Withdrawn from the examination

11.6 Classification of Results. The successful candidates are classified as follows:

11.6.1 For **First Class with Distinction:** Candidates who have passed all the courses prescribed in the Programme *in the first attempt* with a CGPA of 8.25 or above within the programme duration. Candidates who have withdrawn from the End Semester Examinations are still eligible for First Class with Distinction (*See Section 12 for details*).

11.6.2 For **First Class:** Candidates who have passed all the courses with a CGPA of 6.5 or above.

11.6.3 For **Second Class:** Candidates who have passed all the courses with a CGPA between 5.0 and less than 6.5.

11.6.4 Candidates who obtain highest marks in all examinations at the first appearance alone will be considered for University Rank.

11.7 Course-Wise Letter Grades

11.7.1 The percentage of marks obtained by a candidate in a course will be indicated in a letter grade.

11.7.2 A student is considered to have completed a course successfully and earned the credits if he/she secures an overall letter grade other than RA.

11.7.3 A course successfully completed cannot be repeated for the purpose of improving the Grade Point.

11.7.4 A letter grade RA indicates that the candidate shall reappear for that course. The RA Grade once awarded stays in the grade card of the student and is not deleted even when he/she completes the course successfully later. The grade acquired later by the student will be indicated in the grade sheet of the Odd/Even semester in which the candidate has appeared for clearance of the arrears.

11.7.5 If a student secures RA grade in the Project Work/Field Work/Practical Work/Dissertation, he/she shall improve it and resubmit if it involves only rewriting/ incorporating the clarifications suggested by the evaluators or he/she can re-register and carry out the same in the subsequent semesters for evaluation.

12. Provision for Withdrawal from the End Semester Examination

12.1 The letter grade W indicates that a candidate has withdrawn from the examination.

12.2 A candidate is permitted to withdraw from appearing in the ESE for one course or courses in **ANY ONE** of the semesters **ONLY** for exigencies deemed valid by the University authorities.

12.3 Permission for withdrawal from the examination shall be granted only onceduring the entire duration of the programme.

12.3 Application for withdrawal shall be considered **only** if the student has registered for the course(s), and fulfilled the requirements for attendance and CIA tests.

12.4 The application for withdrawal shall be made ten days prior to the commencement of the examination and duly approved by the Controller of Examinations. Notwithstanding the mandatory prerequisite of ten days notice, due consideration will be given under extraordinary circumstances.

12.5 Withdrawal is **not** granted for arrear examinations of courses in previous semesters and for the final semester examinations.

12.6 Candidates who have been granted permission to withdraw from the examination shall reappear for the course(s) when the course(s) are offered next.

12.7 Withdrawal shall not be taken into account as an appearance for the examination when considering the eligibility of the candidate to qualify for First Class with Distinction.

13. Academic misconduct

Any action that results in an unfair academic advantage/interference with the functioning of the academic community constitutes academic misconduct. This includes but is not limited to cheating, plagiarism, altering academic documents, fabrication/falsification of data, submitting the work of another student, interfering with other students' work, removing/defacing library or computer resources, stealing other students' notes/assignments, and electronically interfering with other students'/University's intellectual property. Since many of these acts may be committed unintentionally due to lack of awareness, students shall be sensitised on issues of academic integrity and ethics.

14. Transitory Regulations

Wherever there has been a change of syllabi, examinations based on the existing syllabus will be conducted for two consecutive years after implementation of the new syllabus in order to enable the students to clear the arrears. Beyond that, the students will have to take up their examinations in equivalent subjects, as per the new syllabus, on the recommendation of the Head of the Department concerned.

15. *Notwithstanding anything contained in the above pages as Rules and Regulations governing the Two Year Master's Programmes at Annamalai University, the Syndicate is vested with the powers to revise them from time to time on the recommendations of the Academic Council.*

Programme Objective:

The overall programme objective of M.Com., (Business Intelligence) is to empower the students to enable, to equip and to gain expertise themselves in the field of computer-assisted business analytics at various levels and get acquainted with applied knowledge in the functional areas of business supported by digital marketing, business visualization and motivation for increased turnover of local and international trade supported by customer relationship management.

Programme Learning Specific Objectives:

The objective of the M.Com., (Business Intelligence) programme is to enable the students to:

PLSO1 Gain expert knowledge in the ever changing environment of business, banking, insurance, digital marketing and financial accounting.

- PLSO2** Apply knowledge in the functional areas of business
- PLSO3** Specialize in business intelligence strategies and process
- PLSO4** Appreciate analytic tools and techniques to resolve various business problems
- PLSO5** Understand data science applicable for problem solving and decision-making areas in a business organization and gain practical skill in business visualization

PROGRAMME OUTCOMES:

- PO1** Critical thinking
- PO2** Cultivating Cognitive skills required in the job market
- PO3** Effective Communication
- PO4** Familiarity with ICT to thrive in the information age
- PO5** Cultivating aptitude for research
- PO6** Respect for alternate view-points including those conflicting with one's own perspectives
- PO7** Ability to work individually and as members in a team
- PO8** Upholding ethical standards
- PO9** Acting local while thinking global
- PO10** Commitment to gender equality
- PO11** Commitment to Sustainable development
- PO12** Lifelong learning

PROGRAMME SPECIFIC OUTCOMES:

This programme would enable the students to gain expert knowledge and applied practical exposure in the field of Business Intelligence and Business Analytics. After the successful completion of the M.Com Business Intelligence Degree programme, the students will be able to

- PSO1** Discuss about the key areas of Financial Management, Marketing, Accounting Standards and Reporting System, Project finance and management, business environment, digital technologies in banking, insurance, human resource skill in maintaining the quality of work life in an organization.
- PSO2** Demonstrate the professional skills in Valuation of stock, calculation of Goods and Services Tax, e-filing and different stages of accounting in Partnership, Branch and Departmental accounts, Hire purchase and Installment system and specialized accounts.

- PSO3** Recall the fundamental principles of international financial management and concept of logistic management, digital marketing and explain about business analytics, Customer Relationship Management, data maintenance and data integration.
- PSO4** Get an exposure to generate and manage the funds while undertaking any business ventures and to invest in different portfolio. Also to Discuss and evaluate Corporate Social Responsibility activities and prepare project and research report.
- PSO5** Discuss the key concepts and techniques of Business Intelligence, net work analysis, DBMS web mining and Business visualization of business data
- PSO6** Apply the knowledge of network analysis, cluster analysis, Customer Relationship Management in e -banking and design of data mining to strengthen the organizational effectiveness.

Register Number:

Name of the Candidate:

**M. Com. DEGREE EXAMINATION
TWO – YEAR PROGRAMME
M.Com. BUSINESS INTELLIGENCE
(SEMESTER FIRST/THIRD)**

Model Question Paper

Nov., 2019

Time: 3 Hours

Maximum: 75 Marks

SECTION – A(10 x 1 = 10)

Answer ALL questions

- | | |
|----|-----|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

SECTION – B(5 x 7 = 35)

Answer ALL questions

- | | |
|--------|----|
| 6. a) | OR |
| b) | |
| 7. a) | OR |
| b) | |
| 8. a) | OR |
| b) | |
| 9. a) | OR |
| b) | |
| 10. a) | OR |
| b) | |

SECTION – C(3 x 10 = 30)

Answer any THREE questions

- 11.
- 12.
- 13.
- 14.
- 15.

Register Number:

Name of the Candidate:

**M. Com. DEGREE EXAMINATION
TWO – YEAR PROGRAMME
M.Com. BUSINESS INTELLIGENCE
(SEMESTER SECOND/FOURTH)**

Model Question Paper

May, 2020

Time: 3 Hours

Maximum: 75 Marks

SECTION – A(10 x 1= 10)

Answer ALL questions

- | | |
|----|-----|
| 1. | 6. |
| 2. | 7. |
| 3. | 8. |
| 4. | 9. |
| 5. | 10. |

SECTION – B(5 x 7 = 35)

Answer ALL questions

- | | |
|--------|----|
| 6. a) | OR |
| b) | |
| 7. a) | OR |
| b) | |
| 8. a) | OR |
| b) | |
| 9. a) | OR |
| b) | |
| 10. a) | OR |
| b) | |

SECTION – C(3 x 10 = 30)

Answer any THREE questions

- 11.
- 12.
- 13.
- 14.
- 15.

Learning Objectives:

LO1: To acquaint the students, to have a basic knowledge on Business Environment

LO2 : To provide an insight into the theories of economic, natural and global Environment to the students

LO3: To enable the students to have an overview of technological environment of business

Unit I: Introduction to Business and its Environment

Characteristics of modern business, concept and nature of Business Environment, characteristics of environment, Micro and macro environment, Impact of business environment on business decisions- Stages of Environmental Analysis – approaches to environmental analysis.

Unit II: Economic Environment:

Economic Environment -Concept and nature of economic environment- Economic System – Business Cycle – Inflation – Causes – Impact of Inflation – Deflation- Stagflation – Planned Economy- Five year Plans - NITI Aayog - Members – Functions - Fiscal Policies – Union Budget – Structure of Union Budget.

Unit III: Global Environment

Nature of Globalisation – Rational for Globalisation – MNCs, Benefits from MNCs –Problems – Strategies in Globalisation – FII and FDI – WTO – Functions - implications for India.

Privatisation – Nature and Objectives – Privatisation routes - Arguments against Privatisation – Disinvestment in India.

UnitIV: Political Environment:

Concept and nature of political environment, components of political environment, Economic role of government- Regulatory role, Promotional role, Entrepreneurial role, Planning role. State intervention in business - Pros and Cons of intervention.

Unit V: Natural and Technological Environment:

Natural environment – meaning - impact on business. Natural pollution-meaning, types. Concept and nature of Technological environment- Elements of technological environment- Technology and SocietyEconomic effect of technology - New Technology policy.

Ethics in Business- Social Responsibility of business - Arguments for and against Social Responsibility- Social Audit.

Text Books:

1. Acharya&Govekar 2015, Business Policy and Administration, Himalaya Publishing House,Mumbai
2. Aswathappa, K 2016, Essentials of Business Environment, Himalaya Publishing House,Mumbai
3. CharlesW.L.Hill 2014, Global Business Today, Tata McGraw Hill, UK, 2004

Supplementary Readings:

1. Heldi Vernon 2016, Business and Society, Tata McGraw Hill, UK, 1998
2. Adrian Palmer and Bob Hartley 2017, The Business Environment, McGraw Hill, UK
3. Rajan,V.R 2017,Globalisation of Indian Industries – Strategies and Management, Deep & Deep Publications, New Delhi
4. Cherunilam,Francis 2017, Business Environment, Himalaya Publishing House,Mumbai
5. Ghosh,P.K 2017, Business Policy-Strategic Planning and Management Sultan Chand &Sons, New Delhi.

Course Outcomes:

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

- CO1** Analyse the environment of business from the legal and regulatory, Macro economic, cultural, political and technological environment
- CO2** Apply various strategic tools to assess performance of business environment
- CO3** Critically make an in-depth analysis of each component of Business Environment so that a comparison with own organization is feasible.
- CO4** understand the factors affecting the organizational effectiveness
- CO5** Explain and synthesize Business Environment information in the global environment

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5	PSO 6
CO1	✓										✓		✓					✓
CO2	✓		✓	✓										✓		✓	✓	✓
CO3	✓	✓							✓		✓		✓				✓	
CO4	✓			✓									✓					
CO5			✓					✓	✓				✓			✓		✓

Suggested MOOC Courses:

1. **International Business Environment and Global Strategy (edX)**, Created by: Indian Institute of Management, Bangalore, Delivered by: EdX.
2. **Economics of Money and Banking**, Created by: Columbia University, Delivered by: Coursera, Taught by: Perry G Mehrling.

Learning Objectives:

LO1: To provide an in depth knowledge in Partnership accounts

LO2 : To foster analytical thinking and the use of related areas of accounting viz., branch and departmental accounting

LO3: To impart knowledge in recent trends in specialized accounting.

Unit I :Partnership Accounts – Admission , Retirement and Death of Partner

Partnership accounts - Division of profits – past adjustments and guarantee – Admission, Retirement and Death of a Partner – Intangible assets and Goodwill - Accounting Treatment.

Unit II :Partnership Accounts -Dissolution and Sale of Partnership

Dissolution – Insolvency of Partners – Rule in Garner Vs. Murray – Piecemeal Distribution – Sale of a Partnership Firm to a company.

Unit III: Hire Purchase and Installment system

Hire purchase system – Default in payment of Installment- Partly and Complete Repossession of Stock – Accounting Procedures - Hire purchase trading A/c – Stock and Debtors System – Installment system

Unit IV: Branch and Departmental Accounts

Branch accounts – Dependent Branches – Stock and Debtors System – Independent branches – Wholesale Branch system – Foreign Branch – Departmental Accounts- Inter-Departmental transfer – Treatment of unrealized profit

Unit V: Recent accounting

Concept and Need for Responsibility Accounting - Responsibility Accounting – Human Resource Accounting. Financial Reporting – Annual reports – Half yearly report – Content of Annual Reports Disciplines in Financial Reporting

Note: Question Paper shall cover 20%Theory and 80% Problems.

Text Books:

1.GuptaR.L&Radhasamy, 2015, Advanced Accounting, S.Chand& Sons Publishes r, New Delhi.

2.Shukla M. C., T. S. Grewal 2015, Advanced Accounts, 2015, S. Chand& Sons Publishers, New Delhi

3.JainS.P KL Narrang 2017, Advanced Accountancy I and II Kalyani Publishers Ludhiana

Supplementary Readings:

1.Charumathi, B.N. Vinayakam, 2015, Financial Accounting, S. Chand & Sons Publishers, New Delhi.

2.Battacharyya, S.K. 2015, Accounting for Management, Vikas Publication, New Delhi

3.Jawahar Lal&Seema Srivastava,2016, Financial Accounting (Principles and Practices), S. Chand Publishers, New Delhi

4.PillaiR.S.NBagavathi&S.Uma, 2015, Fundamentals of Advanced Accounting Financial Accounting, S.Chand& Sons Publishers, New Delhi.

5.ReddyT.SandA.Murthy 2016, Financial Accounting Margham Publications Chennai

Course Outcomes:

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

CO1.Solve the problems of partnership accounts relating to Admission of partner

CO2.Solve the problems of partnership accounts relating to Dissolution and Sale of Partnership

CO3. Practice accounting problems relating to Branch and Departmental Accounts

CO4. Solve the accounting problems relating to Hire Purchase and Installment System

CO5.Understand emerging areas in Specialized Accounting

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	P O 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	✓					✓	✓							✓				
CO2	✓						✓							✓				
CO3	✓					✓	✓							✓				
CO4	✓						✓							✓				
CO5	✓					✓	✓	✓	✓		✓			✓				

SUGGESTED MOOC COURSES:

1. *Financial Accounting: Advanced Topics (Coursera)*, Created by: University of Illinois at Urbana-Champaign, Delivered by: Coursera, Taught by: OktayUrcan.
2. *Financial Accounting: Foundations (Coursera)*, Created by: University of Illinois at Urbana-Champaign, Delivered by: Coursera, Taught by: OktayUrcan.

19CBIC103 BANKING AND INSURANCE

Credits:4
Hours : 80

Learning Objectives:

LO1: To impart the students to have a deep knowledge in the functioning of commercial banks

LO2: To make the students to comprehend the general principles of contract of insurance and other forms of insurance.

LO3: To impart the students to master over the provisions of banking instruments.

Unit I:Banking Functionary Services

Commercial Banks - Functions – services – mechanism of Credit creation; merchant banking – virtual banking – Central banking – Functions – Credit controlling mechanism.

Unit II :Commercial banks role on Economic development

Industrial and priority sectors lending – policies term lending, industrial priority sector lending. Rehabilitation of small sick units, guidelines for priority sector lending commercial bank role in SME - micro credit.

Unit III :Instruments in Banking

Negotiable Instruments-Features-Types of Cheques-Draft-Promissory notes-Other type of Banking Institutions.

Debit card and Credit card-Smart card-Endorsements-Types

Unit IV :Insurance and Function

Definition - Importance, Introduction – General Principles of insurance contract - Life insurance Vs other forms of insurance – various plans and claim settlement – recent development in life insurance.

Unit V:General Insurance Policies

Features of marine insurance, types of marine policies, marine clauses – marine losses, Features of fire insurance, insurable interest – types of fire insurance policies.

Text Books:

1. Mishra, M.N., S.B.Mishra, 2015, Insurance Principles and Practice, S.Chand& Sons PVT Ltd, Ram Nagar, New Delhi
- 2.Murthy, A. 2017, Principles and Practices of InsuranceMargam Publication, Chennai
3. GordenNataraj, 2016 Banking Himalaya Publication, New Delhi,

Supplementary Readings:

1. Shekhar K.C., LekshmyShekhar, 2017, Banking Theory and Practice, Vikas Publishing housesPvt Ltd., Chennai
- 2.Ramachandran R. 2015, Banking Theory and Practices MJP Publishers, 5, MuthuKalathy Street, Triplicane, Chennai – 5.
3. Sundaram, KPM,E.N.Sundaram, 2016, Modern Banking Sultan Chand & Sons, New Delhi.
- 4.Gupta, P.K., 2016, Insurance and Risk Management Himalaya Publishing House, Girgaon Mumbai.
- 5.PremkumarSrivatsava 2017, Banking Law and Practice, Himalaya Publishing House, Mumbai.

CourseOutcomes:

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

CO1. Understand the fundamental concepts of banking and Insurance.

CO2. Recall the role of commercial banks in Economic Development.

CO3. Master over the provisions of banking instruments.

CO4. Understand the applicability of various types of policies.

CO5 Recognize the fundamental principles of general insurance.

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	P O 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1		✓											✓	✓				
CO2									✓			✓	✓					
CO3			✓										✓					
CO4											✓		✓					
CO5											✓		✓	✓				

SUGGESTED MOOC COURSES:

1. ***Just Money: Banking as if Society Mattered (edX)***, Created by: MIT and MITx Delivered by EdX, Taught by: Alice Maggio, J. Phillip Thompson, KatrinKaeufer, Lafayette Cruise and Lily Steponaitis.
2. ***Economics of Money and Banking***, Created by: Columbia University, Delivered by: Coursera, Taught by: Perry G Mehrling.

19CBIC104 DIGITAL MARKETING

Credits: 5
Hours : 80

Learning Objectives:

LO1. To enable the students to recognize the changing dimensions of digital Marketing

LO2.. To inculcate the students about the significance of digital marketing mix.

LO3.To educate the students to understand the significance of online Advertising

Unit I: Introduction to Digital Marketing

Marketing in the Digital Era- Forces determining the digital age– E-business- E-Commerce – E-Marketing – E -Marketing Domains – Challenges of E-Commerce -M-Commerce- Meaning – Growth-opportunities-Issues-and Challenges-Future of M-commerce.

Unit II: Digital Marketing Environment and Strategy

Online buying behavior -online marketing -objectives- Digital Marketing Strategies and objectives – Online auction and tendering. Building a digital marketing plan- Digital marketing Metrics, Analytical and Reporting –Integrating-Improving and transforming digital marketing in the 21st Century.

Unit III: Digital Marketing Mix

Digital Marketing Mix- 4Ps of digital Marketing -Porter's five forces-Brand or Perceptual Positioning map-customer life time value-segmentation-Boston consulting Group Matrix. Multichannel retailing –the retail websites – The check out process-fulfillment – e-market places and companion data.B2B buying practices – The B2B Website-Lead generation – E Market places.

Unit IV:Online Advertising

Meaning and Objectives - Management of online advertisement-Search engine advertising – Net work advertising – Affiliate programmes- E-mail Marketing- Social media and online consumer engagement- different forms of social media- Social media dash boards. Consumer – business relationship – Online audience- Human Information Processing- Visual design Practice-Writing for the Screen- Site Structure- Interactive advertising.

Unit V Legal and Ethical aspects of Digital marketing

Observation and experimental data - legal and ethical aspects of digital marketing- Green Marketing - Digital Networks as a Communication Medium – Customer satisfaction in digital marketing – Legal issues and challenges – Remedies in CPA 1986.

Text Books :

1. Simon Kingsnorth 2016, Digital Marketing Strategy : An Integrated Approach to Online Marketing Great Britain and the United States, Kogan Page Limited,USA
2. Damian Ryan.Calvin Jones2016, Understanding Digital Marketing: Marketing Strategies for engaging the Digital Generation Great Britain and the United States, Kogan Page Limited,USA
3. Charles F.Hofacker 2018, Digital Marketing Communicating, Selling and Connecting Edward Elgar Publishing Limited,UK

Supplementary Readings:

1. Vandana Ahuja Digital Marketing 2016, Oxford University Press, New Delhi
2. Annmarie Hanlon 2016, Digital Marketing Strategic Planning & Integration Sage Publications New Delhi
3. Drayton Bird, 2017, Commonsense Direct & Digital Marketing Great Britain and the United States, Kogan Page Limited,USA
4. Marjolein Visser, Berend Sikkenga, Mike Berry 2018, Digital Marketing Fundamentals Wolters- Noordhoff B.V USA
5. Travis Wright, Chris 2016, Digital Sense .Wiley Publishers U.S.A

Course Outcomes:

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

CO1. Recognize the changing dimensions of digital marketing.

CO2. Understand the forces behind the digital marketing

CO3. Recognize the significance of digital marketing mix

CO4. Discriminate various models of digital marketing

CO5. Understand the significance of online advertising

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1			✓	✓				✓	✓		✓	✓	✓		✓			✓
CO2		✓		✓			✓		✓				✓		✓			
CO3							✓		✓				✓					
CO4				✓		✓							✓		✓	✓		✓
CO5	✓			✓			✓	✓	✓				✓					

Learning Objectives:

LO1. To enable the students to have a thorough understanding of changing role of HRM in global and Indian perspective.

LO2.. To disseminate the students about various methods of recruitment, training and performance appraisal techniques

LO3. To impart the students to gain expert knowledge of various theories of motivation and human resource audit.

Unit I: Introduction to Human Resource Management

HRM Concepts – Significance- Scope – Nature of human resource management – Features of HRM – Personal Management Vs HRM, Functions of HRM-Competencies of HR manager- Employer Identifying – and competency mapping – Changing role of HRM - Global and Indian scenario.

Unit II: HR Planning & Job Analysis

Importance of HR planning- Characteristics of HR planning – Factors influencing HR planning Levels – Process in HR planning – HR – Format System – Job analysis – Job description – Job designation.

Unit III: Human Resource Development

Recruitment – Factors – Recruitment Policy- Recruitment process – Sources of recruitment – selection – Concept – Selection Strategies – Selection Tests – Interview – Process- Types – Training- Features- Process- Various methods of Training.

Unit IV: Performance appraisal & Compensation Management

Concept – Scope – Significance – Objectives- Traditional and Modern methods of appraisal – MBO – 360 degree appraisal – developing carriers- talent management-Compensation – Job evaluation – Methods – Compensation management and compensation plan – Wage – Wage structure – Methods of Wage payment.

Unit V: Motivation

Meaning – Nature – Significance – All Theories of Motivation – Approaches to Motivation – Motivational Applications – Human Resource Audit – Meaning – Objectives – Quantitative indicators – HR Audit Plan.

Text Books:

1. Prasad, L M, 2017, Human Resource Management, Sultan Chand & Sons, New Delhi.
2. Aswathappa, K, 2017 Human Resource Management, 6(e) Tata McGraw Hill Education PVT Ltd, New Delhi.
3. Sundar K Srinivasan J 2018, Human Resource Management Vijay Nicole Imprints (P) Ltd, Chennai.

Supplementary Readings:

1. Gary Dessler, Biju Varkkey 2017, Human Resource Management – Pearson Education India Ltd., New Delhi.
2. Rao, VSP 2018, Human Resource Management-Text and Cases, 3(e) Excel Books, New Delhi.
3. Narayan B, 2016, Human Resource Management, APH Publishing Corporation, Ansari Road, Darya Ganj, New Delhi.
4. Jayant Mukherjee, 2017, Designing Human Resource Management Systems- A Leader's guide, SAGE Response, Mohan Co-operative Industrial Area, Mathura Road, New Delhi.
5. Jaya Bharathi, S., T. Raju, 2017, Human Resource Management, Wiley India Pvt. Ltd., New Delhi.

Course Outcomes:

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

CO1. Comprehend the fundamentals of Human Resource Management

CO2. Compute job analysis report and be able to develop job description and job specification.

CO3. Describe the various motivational applications in practice

CO4. Explain performance appraisal techniques and able to prepare performance appraisal forms

CO5. Develop human resource audit plan and conduct HR audit.

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1		✓								✓			✓					
CO2		✓			✓	✓		✓		✓			✓			✓		
CO3		✓				✓			✓	✓	✓							
CO4			✓	✓									✓			✓		✓
CO5		✓						✓					✓					

Learning Objectives:

LO1. To enable the students to grasp principles and techniques of financial management

LO2.. To impart the students to understand the significance and application of cost of capital and capital structure theories

LO3. To impart the students to gain expert knowledge of dividend policy and working capital management

UnitI:Financial Management an Introduction

Nature and scope of financial management – objectives – Financial decisions – Relationship between Risk and Return – Role and functions of financial manager – Time value of money – concept of value and return.

UnitII:Cost of Capital and Capital Budgeting

Cost of Capital – Meaning and importance – Cost of debt, preference, equity and retained earnings – weighted average cost of capital – capital budgeting – Techniques – Traditional Methods - payback period and ARR - Discounted cash flow Technique – NPA, PI and IRR – Risk Analysis in Capital Budgeting.

UnitIII:Financial Leverage & Capital Structure Theories

Financial leverage –measures – EBIT, EPS Analysis – operating leverage – financial - business and operating risks – Theories of capital structure – net income approach – Net – operating income Approach. MM Hypothesis – Determinants of capital structure; Leasing – Nature & Types of leasing –Advantages and disadvantages of leasing

UnitIV:Dividend Policy

Dividend Theories – Walter's model – Gordon and MM's models – Dividend policy – forms of Dividend – Determinants of dividend policy

UnitV:Working Capital

Management of working capital – concept – importance – Determinants and computation of working capital – Management of cash, inventory and receivables.

Note: Question Paper shall cover 80% theory and 20% Problem in Capital Budgeting

Text Books:

1. Prasanna Chandra, 2018, Financial Management, Tata McGraw Hill Publishing Company Limited, Noida,
2. Maheswari S.N 2017, Financial Management, S.Chand& Sons Publisher, New Delhi.
3. KhanM Y and P K Jain 2018, Basic Financial Management, Tata McGraw-Hill Publishing Company Limited, New Delhi

Supplementary Readings:

1. GitmanL.J&Dr.M.Manickam, 2018, Principles of Managerial Finance, Pearson Education, New York
2. PandeyI.M. 2017, Financial Management, Vikas Publication, New Delhi.
3. Khan & Jain, 2017, Financial Management, Tata McGraw Hill Publishing Company Limited, Noida,
4. Sharma Shashi R.K & Gupta K 2017, Financial Management, Kalyani Publishers, Ludhiana
5. Murthy A. 2017, Financial Management , Margham Publishers, Chennai

CourseOutcomes:

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

CO1.Appraise the basic components of financial management

CO2.gain expert knowledge on calculating various techniques of capital budgeting.

CO3.generate and manage funds while undertaking any business venture.

CO4.gain expert knowledge in dividend decisions.

CO5.understand the computations and techniques of working capital.

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1									✓			✓				✓		
CO2	✓										✓					✓		
CO3	✓					✓	✓		✓				✓					
CO4									✓		✓		✓			✓		
CO5						✓	✓						✓			✓		

SUGGESTED MOOC COURSES:

1. **Corporate Financial Decision-Making for Value Creation** (Coursera), Created by: University of Melbourne, Delivered by: Coursera, Taught by: Paul Kofman Sean Pinder.
2. **Corporate Finance Essentials** (Coursera), Created by: IESE Business School, Delivered by: Coursera, Taught by: Javier Estrada.

19CBIC203 BUSINESS RESEARCH METHODS

Credits: 4

Hours: 80

Learning Objectives:

LO1. To train the students to acquire foundational understanding of conducting business research

LO2... To impart the students to have a sound knowledge of sampling design, data collection methods and analysis of data

LO3. To inculcate the students to learn the best practice of report writing

Unit I: Introduction to Research

Concept of Research, Social and Business Research-Objectives of Research – Significance – Types of Business Research – Steps in Business Research process -Identification of Research Problem–Literature survey – steps in literature review process –identification of Research Gap - Formulation of objectives and Hypothesis.

Unit II: Research and Sample Design

Research Design: Meaning– Features of good Design – Types of research Design. Sample Design: Census and Sample Survey – Steps in sample Design - Types of Sample Designs – Probability and non-probability sampling techniques

Unit III: Data Collection and Measurement of Scales

Meaning of Data- Classification of Data –Primary Data and Secondary Data – Method of Data Collection – Observation -Interview Tools - Questionnaires and schedules –collection of Secondary data-Scaling Technique - Types of Scales.

Unit IV: Processing and Analysis of Data

Data processing operations – Editing, Coding, Classifying and tabulation – Analysis of data –Application of Statistics in research : Descriptive statistics – Inferential analysis – Hypothesis testing – Meaning – Characteristics – Types of Hypothesis - steps in Testing of Hypotheses - Mean Difference and relationship testing

Unit V: Interpretation and Report writing

Interpretation: Meaning – Need for interpretation – Techniques of Interpretation – precautions. Report Writing: Meaning – Significance –Types of Report – Layout and mechanics of the research report writing– Footnotes, endnote and Citations- Bibliography.

Text Books

1. Anusree, M., Mohapatra, S., & Sreejesh, S. 2017, Business Research Methods - An Applied Orientation. Springer International Publishing. New Delhi
2. Kothari, C. 2018, Research Methodology Methods and Techniques. New Delhi: New Age International (P) Limited, Publishers. New Delhi
3. Kumar, R. 2017, Research Methodology - A step-by Step Guide for Beginners SAGE Publications India Pvt Ltd., New Delhi

Supplementary Readings:

1. Creswell, J. 2017, Research Design Qualitative, Quantitative, and Mixed Methods Approaches. New Delhi: SAGE Publications India Pvt. Ltd.
2. Neuman, W. 2014, Social Research Methods Qualitative and Quantitative Approaches. Harlow, Essex: Pearson Education Limited.
3. Walliman, N. 2018, Research Methods - The basics. New York: Routledge.
4. Zikmund, W. G. 2017, Business Research Methods Cengage Learning India Private Limited. New Delhi
5. Panneerselvam, R. 2018, Research Methodology : Prentice-Hall of India Private Limited. New Delhi

Course Outcomes:

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

CO1. Describe the objectives and types of research

CO2. Construct good research design.

CO3. Understand the significance and process of Business research

CO4. Have an insight into the sampling techniques and develop sampling plan

CO5. Analyze and interpret the data and write the research report

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	✓		✓	✓	✓	✓			✓			✓				✓		
CO2	✓				✓	✓										✓		
CO3					✓			✓					✓			✓		
CO4					✓											✓		
CO5	✓		✓	✓	✓	✓		✓	✓				✓			✓		

SUGGESTED MOOC COURSES:

1. ***Understanding Research Methods***, Created by: University of London, Delivered by: Coursera, Taught by: J.SimonRofe and Yenne Lee.
2. ***Mastering Data Analysis in Excel***, Created by: Duke University, Delivered by: Coursera, Taught by Daniel Egger and Jana Schaich Borg.

Learning Objectives:

LO1.To enable the students to understand the role of business analytics in business data processing

LO2.. To impart the students to gain knowledge of application of information technology in the core business process

LO3.To equip the students with big data application in business intelligence

Unit I: Introduction to Business Analytics

Business Analysis-Different Levels - Business Analyst- Role of Business Analyst -Basic rules-Requirements and Tasks performed by Business Analyst – Project Definition and Scoping –Project phases and approaches – Role of Business Analyst across the project Life cycle.

Unit 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-Types- Attributes and Measurement-Types of data sets-Data quality-Types of Digital Data.

Unit III: Introduction to OLTP and OLAP

Introduction to OLTP and OLAP – Different OLAP Architectures-Data Models-Tools in Business Intelligence-Role of DSS, EIS,MIS and digital Dash boards – Need for Business Intelligence- Business Intelligence value chain-Components-applications-roles and responsibilities.

Unit IV: Data Integration

Data Integration-Data Warehouse-Goals-Data Sources- Data Integration Technologies-Data Quality maintenance-Data profiling-Data modeling-Types and Techniques-Fact table-Dimension Table-Typical Dimensional Models-Life cycle-Designing..

Unit V: Performance and Measurement system Terminology

Performance and Measurement System terminology- Role of Metrics –Supply Chain-Fact based decision making and KPIS use of KPIs-Potential source for metrics-Enterprise Reporting –Report Standardization –Balanced score card Scoreboards Vs Dashboards-Business Intelligence in Real world- Mobility-Cloud computing.

Text Books:

1. Edward Mize 2017, Data Analysis, Create Space Independent Publishing Platform
2. Seema Acharya R.N.Prasad 2016, Fundamentals of Business Analysis Wiley
3. Pang –Ning Tan, Michael Steinbach, AnujKarpatne and Vipin Kumar 2018, Pearson Publishers .

Supplementary Readings:

1. Paul Turner 2018, Business Analysis Techniques, International Institute of Business Analyst, London
2. Howard Podeswa 2017, Handbook of Business Analyst , outskirts Press, London
3. Debra Paul, Lynda Girvan 2018, Business Analyst, BCS Learning & Development Limited, New Delhi.

Course Outcomes:

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

CO1. Understand the language of business analytics, theory and models in the field of business analytics

CO2. Perceive skills on data analytics and its application

CO3. Gain expert knowledge in data integration technology

CO4. Analyze different types of digital data, use of appropriate models for analysis and derive insights from results

CO5. Equip with key analytical tools and techniques of business intelligence

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	✓	✓		✓											✓		✓	
CO2		✓		✓											✓		✓	
CO3				✓					✓			✓			✓		✓	
CO4				✓											✓		✓	
CO5	✓		✓	✓					✓			✓			✓		✓	

Learning Objectives:

LO1. To make the students to understand and the need and importance of Organizational Behaviour.

LO2.. To impart the students to gain expert knowledge about the application of organizational conflict technique to resolve problems in an organization.

LO3. To make an awareness among students about the implication of organizational changes and its effectiveness

Unit I: Introduction to Organisational Behaviour

Organisational Behaviour – Meaning- Importance- Nature and Scope- Organisation Goals-Functions- Evolution of Organisational Behaviour-Factors Influencing Organisational Behaviour.

Unit II: Organisational Structure and Culture

Organisational Structure– Meaning-Need – Elements- Typology- Organisational Structure and Employee Behaviour-Meaning and Definition of Organizational Culture-Types Functions –Factors influencing organizational culture-Differentiation between organizational culture and climate.

Unit III: Organisational Conflicts and Leadership

Organisational Conflicts – Causes and Types – Managing Conflicts – Leadership Qualities - Types –Styles.

Unit IV: Organisational Effectiveness and Quality of Work Life

Organisational Effectiveness- Meaning-Approaches to Organisational Effectiveness- Factors influencing Organisational Effectiveness-Quality of Work Life-Meaning – Definition- Evolution and Development of the Concept of QWL-Constituents of QWL.

Unit V: Organisational Change and Development

Organisational Change – Meaning- Reasons for changing – Types of Changes- Organisational Resistance-Managing Resistance to Change- Organisational Development Meaning-Characteristics – Models – Factors influencing of an OD Intervention

Text Books:

1. Ahuja, K.K. 2017, Organisational Behaviour, Kalyani Publishers, Ludhiana.
2. Gangadhaar Rao M, Rao V.S.P and Narayana P.S 2017 Organaisational Behaviour Text and Cases, Konark Publishers Pvt. Ltd. New Delhi.
3. Khanka S.S Organisational Behaviour, 2018 S.Chand & Company Ltd, New Delhi

Supplementary Readings:

1. Aswathappa, K. 2018, Organisational Behaviour Text, Cases and Games, Himalaya Publishers Pvt. Ltd, New Delhi.
2. Prasad, L.M Organisational Behaviour ,2018, Sultan Chand Publisher, New Delhi
3. Mrityunjay Banerjee. 2009, Organisational Behaviour. Allied Publishers Ltd, New Delhi
4. Paul Hersey Kenneth Blanchard Dewey, K. Johnson. 2018, Management of Organisational Behaviour, Prentice Hal of India, New Delhi
5. Laurie J. Mullins. 2017, Management and Organisational Behaviour, Wheeler Publishing Pvt. Ltd., New Delhi.

Course Outcomes:

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

CO1. Appreciate the implication of Organizational Behaviour in an organization.

CO2. Compare the strength and limitations of different organizational structure

CO3. Solve the different forms of conflicts and assume different leadership styles

CO4. Recall the significance of quality of work life and organizational changes.

CO5. Recognize the factors affecting the organizational effectiveness.

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1		✓				✓		✓		✓	✓		✓					
CO2						✓	✓	✓	✓		✓	✓	✓					✓
CO3						✓	✓		✓	✓	✓		✓			✓		
CO4		✓				✓		✓		✓			✓			✓		
CO5	✓		✓					✓	✓	✓	✓		✓			✓		✓

19CBIC302 BUSINESS DATA MINING

Credits: 5
Hours : 80

Learning Objectives:

LO1. To introduce the students about the various data warehouse architecture

LO2. To enable the students to understand the data mining functionalities

LO3. To impart the students to introduce the various data mining techniques and apply cluster analysis in data

Unit I:Data Warehousing

Data Warehouses- Multidimensional Data Model –Schemes-OLAP Operations -Data Warehouse Architecture – Indexing – Data Pre Processing – Knowledge Discovery from Data Base – Need-Data Cleaning - Data Reduction

Unit-II: Association Rule Mining

Data Mining Functionalities - Rule Mining - Mining various kinds of Association Rules-Data Mining Tasks- Data mining primitives -Issues- Data cleaning – Data transformation –Data reduction- Mining multi- dimensional association rules.

Unit III: Classification & Prediction

Data preparation for classification and prediction- Classification by Decision Tree-Bayesian Classification- Rule Based Classification – Classification by Back propagation-Support Vector Machines- Associative Classification- Other Classification – Accuracy and Error measures –Ensemble Methods – Model Section.

Unit IV :Cluster Analysis

Cluster Analysis – Types and Methods –Clustering High Dimensional Data – Constraints –Based Cluster Analysis-Outlier Analysis.

Unit V : Data Mining Tool

Data Mining Tool – Loading the data – Filtering attributes – Selection-Training a classifier-Building your own classifier- Tree visualization-Testing and evaluating your models- Regression models-Clustering- Reusing model- Data mining in marketing –Using WEKA for stock value forecasting.

Text Books:

- 1.Jiawei Han and MichelineKamber 2017, Data Mining Concepts and Technologies, Morgan Kaufman
- 2.BostjanKaluzza 2018, Instant Weka How – to , PACKT Publishing
- 3.David& Young 2018, Introduction to Business Data Mining , Irwin Professional Publishing, USA

Supplementary Readings:

- 1.Ian H Witten and Eibe Frank 2018,Data Mining: Practical Machine Learning Tools and Techniques, Morgan Kaufmann Publications
- 2.Dunham M.H 2017, Data Mining: Introductory and Advanced Topics Imprint Pearson Education
- 3.ArunK.Pujari 2018, Data Mining Techniques Universities Press (India) PvtLtd New Delhi.

Course Outcomes:

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

CO1. Understand the data warehouse architecture

CO2. Prepare, classify and predict the data

CO3. Apply cluster analysis in data mining

CO4. Familiarize with design of Data mining

CO5. Apply knowledge on structures of data mining techniques

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	✓					✓		✓	✓			✓			✓		✓	✓
CO2	✓		✓			✓					✓	✓			✓	✓	✓	✓
CO3	✓		✓	✓				✓			✓				✓	✓	✓	✓
CO4			✓	✓				✓	✓						✓	✓	✓	✓
CO5	✓		✓	✓											✓	✓		✓

19CBIC303 DATA BASE MANAGEMENT SYSTEM

Credits: 5
Hours : 80

Learning Objectives:

LO1.To introduce the conceptual frame work of database system to the students

LO2.To impart the students basic concepts in data base architecture

LO3.To enable the students to have a broad understanding of data base concepts and data base management software

Unit I: Database System Architecture - Basic concepts

Data system, operational data, data independence, Architecture for a database system, Distributed databases. Storage Structures : Representation of Data. Data Structures and corresponding operators - Relation Approach, Hierarchical Approach, Network approach.

Unit II :Relational Approach

Relational Data Structure : relation, Domain, attributes, keys. Relational Algebra : Introduction, Traditional set operation. Attribute names for derived relations, special relational operations.

Unit III : Network Approach

Architecture of DBTG system. DBTG Data Structure : The Set construct, Singular sets, sample schema, the external level of DBTG – DBTG Data manipulation.

Unit IV :Relational Database Design

Relational Database Design: Pitfalls – Normalization Using Functional Dependencies- Decomposition – Boyce-Codd Normal Form – Third Normal Form – Normalization Using Multivalued Dependencies- Fourth Normal Form- Normalization Using Join Dependencies – Domain Key Normal Form.

Unit V :Query Interpretation

Query Interpretation – Equivalence of Expression – Query Processing Cost – Query Optimizer.

Basic Concepts of Database Recovery- Concurrency Control Database Security and Integrity- Distributed Database.

Text Books:

1. Abraham Silberschatz, Henry F. Korth, S. Sudharshan, 2012, Database System Concepts 6th Edition, Tata McGraw Hill, New Delhi.
2. Jeffrey D. Ullman, 2017, Principles of Database System, Galgotia Publishers, New Delhi
3. Ramakrishnan, 2017, Database Management System Tata McGraw Hill, New Delhi.

Supplementary Readings:

1. Ramez Elmasri, Shamkant B. Navathe, 2017, Fundamentals of Database Systems, 4th Edition, Addison Wesley,
2. Raghu Ramakrishnan, 2016, Database Management Systems, 3rd Edition Tata McGraw Hill, New Delhi.
3. Subhash Batnagar 2017, Information and Communication Technology in Development, Sage Pub. India, New Delhi
4. Suresh, K. Basandra, 2017, Computers Today, Galgotia Publisher, New Delhi

Course Outcomes:

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

- CO1.** Understand the data base concepts and DBMS software
- CO2.** Gain knowledge on Data Base Management Components and its functions
- CO3.** Understand the Architecture of Database system
- CO4.** Improve the quality of database design by normalization
- CO5.** Have a high level understanding of Data Base Management Components and its functions

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	✓	✓		✓					✓			✓			✓		✓	✓
CO2				✓					✓			✓			✓		✓	✓
CO3				✓					✓			✓			✓		✓	✓
CO4	✓	✓		✓					✓			✓			✓		✓	✓
CO5	✓	✓		✓					✓			✓			✓		✓	✓

19CBIP304: INSTITUTIONAL TRAINING/ INTERNSHIP**Credits: 5****Learning Objectives:**

LO1. To familiarize the students to have a knowledge on institutional/industrial environment

LO2.. To provide students an insight into the organizational structure of an institution/industry

LO3.To enable the students to gain practical knowledge on institution/industrial operations

Course Outcomes:

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

CO1. Familiar with institution/industrial environment

CO2. Understand the organizational structure of an institution/industry

CO3. Comprehend the institutional/industrial practices like, HR, Finance, Manufacturing and Marketing

CO4. Gain practical knowledge on institutional/industrial operations

CO5. Integrate the theoretical knowledge with practical knowledge

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1		✓	✓		✓	✓	✓	✓			✓		✓	✓	✓	✓		
CO2									✓		✓	✓	✓	✓		✓	✓	
CO3		✓		✓		✓	✓	✓					✓	✓		✓	✓	
CO4		✓	✓						✓			✓		✓	✓	✓		
CO5		✓						✓	✓			✓	✓	✓	✓	✓		

19CBIC401 BUSINESS INTELLIGENCE STRATEGIES AND PROCESS

Credits: 5

Hours : 80

Learning Objectives:

LO1. To impart the students to understand basic concepts of business intelligence and its frame work

LO2.. To equip the students to formulate strategies in relation to business performance measurement

LO3.To make the students to gain an insight into the text and web designing

Unit I: Introduction to Business Intelligence

Business Intelligence – Framework for Business Intelligence-Creation-Transaction Processing Vs analytical Processing – Major Tools and Techniques of Business Intelligence.

Unit II :Business Performance Management

Business Performance Management – Strategies – Plan –Monitor – Performance Measurement – Business Process Management Methodologies – Performance of Dashboards and Scorecards.

Unit III: Text and Web Mining

Text and Web mining – Concepts and Definition – Language processing.-Text Mining applications – text mining process – text mining tools – web mining and web structure mining – web usage mining

UnitIV :Business Intelligence and Implementation

Business Intelligence Implementation – Implementation of Business Intelligence and Integration Implementation – Connecting Business Intelligence systems to Databases and other enterprise systems.

Unit V : Business Intelligence Issues

On Demand Business Intelligence – Issues of Legality, Privacy and Ethics- Emerging Topics in Business Intelligence- the Web 2.0 revolution- On line social networking-virtual worlds-social networks and Business Intelligence-collaborative decision making-RFID and new Business Intelligence application opportunities – reality mining.

Text Books:

- 1.Efraim Turban, Ramesh Sharda,DursunDelen and David King 2017, Business Intelligence Prentice Hall, New Delhi
2. Stuart Russel and Peter Norvig 2017,ArtificialIntelligence: A Modern Approach, Prentice Hall, New Delhi
3. GalitShmueli, NitinR.Patel and Peter C.Bruce 2017, Data Mining for Business Intelligence, Wiley- India PvtLtd,New Delhi.

Supplementary Readings:

- 1.CindiHowson, 2017,Successful Business Intelligence, McGraw Hill, New Delhi.
2. Grossmann, Wilfried, Rinderie-ma Stefanie 2017, Fundamentals of Business Intelligence , For Dummies, London
- 3.Rausch,PeterShetaAlaaFAYesh2017, Business Intelligence and Performance management ,Berrett.Koehler, London

Course Outcomes:

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

- CO1.** Understand the conceptual frame work of business intelligence
- CO2.** Formulate strategies in relation to business performance measurement
- CO3.** Appreciate the importance of text and web mining data
- CO4.** Analyze and apply various business intelligence methods
- CO5.** Tackle the issues in business intelligence

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1			✓	✓					✓			✓	✓		✓		✓	✓
CO2				✓		✓	✓	✓	✓						✓	✓	✓	
CO3			✓	✓							✓				✓		✓	✓
CO4		✓		✓								✓			✓		✓	
CO5	✓	✓		✓			✓		✓			✓			✓		✓	✓

19CBIC402 E-CUSTOMER RELATIONSHIP MANAGEMENT

Credits: 4
Hours : 80

Learning Objectives:

LO1. To impart the students to understand on various concepts of customer relationship management practices

LO2.. To make the students to acquire expert knowledge on customer information data base

LO3.To train the students to gain knowledge on customer relationship management process

Unit I: Introduction to CRM

Definitions – Concepts and Context of relationship Management Evolution – Transactional Vs Relationship Approach – CRM as a strategic marketing tool – CRM significance to the stakeholders

Unit II: Understanding Customers

Customer information Database – Customer Profile analysis Customer perception, Expectations analysis – Customer behavior in relationship perspectives; individual and group customer segments

Unit III: CRM Structures

Elements of CRM – CRM Process – Strategies for Customer acquisition – Retention and Prevention of defection – Models of CRM – CRM road map for business applications

Unit IV : CRM Planning And Implementation

Strategic CRM planning process – Implementation issues – CRM Tools – Analytical CRM – Operational CRM – Call centre management – Role of CRM Managers

Unit V: Trends in CRM

e-CRM Solutions – Data Warehousing –Data mining for CRM – an introduction to CRM software packages

Text Books :

1. Shainesh, G and Jagdish, N Sheth,2018, Customer Relationship Management-Strategic Perspective, New Delhi: MacMillan, New Delhi
2. Alok Kumar et al.2018 Customer Relationship Management: Concepts and Applications, Biztantra.
3. ShanthiR. 2013, Customer RelationshipManagement: MJP Publishers, New Delhi

Supplementary Readings:

- 1.Mohammed, H.P., and Sagadevan, A.2018 Customer RelationshipManagement – a step by step Approach New Delhi:Wiley India Pvt.Ltd.
- 2.JimCatheart. 2018. The Eight Competencies of Relationship Selling, New Delhi:Macmillan India.
- 3.Assel.2018 Consumer Behaviour – A Strategic Approach, Biztranza

Course Outcomes:

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

CO1. Comprehend the concepts relating to Customer Relationship management practices

CO2. Analyze Customer Information Database to understand the customer behaviour

CO3.Grasp an idea of customer relationship management process

CO4. Appreciate the various Models of Customer Relationship Management

CO5. Understand the e-CRM solutions for better customer relationship management

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1											✓	✓	✓	✓	✓			
CO2	✓		✓	✓									✓	✓		✓	✓	✓
CO3	✓		✓			✓	✓								✓	✓	✓	
CO4	✓		✓						✓		✓	✓			✓	✓	✓	
CO5	✓		✓	✓					✓			✓	✓		✓		✓	✓

19CBIC403 BUSINESS VISUALISATION ANALYSIS

Credits: 5
Hours : 80

Learning Objectives:

LO1. To make the students to understand the concept of Tableau

LO2.. To train the students to construct various visualization techniques

LO3.To impart the students to gain expert knowledge on Apache Spark platform for business intelligence data storage and analysis

Unit I: Tableau

Introduction to Tableau – Tableau Role –Application – Tableau workbooks-Publishing-PDF-Best Practices in Connecting to Data- Working with Meta data- Data source changes- Working with data –Filtering- Building groups- hierarchies- Sets.

Unit II : Building Visualizations

Building Visualization – Bar charts- Line charts –Pie Charts – Building Packed Bubble Charts -Text Tables — Building Scatter Plots- Map views- Building heat Maps –Building Tree Maps –Dash Boards- Overview – Building Dashboards.

Unit III: Power Business Intelligence

Introduction – Parts of Power Intelligence – Flow of work in Power Business Intelligence – Using Power Business Intelligence- Building Blocks of Power Business Intelligence – Visualizations –Datasets-Reports –Quick Look at the power Business Intelligence service- Create out of Box dashboards with cloud services- Refreshing data in the Power Business Intelligence Service.

Unit IV: Connect to data

Data Sources in Power Business Intelligence Desktop – Connect to data in Power Business Intelligence Desktop-Import Excel workbooks into Power Business Intelligence Desktop- Connect to an Oracle database- Run R Scripts- Connect to CSV files.

Unit V: Spark Overview

Features of Apache Spark – Components – Spark Clusters and Files- RDD Fundamentals – Purpose and Structure –Transformations, actions and DAG – Spark SQL and Data frame uses – Spark Streaming – Sources and Tasks- Principles of Machine Learning-Classification-regression-clustering-collaborativefiltering, dimensionality reduction.

Text Books:

- 1.Joshua N. Milligan 2016, Learning Tableau – How Data Visualization Brings Business Intelligence to Life Packt Publishing, USAi.
- 2.George Pack 2018,Tableau & Official Guide McGraw Hill Publication, New Delhi
- 3.Efraim Turban, Ramesh Sharda, DursunDelen and David King 2012, Business Intelligence Prentice Hall, New Delhi

Supplementary Readings:

- 1.CindiHowson 2018,Sucessful Business Intelligence, McGraw Hill, New Delhi.
2. Grossmann, Wilfried, Rinderie-ma Stefanie 2017, Fundamentals of Business Intelligence , For Dummies, London
- 3.StuartRussel and Peter Norvig 2018, Artificial Intelligence: A Modern Approach, Prentice Hall, New Delhi

Course Outcomes:

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

CO1. Comprehend theoretical frame work of business visualization Tableau

CO2. Connect various business data for visualization

CO3. Construct various visualization techniques

CO4. Apply Power Business Intelligence services in business intelligence

CO5. Apply Apache Spark platform for business intelligence data storage and analysis

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	✓			✓										✓	✓		✓	
CO2	✓			✓					✓			✓			✓		✓	✓
CO3	✓			✓					✓			✓		✓	✓	✓	✓	
CO4	✓	✓	✓	✓				✓	✓						✓		✓	
CO5	✓	✓	✓	✓				✓	✓						✓		✓	✓

19CBIP404: PRACTICAL- BUSINESS VISUALISATION ANALYSIS

Credits: 8

Learning Objectives:

LO1. To give practical knowledge to the students on Business visualization Tableau software

LO2.. To train the students to connect various business data for visualization

LO3.To impart the students to comprehend and relate power business intelligence services in business intelligence

Tableau

- 1.Creating or modify a Schedule
2. Publishing data in Tableau
- 3.Working with data, filter, sorting
- 4.Data visualization using charts and scatter plots
- 5.Reports generation in Tableau

Power Business Intelligence

- 6.Sales and Marketing sample of Power Business Intelligence
- 7.Customer Profitability Sample Power Business Intelligence
- 8.Human Resources for sample power Business Intelligence
- 9.Supplier Quality Analysis sample for power Business Intelligence

Spark

- 10.Creating RDDs from Data files, Reshaping Data to Add Structures
- 11.Creating Data frames, Catching and Re-using Data frames
- 12.CreatingDStreams from sources, operating on DStream Data

Course Outcomes:

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

- CO1.** Working in Tableau for creating, visualizing and reporting on data
- CO2.** Analyze various business systems using power business intelligence techniques
- CO3.** Corroborate power business intelligence services in business intelligence
- CO4.** Implement the various data processing operations using Spark
- CO5.** Construct Apache's spark platform for business intelligence

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1	✓		✓	✓										✓	✓		✓	
CO2	✓			✓		✓		✓	✓			✓			✓		✓	✓
CO3	✓		✓	✓					✓			✓		✓	✓	✓	✓	
CO4	✓		✓	✓					✓			✓			✓		✓	✓
CO5	✓		✓	✓					✓			✓			✓		✓	✓

**Elective Courses
Department Electives (DE)**

S. No	Course Code	Course Title	Hours/week	C	Marks		
			L		CIA	ESE	Total
1.	19CODE205.1	Corporate Social Responsibility	3	3	25	75	100
2.	19CODE205.2	International Finance and Foreign Exchange	3	3	25	75	100
3.	19CODE205.3	International Logistics Management	3	3	25	75	100
4.	19CODE305.1	Goods and Services Tax	3	3	25	75	100
5.	19CODE305.2	Marketing of Financial Services	3	3	25	75	100
6.	19CODE305.3	Project Finance and Management	3	3	25	75	100

Semester -2

19CODE205.1 CORPORATE SOCIAL RESPONSIBILITY

Credits: 3

Hours : 60

Learning Objectives:

LO1. To enable the students to understand the meaning and concept of Corporate Social responsibility

LO2. To enable the students to understand the preparation of Customer Relationship Reports

LO3. To impart the students to gain knowledge on principles and practice of CSR in Indian context

Unit I: Meaning of Corporate Social Responsibility (CSR)

Meaning and Definition of CSR - Principles of CSR - CSR and Corporate Governance - Drivers of CSR - Concept of Charity- Corporate Citizenship -Corporate Philanthropy.

Unit II: CSR Policy under Sec. 135 of the Companies Act 2013

CSR Policy - Constitution of CSR committee and its composition - CSR Design - CSR Budget -Implementation of CSR - CSR Process - CSR Activities - Provision of CSR in Companies Act, 2013

Unit III: CSR Activities

Meeting of the CSR Committee - Preparation of CSR Report - Placing CSR Report in Board meeting - Board's responsibility towards CSR - CSR project management approach - Evaluation of CSR projects –

Unit IV: Evaluation of CSR Activities

Internal Monitoring and Evaluation of CSR Activities - External Monitoring and Evaluation of CSR Activities; - CSR Committee and Board level review of CSR performance - CSR Reporting

Unit V: Audit and Standards CSR

CSR Audit; various issues relating to CSR Audit - Sustainability of CSR Audit - benefits of CSR audit - CSR Ratings, CSR awards. Social Accountability 8000(SA8000) - Indian Standard Organization (ISO-26000-2010).

Text Books

1.Sanjay K. Agarwal 2017,Corporate Social Responsibility in India Sage Publications New Delhi.

2.Nancy Lee and Philip Kotler 2017,Corporate social Responsibility: Doing the most Good for your company, John Wiley & Sons, USA

3.WayneVisser 2018,CSR 2.0 Transforming Corporate Sustainability andResponsibility, Springer Science & Business Media,USA

Supplementary Readings:

1.Mia Mahmudur Rahim 2015,Legal Regulation of Corporate Sustainability and Responsibility Springer Science & Business Media, USA

2.Christoper 2018,Sustainable Value: How the world's leading companies doing well by doing good Stanford University Press, USA

3.Ilangovan D & R.Durga doss 2018, Corporate Governance – An Insight, The United Publishers, Mangalore

Course Outcomes:

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

CO1. Gain all essential and fundamental knowledge on the principles and practices of CSR in India.

CO2. enhance the skill of implementing the CSR in their own enterprises as and when

CO3.augment the skill to bring up their start-ups.

CO4.Evaluate CSR activities

CO5.Tackle various issues relating to CSR audit

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1								✓	✓	✓					✓			
CO2		✓				✓									✓			✓
CO3							✓		✓		✓	✓			✓			
CO4				✓		✓		✓	✓		✓				✓			✓
CO5			✓												✓			✓

19CODE205.2 INTERNATIONAL FINANCE AND FOREIGN EXCHANGE

Credits: 3
Hours : 60

Learning Objectives:

- LO1.** To enable the students to gain knowledge on international financial institutions and its Functions
LO2. To make the students to comprehend the foreign exchange dealings by commercial banks and RBI
LO3. To educate the students to understand and compute the exchange rates

Unit I Introduction

Significance and Importance of International Finance – Scope and Limitation

–Foreign Aid – Indian Experience.

Unit II International Financial Institutions

Organisation, Functions, Objective and working of International Bank for Reconstruction and Development (IBRD) and International Monetary Fund (IMF).

Unit III Regional Financial Institutions

Objectives and Functions of International Development Association, International Finance Corporation – The Bank for International Settlements (BIS) and Asian Development Bank (ADB).

Unit IV Foreign Exchange

Foreign Exchange – Meaning and Definition –Foreign Exchange Market – Authorised Dealers – Money changers – Foreign Exchange Dealings by Commercial Bank and Reserve Bank of India

Unit V Rate of Exchange

Introduction – Factors influencing exchange rates – Direct rate and Indirect Rate — Exchange arithmetic – Computation of exchange rates.

Text Books :

- 1.AlanC.Shapiro 2017, Multinational Financial Management, Prentice Hall of India, New Delhi
- 2.Bhalla,V.K 2016 International Financial Management, Anmol Pub., New Delhi.
- 3.Keshkamat,V.V-2015, Foreign Exchange: A Introduction, Vivek Pub., Mumbai

Supplementary Readings:

- 1.Balagopal,T.A.S 2016, Export Management, Himalaya Pub., Mumbai,
- 2.Buckly 2016 Multinational Finance, PHI, New Delhi.
- 3.Jeevanatham 2016, Foreign Exchange & Risk Management, Sultan Chand, New Delhi.
- 4.Jeevanatham 2016, Foreign Exchange –Principles Practices & Control, Sultan Chand, & Sons, New Delhi.
- 5.Simha, SLN 2017, International Monetary Reforms, Vora&Co, Mumbai,

Note: Theory Questions Only

Course Outcomes:

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

- CO1.** Appraise the fundamental knowledge on working of international financial Institutions in India.
CO2. Gain knowledge of role of international financial institutions like BIS and ADB
CO3. Monitor foreign exchange market movement
CO4. Recall the foreign exchange dealings by commercial banks and RBI.
CO5 Calculate and compute foreign exchange rates.

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6
CO1									✓			✓			✓			
CO2											✓				✓			
CO3	✓			✓								✓			✓			
CO4									✓			✓			✓			
CO5	✓			✓											✓			

19CODE205.3 INTERNATIONAL LOGISTICS MANAGEMENT

Credits: 3
Hours : 60

Learning Objectives:

- LO1.** To acquaint the students with basic knowledge of business logistics
- LO2.** To make the students to develop awareness about ocean transportation
- LO3.** To enable the students to acquire knowledge on inventory management

Unit I: Introduction to Business Logistics and Supply Chain

Business logistics and Supply Chain-Meaning-Importance-objectives and drivers Strategy-Planning selecting proper channel, Performance measurement-outsourcing-Make or Buy approach

Unit II: Structure of shipping

Structure – Types of ships-Operating systems-Characteristics liner and tramp operators-code of conduct for liner conferences, freight structure and practices-chartering principles.

Unit III: Developments in Ocean Transportation

Containerization: CFS and inland container depots, Multi-model transportation and CONCOR – Role of intermediaries including freight Agents, shipping agents, Container Agents.

Unit IV: Inventory and Warehousing

Inventory-Objectives, Bullwhip effect, control-Probabilistic inventory models-Risk pooling-Vendor managed inventory-Warehousing functions

Unit V: Transportation and Packaging

Transportation-Drivers modes measures-Strategies for transportation, 3PL and 4PL., Vehicle routing and scheduling-Packaging-Design consideration material and cost-packing

Text Books :

1. Natarajan L 2017, Logistics Supply Chain Management, Margham Publications, Chennai.
2. Sunil Chopra and Petermeindi 2016, Supply Chain Management – Strategy Planning and Operation PHI Learning, New Delhi
3. Donald J Bowersox and Davis J.Closs 2016, Logistics Management: The Integrated Supply chain, Tata McGraw Hill., New Delhi.

Supplementary Readings :

1. Rahul V. Altekar, 2016, Supply Chain Management, PHI Learning, New Delhi
2. Ailawadi and Rakesh Singh 2016, Logistics Management PHI Learning, New Delhi
3. Donald Waters and Palgrave 2016, Logistics: An Introduction to Supply Chain Management, Mac Millan, New Delhi
4. Sarika Kulkarni and Ashok Sharma 2018, Supply Chain Management, Tata McGraw Hill Publishing Company, New Delhi
5. Harold Dyckhoff and Springer 2017, Supply Chain Management and Reverse Logistics, International Edition, New Delhi

Course Outcomes:

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

- CO1.** Understand the knowledge about the fundamentals and basic concepts of business logistics and supply chain
- CO2.** Enlighten with the knowledge freight structure and practices in shipping
- CO3.** Master over the procedure and principles of ocean transportation
- CO4.** Understand the applicability of inventory management and warehousing Functions
- CO5.** Apply the strategies for transportation and packaging

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5	PS O6
CO1	✓	✓						✓	✓			✓			✓			
CO2	✓	✓						✓	✓			✓			✓			
CO3	✓	✓		✓				✓	✓			✓			✓			✓
CO4	✓	✓						✓	✓			✓			✓			
CO5	✓			✓											✓			

Learning Objectives:

LO1.To enable the students to understand the basic concept of indirect tax

LO2. To provide the students basic knowledge of provisions of GST

LO3. To educate the students with registration process, returns and payment procedure of GST

Unit I Introduction to Goods and Services Tax

Indirect Taxes – Problems of Indirect taxes – Need for introduction of GST – Commodities kept out the preview of GST – Other indirect Taxes

Unit II: Structure of GST

GST Structure – CGST –SGST- IGST – Futures – Exemptions – Schemes – Composition Schemes – Ordinary Scheme – GST Structured Rates

Unit III GST Registration Process

Registration process in GST – Types – Compulsory Registration - Cancellation

Unit IV:Input Tax Credit

Input Tax Credit – Adjustment of Debit Notes and Credit Notes – Problems in Input Tax Credit

Unit V Returns, Payments, Refund Process and Assessment

Process of Return Filing-Types of Returns - E-Ledger and E-Payment Process in GST- Assessment Methods – Refund under GST – Refund under Special Occasions - Authorities of GST

Text Books :

1. Balachandran V., 2018, Indirect Taxes, Sultan Chand & Sons, New Delhi
2. Satrangi G .Goods & Services Tax Precept and Practice 2018,Centax Publications, New Delhi
3. Anandaday Mishra, 2017, GST Law and Procedure, Taxmann Publication, New Delhi

Supplementary Readings:

1. C.A.Raj K. Agarwal, 2017, Taxation and Indirect Taxes, Taxmann Publication, New Delhi
2. V.S.Datey, 2017, Goods and Services Tax, Taxmann Publication, New Delhi
3. Pullani and Maniyar, 2017, Goods and Services Tax, Law Journal, Bangalore Development Limited, New Delhi.

Course Outcomes:

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

CO1.Comprehend the fundamentals of indirect tax and need for GST

CO2.Understand the structure of GST and their schemes in practice

CO3. Disseminate various modes of registration of GST

CO4.Familiarize with the adjustment of debit and credit notes

CO5. Understand and apply the e-filing of GST in practice

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PSO 6
CO1												✓	✓	✓				
CO2	✓										✓		✓	✓				
CO3													✓	✓				
CO4													✓	✓				
CO5			✓	✓									✓	✓				

Learning Objectives:

LO1.:To acquaint the students with the concept and features of financial services.

LO2.: To enable students to learn the concept of market segmentation and buyer behaviour.

LO3. To educate students with 7- Ps of services marketing mix.

Unit I : Marketing Concept in Financial Services

Services Marketing-Concept-Features of Services Marketing-Need for applying Marketing Concept in Financial Services –Customer Services in Financial Marketing.

.Unit II : Market Segmentation and Buyer Behaviour

Financial Services Marketing-Environment-Market Segmentation in Financial Market-Buyer Behaviour with reference to Financial Services.

Unit III : Marketing Mix – Product and Place

Marketing Mix in Financial Services Markets-Product Development-Product Life Cycle-Branding related to Financial Services-Customer Loyalty-Place related issues in financial services

Unit IV :Marketing Mix – Price and Promotion

Pricing of financial services- Methods-Promotional Mix-Financial Advertising- Role of media-Corporate image-Publicity-Sales Promotion-Service Guarantee and Assurance.

Unit V : Marketing Mix- People, Procedure and Physical Evidence

Internal Marketing-Personnel for Financial Services-TQM-Procedural issues in Financial Services- Role in Service Delivery-Physical evidence in Financial Services.

Text Books :

1. Balachandran S 2017, Customer Services Management Response Books ,New Delhi.
- 2.Chawla A.S and Others 2016, Indian Banking towards 21st Century, Deep and Deep Publications ,New Delhi..
- 3.Jha S.M 2016, Services Marketing Himalaya Publishing House, New Delhi

Supplementary Readings:

1. Rajeev Seth 2017, Marketing of Banking Services, MacMillan Publishing House,New Delhi.
- 2.Roland T Rust 2016, Services Marketing Addison Wesley,New York
- 3.Balaji B 2017, Service Marketing and Management S.Chand& Co ., New Delhi

Course Outcomes:

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

- CO1.** Explain the concept and features of financial services
- CO2.** Gain knowledge on segmentation strategy of marketing
- CO3.** Understand the significance of customer loyalty and product life cycle
- CO4.** Explain price and promotion strategy and protection of corporate image.
- CO5.** Describe 3 -Ps of service marketing

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5	PSO 6
CO1		✓	✓			✓	✓						✓		✓			
CO2	✓	✓					✓						✓		✓			
CO3						✓		✓	✓				✓					
CO4	✓	✓	✓	✓		✓	✓	✓	✓									
CO5		✓					✓		✓		✓		✓		✓			

Learning Objectives:

LO1. To enable the students to understand the need for innovative projects

LO2. To make the students to gain knowledge on Net Work Analysis of PERT and CPM methods

LO3. To gain expert knowledge on monitoring of cost control and evaluate the project performance

Unit I Project an Introduction

Meaning and Definition of Project – Features – Establishing a New Project – Organisation – Innovative Projects – Need for Project Management – Duties and Responsibilities of a Project Manager.

Unit II Project Feasibility Study

Project Feasibility Study – Market or Demand analysis – Technical and Financial Analysis of Projects.

Unit III Net Work Analysis

Minimization of Cost and Time of Projects – Net Work Analysis – PERT – Methods – CPM methods – Details.

Unit IV Project Cost Control

Project Cost Control – Cost forecasting – Monitoring and Control of Costs – Estimation techniques – Factorial, Man-hour, unit rate and operational cost estimation.

Unit V Project performance

Project performance – Indicators – Review of Project performance – Benefits – Project report – Project failures – Precautions and Practical guidelines.

Text Books:

- 1.Choudhury, S 2016, Project Management, Tata McGraw Hill Pub., New Delhi
- 2.KesavaRao,P.C 2017, Project Management and Control, Sultan Chand & Sons, New Delhi
- 3.PrasannaChandra 2017, Project Preparation, Appraisal, Implementation Tata McGraw Hill (P)., New Delhi.

Supplementary Readings:

- 1.Goel,BB 2017, Project Management: Principles and Techniques Deep & Deep Pub., New Delhi.
2. Harvey Maylor 2017, Project Management, MacMillan India Ltd., New Delhi.
- 3.JohnM.Nicholas- 2018, Project Management for Business Technology, Prentice Hall of India, New Delhi.

Course Outcomes:

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

- CO1.** Understand the role of project manager in establishing a New Project.
- CO2.** Evaluate the project feasibility study of new project in the market
- CO3.** Gain the knowledge of Net Work Analysis of PERT and CPM methods.
- CO4.** Determine the cost control methods in project.
- CO5.** Conduct performance appraisal of project report.

Outcome Mapping

CO/ PO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O1	PS O2	PS O3	PS O4	PS O5	PSO 6
CO1		✓	✓					✓	✓		✓	✓	✓		✓			
CO2	✓		✓	✓			✓	✓	✓				✓		✓			
CO3	✓				✓	✓	✓	✓					✓		✓			✓
CO4	✓					✓							✓		✓			
CO5	✓		✓	✓		✓	✓	✓	✓		✓	✓	✓		✓			✓

Learning Objectives:

LO1: To develop an appreciation about the utility of E-Banking practices

LO2: To understand the quality services of E-banking and various tools of E-banking

LO3: To evaluate the challenges in CRM with E-Banking and security issues of online Banking

Unit I: Introduction to CRM

Definitions – Need and importance of CRM in present scenario – CRM as a strategic marketing tool.

Unit II : Significance of CRM in Banking today

Meaning and concept of E-Banking – Advantages customer information Database – objectives of E-Banking – Customer facilities through E-Banking tools.

Unit III : CRM Practices

Importance of CRM through E-Banking – internal facilities, costs, quality of service and cost of communication

Unit IV : E- Payment system

Rupay – Rupay secure – IMPS – National unified USSD platform – (USSD) National Automated Clearing House (NACH) – National Financial Smith (NES) RTGS, NEFT. Innovative banking Payment system.

Unit V : Security Issues in CRM and E- Banking

Security and Privacy, Transactional difficulty, Technical issues and Level of Customer awareness.

Text books:

1. Abhijeet Singh and Brijesh Kumar 2011, Customer Relationship Management Tools: An Overview, Marketing Mastermind, Vol 11, pp 24.
2. Alokumar&Chhabi Sinha 2008, Customer relationship management concepts and application, 1st Ed, Sudha offset press, pp 3-16.
- 3.Mahmood Shah &steve Clarke 2009, E-Banking management: Issues, Solutions and Strategies

Supplementary Readings:

1. Alan Smith, 2006, CRM and customer service: Strategic asset or Corporate over-head, Handbook of Business Strategy, Vol 7, pp.87 – 93.
2. JayaramKondabagil 2012, Risk Management in Electronic banking: Concepts and Best Practices
- 3.Himani Sharma 2011, Bankers' Perspectives on E-Banking and Its Challenges: Evidence from North India" The IUP Journal of Bank Management

Course Outcomes:

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

CO1. Understand the important concepts in Customer Relationship Management

CO2. Master over e-banking and data base services day today

CO3. Attain knowledge in the e-banking practices

CO4. Have an idea of Understand e-payment system

CO5. Evaluate the security issues in CRM and e-banking

Outcome Mapping

CO/ PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO 10	PO 11	PO 12	PSO 1	PSO 2	PSO 3	PSO 4	PSO 5	PS O6
CO1											✓	✓	✓	✓	✓			✓
CO2	✓		✓	✓									✓	✓		✓	✓	✓
CO3	✓		✓			✓	✓								✓	✓	✓	✓
CO4	✓		✓						✓		✓	✓			✓	✓	✓	✓
CO5	✓		✓	✓					✓		✓	✓	✓		✓		✓	✓

Semester -3

**VALUE ADDED COURSE
(Visit University Students portal)**

**19CVAC310ARTIFICIAL INTELLIGENCE AND ITS APPLICATIONS IN
BUSINESS**

**Credits:
Hours**

Unit I: Introduction

Introduction - Intelligent Agents- Problem Solving

Unit II : Knowledge

Knowledge and Reasoning - Knowledge Representation- Knowledge Acquisition tools.

Unit III : Planning

Planning – Planning and Acting in the Real World

Unit IV : Learning

Learning - Knowledge in Learning- Statistical Learning Methods - Reinforcement Learning

Unit V : Communication

Communicating, Perceiving, and Acting - Natural Language Processing Communication– Robotics.

Text Books:

- 1.Dhanrajani, S. 2018. *AI and Analytics: Accelerating Business Decisions* (2 ed.). New York: Wiley.
- 2.Finlay, S. 2018. *Artificial Intelligence and Machine Learning for Business* (3 ed.). Relativistic
- 3.Prabhat Kumar . 2019. *Artificial Intelligence: Reshaping Life and Business* (1 ed.). New Delhi: BPB Publications.

Supplementary Readings:

- 1.John Medicine 2019. *Artificial Intelligence Business Applications* (1 ed.). New Delhi.
- 2.Rose, D. 2018. *Artificial Intelligence for Business* (1 ed.). Chicago: Chicago Lakeshore Press.
- 3.Yao, M., Zhou, A., & Jia , M.2019. *Applied Artificial Intelligence: A Handbook for Business Leaders* (1 ed.). New York: TOPBOTS.