# ALAGAPPA UNIVERSITY

(A State University Established in 1985)

Karaikudi - 630003. Tamil Nadu, India

2017 Accredited with A+ Grade by NAAC (CGPA : 3.64)

2018 MHRD Govt. of India UGC Graded as Category - 1 & Granted Autonomy

2018 MHRD Swachh Campus Rank : 4

2021 nirf National Institutional Ranking Framework Rank : 33

2021 QS University Rankings Asia Rank : 199

## FACULTY OF MANAGEMENT

## DEPARTMENT OF LOGISTICS MANAGEMENT


# M.B.A., LOGISTICS AND SUPPLY CHAIN MANAGEMENT

## REGULATIONS AND SYLLABUS

(For the candidates admitted from the Academic Year 2022 - 2023)

**DEPARTMENT OF LOGISTICS MANAGEMENT**
**M.B.A., LOGISTICS AND SUPPLY CHAIN MANAGEMENT**

# SYLLABUS

[For the candidates admitted from the Academic Year 2022 – 2023 onwards]


**ALAGAPPA UNIVERSITY**

(A State University Accredited with "A+" grade by NAAC (CGPA: 3.64) in the Third Cycle and Graded as Category-I University by MHRD-UGC)
Karaikudi -630003, Tamil Nadu.

**ALAGAPPA UNIVERSITY**
**DEPARTMENT OF LOGISTICS MANAGEMENT**
Karaikudi -630003, Tamil Nadu.

**SYLLABUS - (CBCS-University Department)**
**[For the candidates admitted from the Academic Year 2022 – 2023 onwards]**

Name of the Department : Logistics Management

Name of the Programme : M.B.A., Logistics and Supply Chain Management

Duration of the Programme : Full Time (Two Years)

**Choice-Based Credit System**
A choice-Based Credit System is a flexible system of learning. This system allows students to gain knowledge at their own tempo. Students shall decide on electives from a wide range of elective courses offered by the Department in consultation with the Department committee. Students may undergo additional courses and acquire more than the required number of credits. They can also adopt an inter-disciplinary and intra-disciplinary approach to learning and make the best use of the expertise of available faculty.

**Programme**
Two Year Full Time Post Graduate Programme in the Management Discipline and awarded as MBA (Logistics and Supply Chain Management) after successful completion of the programme as prescribed.

**Courses**
'Course' is a component (a paper) of a programme. Each course offered by the Department is identified by a unique course code. A course contains lectures/ tutorials/laboratory work/seminar/project work / practical training/report writing /Viva-voce, etc or a combination of these, to meet effectively the teaching and learning needs.

**Credits**
The Term "Credit" refers to the weightage given to a course, usually in relation to the instructional hours assigned to it. Normally in each of the courses credits will be assigned on the basis of the number of lectures/tutorials/laboratory and other forms of learning required to complete the course contents in a 15-week schedule. One credit is equal to one hour of lecture per week. For laboratory/field work one credit is equal to two hours. The detailed credit structure is given for better understanding. A Candidate has to secure 102 credits in total to complete the programme spread across four semesters.

**Semesters**
An Academic year is divided into two **Semesters.** In each semester, courses are offered in 15 teaching weeks and the remaining 5 weeks are to be utilized for conduct of examination and

evaluation purposes. Each week has 30 working hours spread over 5 days a week.

**Medium of Instruction**
English

**Departmental Committee**
The Departmental Committee consists of the faculty of the Department. The Departmental Committee shall be responsible for admission to all the programmes offered by the Department including the conduct of entrance tests, verification of records, admission, and evaluation. The Departmental Committee determines the deliberation of courses and specifies the allocation of credits semester-wise and course-wise. For each course, it will also identify the number of credits for lectures, tutorials, practical's, seminars etc. The courses (Core/Discipline Specific Elective/Non-Major Elective) are designed by teachers and approved by the Departmental Committees. Courses approved by the Departmental Committees shall be approved by the Board of Studies. A teacher offering a course will also be responsible for maintaining attendance and performance sheets (CIA-I, CIA-II, assignments and seminar) of all the students registered for the course. The non-major elective programme and MOOCs coordinator are responsible for submitting the performance sheet to the Head of the department. The Head of the Department consolidates all such performance sheets of courses pertaining to the programmes offered by the department. Then forward the same to be Controller of Examinations.

**Program Educational Objectives (PEOs):**

| | |
|---|---|
| **PEO 1** | Develop a comprehensive understanding of the fundamental concepts, principles, and practices of logistics and supply chain management. |
| **PEO 2** | Apply management knowledge, including accounting, finance, marketing, and business environment, to effectively manage logistics and supply chain operations in a business context. |
| **PEO 3** | Acquire quantitative skills and techniques to analyze data and improve decision-making processes in logistics and supply chain management. |
| **PEO 4** | Demonstrate the ability to design and optimize efficient and sustainable logistics and supply chain processes using advanced operations like quality management, lean principles, strategic planning, and green practices. |
| **PEO 5** | Develop a global perspective and understand the complexities of logistics and supply chain operations in the context of national and international business systems. |
| **PEO 6** | Cultivate problem-solving and critical thinking skills to address real-world challenges and complexities in logistics and supply chain management. |
| **PEO 7** | Foster effective communication and teamwork abilities to collaborate with diverse stakeholders and streamline the flow of information and resources within the supply chain. |
| **PEO 8** | Utilize technological advancements and data-driven approaches to optimize logistics and supply chain processes and enhance overall efficiency. |

| | |
|---|---|
| **PEO 9** | Instill ethical and sustainable practices in logistics and supply chain management to promote responsible business operations. |
| **PEO 10** | Engage in lifelong learning and professional development to stay updated with evolving industry trends and emerging best practices in logistics and supply chain management. |

**Program Specific Objectives (PSOs):**

| | |
|---|---|
| **PSO 1** | Upon completion of the program, students will demonstrate a comprehensive understanding of the fundamental concepts, principles, and practices of logistics and supply chain management through theoretical knowledge and practical application. |
| **PSO 2** | Leaners will be able to effectively apply management knowledge, including accounting, finance, management concept, and business environment, to analyze and manage logistics and supply chain operations in diverse business environments. |
| **PSO 3** | Students will acquire quantitative skills and techniques to analyze complex data sets and make data-driven decisions to optimize logistics and supply chain management processes for enhanced efficiency and effectiveness. |
| **PSO 4** | Upon completing the program, students will showcase their ability to design and optimize efficient and sustainable logistics and supply chain processes by integrating advanced operations such as quality management, lean principles, strategic planning, and green practices. |
| **PSO 5** | Leaners will develop a global perspective and a comprehensive understanding of the complexities involved in logistics and supply chain operations within national and international business systems, enabling them to make informed decisions in a global context. |

**Program Outcomes (POs):**

| | |
|---|---|
| **PO 1** | Introduction to Management Techniques in Business Environments. |
| **PO 2** | Evaluation of Organizational Systems and Processes, including Planning, Decision Making, Group Dynamics, Innovation, Production, Supply Chain, Operations, Technologies, Marketing, and Distribution Management. |
| **PO 3** | Designing Alternatives for Business Problem Solving through Quantitative Analysis and Critical Thinking. |
| **PO 4** | Research-Based Approaches to Company Analysis, Data Collection, and Interpretation for Business Problem Solutions. |
| **PO 5** | Effective Problem-Solving in Business Projects using Appropriate Tools and Techniques. |
| **PO 6** | Application of Economic Models, Accounting Principles, Statistical Techniques, and Financial Theories in Business Decision-Making. |
| **PO 7** | Utilizing Tools and Techniques from Various Functional Areas (Finance, |

| | |
|---|---|
| | Marketing, Business Environment, Operations, etc.) for Business Problem Handling. |
| **PO 8** | Integrating Ethical Considerations in Business Decision Making. |
| **PO 9** | Effective Communication through Technology and Logical Reasoning for Presentations, Documentation, Report Writing, and Manual Preparation. |
| **PO 10** | Emphasis on Lifelong Learning, Professional Development, Creativity, Innovation, and Global Business Operations Awareness. |

**Program Specific Outcomes (PSOs):**

| | |
|---|---|
| **PSO 1** | Apply management knowledge in accounting, finance, marketing, and human resources with a focus on logistics and supply chain for a business enterprise. |
| **PSO 2** | Utilize quantitative methods to enhance logistics and supply chain operations. |
| **PSO 3** | Apply fundamental concepts of logistics and supply chain in the context of national and international business systems. |
| **PSO 4** | Implement advanced operations such as quality, lean, strategy, and green practices to improve logistics and supply chain processes and ensure sustainability. |
| **PSO 5** | Develop analytical skills using information technology advancements to support decision making in logistics and supply chain systems. |

**Eligibility for Admission**

- Eligibility: Any degree from a recognized university in the 10+2+3 pattern or equivalent
- Selection of Admission: The selection of candidates shall be made on the basis of the Entrance Exam, Group Discussion & Interview
- Intake: The total number of candidates to be admitted to the programme would be 60 (Sixty) only.

**Minimum Duration of programme**

The programme is for a period of two years. Each year shall consist of two semesters viz. Odd and Even semesters. Odd semesters shall be from June / July to October / November and even semesters shall be from November / December to April / May. Each semester there shall be 90 working days consisting of 6 teaching hours per working day (5 days/week).

**Components**

A PG programme consists of a number of courses. The term "course" is applied to indicate a logical part of the subject matter of the programme and is invariably equivalent to the subject matter of a "paper" in the conventional sense. The following are the various categories of the courses suggested for the PG programmes:

**A. Core courses** (CC)- "Core Papers" means "the core courses" related to the programme concerned including practical's and project work offered under the programme and shall cover Core competency, critical thinking, analytical reasoning, and research skill.

**B. Discipline-specific electives** (DSE) means the courses offered under the programme related to the major but are to be selected by the students, and shall cover additional academic knowledge, critical thinking, and analytical reasoning.

**C. Non-Major Electives** (NME)- Exposure beyond the discipline

- Students have to undergo a total of Non-Major Elective courses with 2 credits offered by other departments (one in II Semester and another in III Semester)
- A uniform time frame of 3 hours on a common day (Tuesday) shall be allocated for the Non-Major Electives
- Non-Major Elective courses offered by the departments pertaining to a semester should be announced before the end of the previous semester.
- Registration process: Students have to register for the Non-Major Elective course within 15 days from the commencement of the semester either in the department or NME portal (University website).

**D. Self-Learning Courses from MOOCs platforms.**

- MOOCs shall be voluntary for the students.
- Students must undergo a total of 2 Self Learning Courses (MOOCs) one in II semester and another in III semesters.
- The actual credits earned through MOOCs shall be transferred to the credit plan of programmes as extra credits. Otherwise, 2 credits /course be given if the self-Learning Course (MOOCs) is without credit.
- While selecting the MOOCs, preference shall be given to the course related to employability skills.

**E. Projects / Training /Internships (Maximum Marks: 200)**

The student shall undertake the summer internship during the end of Second Semester and a project /training during the fourth semester.

**PLAN OF WORK**

**Project/Training**

The candidate shall undergo Project Work /Training during the final semester. The candidate should prepare a scheme of work for the project and should get approval from the guide. The candidate, after completing the project work, shall be allowed to submit it to the university department at the end of the final semester. The candidate has to undergo the project work in any of the business houses as per their convenience and they will be permitted only after getting approval from the guide and HOD.

**Format for Project / Training Report**

The format /certificate for thesis to be followed by the student are given below.

- Title page
- Certificate
- Acknowledgment
- Content as follows:

| Chapter No | Title | Page Number |
|---|---|---|
| 1 | Introduction | |
| 2 | Aim and objectives | |
| 3 | Review of literature | |
| 4 | Analysis | |
| 5 | Result | |
| 6 | Discussion | |
| 7 | Summary | |
| 8 | References | |

- **Format of the Title Page**

**Title of Dissertation/Project work**

Dissertation submitted in partial fulfilment of the requirement for the degree of Master of Science in _____to the Alagappa University, Karaikudi - 630003.

By

(Student Name)

(Register Number)

University Logo

**Department of ----------**

**Alagappa University**

*(A State University Accredited with "A+" grade by NAAC (CGPA: 3.64) in the Third Cycle and Graded as Category-I University by MHRD-UGC, 2019: QS ASIA Rank-216, QS BRICS Rank-104, QS India Rank-20)*

Karaikudi - 630003

(Year)

- **Format of Certificates-**

**Certificate -Guide**

This is to certify that the thesis entitled "----------" submitted to Alagappa University, Karaikudi-630 003 in partial fulfilment for the degree of Master of Business Administration (Logistics and Supply Chain Management) by Mr/Miss ----------(Reg No:----------) under my supervision. This is based on the results of studies carried out by him/her in the Department of----------, Alagappa University, Karaikudi-630 003. This Project or any part of this work has not been submitted elsewhere for any other degree, diploma, fellowship, or any other similar titles or record of any University or Institution.

**Certificate - (HOD)**

This is to certify that the thesis entitled **"----------"** submitted by Mr/**Miss ----------(Reg No: ----------)** to the Alagappa University, in partial fulfilment for the award of the degree of **Master of** --------in ---------- is a bonafide record of research work done under the supervision of **Dr.----------,** Assistant Professor, Department of----------, Alagappa University. This is to further certify that the thesis or any part thereof has not formed the basis of the award to the student of any degree, diploma, fellowship, or any other similar title of any University or Institution.

Place: Karaikudi Head of the Department
Date:_____

**Declaration (Student)**

I hereby declare that the dissertation entitled **"----------"** submitted to Alagappa University for the award of the degree of Master of -------- in ---------- has been carried out by me under the guidance of **Dr. ----------**, Assistant Professor, Department of----------, Alagappa University, Karaikudi – 630 003. This is my original and independent work and has not previously formed the basis of the award of any degree, diploma, associateship, fellowship, or any other similar title of any University or Institution.

Place: Karaikudi **(----------)**
Date:_____

**Internship**

The students shall undergo Internship / industrial training in the reputed organizations for minimum of four to six weeks to acquire industrial knowledge during the summer vacation at the end of second semester. The students have to find industry related to their discipline (Public limited/Private Limited/owner/NGOs etc.,) in consultation with the faculty in charge/Mentor and get approval from the Head of the Department and Departmental Committee before going for an internship / industrial training.

**Format to be followed for Internship Report**

The format for internship report to be followed by the student are given below

- **Format of the title page**

**Title of internship report**

Internship report submitted in partial fulfillment of the requirement for the Master of Business Administration in Logistics and Supply Chain Management to the Alagappa University, Karaikudi -630003.

By

(Student Name)

(Register Number)

University Logo

**Department of _____**

**Alagappa University**

*(A State University Accredited with "A+" grade by NAAC (CGPA: 3.64) in the Third Cycle and Graded as Category-I University by MHRD-UGC, 2019: QS ASIA Rank-216, QS BRICS Rank-104, QS India Rank-20)*

Karaikudi - 630003

(Year)

- **Format of certificate**

**(Faculty in-charge)**

This is to certify that the internship report entitled "----------" submitted to Alagappa University, Karaikudi-630 003 in partial fulfillment for the Master of Business Administration in _____by Mr/Miss ---------- (Reg. No.:----------) under my supervision. This is based on the work carried out by him/her in the organization M/S ----------. This Internship report or any part of this work has not been submitted elsewhere for any other degree, diploma, fellowship, or any other similar record of any University or Institution.

Place: Research Supervisor

Date:_____

**(HOD)**

This is to certify that the Internship report entitled "----------" submitted by Mr./Miss.---------- (Reg No:----------) to the Alagappa University, in partial fulfillment for the award of the Master of Science in _____is a bonafide record of Internship report done under the supervision of ----------, Assistant Professor, Department of ----------, Alagappa University and the work carried out by him/her in the organization M/S ----------. This is to further certify that the thesis or any part thereof has not formed the basis of the award to the student of any degree, diploma, fellowship, or any other similar title of any University or Institution.

Place: Karaikudi

Head of the Department

Date:_____

**(Company supervisor or Head of the Organization)**

This is to certify that the Internship report entitled "----------" submitted to Alagappa University, Karaikudi-630 003 in partial fulfillment for the Master of Business Administration in _____by Mr./Miss ---------- (Reg No:----------) under my supervision. This is based on the work carried out by him/her in our organization M/S ---------- for the period of ------. This Internship report or any part of this work has not been submitted elsewhere for any other degree, diploma, fellowship, or any other similar record of any University or Institution.

Place: Supervisor or In charge

Date:_____

**Declaration (student)**

I hereby declare that the Internship Report entitled "----------" submitted to the Alagappa University for the award of the Master of Business Administration in _____has been carried out by me under the supervision of----------, Assistant Professor, Department of----------, Alagappa University, Karaikudi – 630 003. This is my original and independent work carried out by me in the organization M/S ---------- for the period of ------ and has not previously formed the basis of the award of any degree, diploma, associateship, fellowship, or any other similar title of any University or Institution.

Place: Karaikudi (----------)

Date:_____

- Acknowledgment
- Content as follows:

| Chapter No. | Title | Page No. |
|---|---|---|
| 1 | Introduction | |
| 2 | Aim and objectives | |
| 3 | Organisation profile / details | |
| 4 | Methods / Work | |
| 5 | Observation and knowledge gained | |
| 6 | Summary and outcome of the Internship study | |
| 7 | References | |

**No. of copies of the Project/internship report**

The candidate should prepare three copies of the dissertation report and submit the same for the evaluation of examiners. After evaluation, one copy will be retained in the department library, one copy will be retained by the guide and the student shall hold one copy. The candidate should prepare one copy of the field visit/internship report and submit the same for the evaluation of examiners

**Attendance**

Students must have earned 75% of attendance in each course for appearing for the examination. Students who have earned 74% to 70% of attendance need to apply for condonation in the prescribed form with the prescribed fee. Students who have earned 69% to 60% of attendance need to apply for condonation in the prescribed form with the prescribed fee along with the Medical Certificate. Students who have below 60% of attendance are not eligible to appear for the End Semester Examination (ESE). They shall re-do the semester(s) after completion of the programme.

**Examination**

The examinations shall be conducted separately for theory and practical's to assess (remembering, understanding, applying, analysing, evaluating, and creating) the knowledge required during the study. There shall be two systems of examinations viz., internal and external examinations. The internal examinations shall be conducted as Continuous Internal Assessment tests I and II (CIA Test I & II).

***A. Internal Assessment***

The internal assessment shall comprise a maximum of 25 marks for each subject. The following procedure shall be followed for awarding internal marks.

Theory -25 marks

| Sr.No | Content | Marks |
|---|---|---|
| 1 | Average marks of two CIA test | 15 |
| 2 | Seminar/group discussion/quiz | 5 |
| 3 | Assignment/field trip report/case study report | 5 |
| | Total | 25 |

Practical -25 Marks

| | | |
|---|---|---|
| 1 | Average marks of two CIA test | 15 marks |
| 2 | Attendance | 2 marks |
| 3 | Observation note book | 8 marks |
| | Total | 25 Marks |

Internship- 25 Marks (assess by Guide/in charge/HOD/Supervisor)

| | | |
|---|---|---|
| 1 | Presentations | 15 Marks |
| 2 | Progress report | 10 Marks |
| | Total | 25 Marks |

Project/Dissertation -50 Marks (assess by Guide /in charge /HOD/ Supervisor)

| | | |
|---|---|---|
| 1 | Two presentations (mid-term) | 30 Marks |
| 2 | Progress report | 20 Marks |
| | Total | 50 Marks |

***B. External Examination***

- There shall be examinations at the end of each semester, for odd semesters in the month of October / November; for even semesters in April / May.
- A candidate who does not pass the examination in any course(s) may be permitted to appear in such failed course(s) in the subsequent examinations to be held in October / November or April / May. However, candidates who have arrears in Practical shall be permitted to take their arrear Practical examination only along with Regular Practical examination in the respective semester.
- A candidate should get registered for the first-semester examination. If registration is not possible owing to a shortage of attendance beyond condo nation limit/regulation prescribed OR belated joining OR on medical grounds, the candidates are permitted to move to the next semester. Such candidates shall re-do the missed semester after completion of the programme.

- For the Project Report/ Dissertation Work the maximum marks will be 100 marks for project report evaluation and for the Viva-Voce it is 50 marks
- For the Internship the maximum marks will be 50 marks for project report evaluation and for the Viva –Voce it is 25 marks.
- Viva-Voce: Each candidate shall be required to appear for the Viva-Voce Examination (in defense of the Dissertation Work / Internship).

### *C. Scheme of External Examination (Question Paper Pattern)*

Theory - Maximum 75 Marks

| | | | |
|---|---|---|---|
| **Section A** | 10 questions. All questions carry equal marks. (Objective-type questions) | 10 x 1 = 10 Marks | 10 questions – 2 each from every unit |
| Section B | 5 questions Either / or type like 1.a (or) b. All questions carry equal marks | 5 x 5 = 25 | 5 questions – 1 each from every unit |
| Section C | 5 questions Either / or type like 1.a (or) b. All questions carry equal marks | 5 x8 = 40 | 5 questions – 1 each from every unit |

Practical –Maximum 75 Marks

| | | |
|---|---|---|
| Section A | Major experiment | 15 Marks |
| Section B | Minor experiment | 10 Marks |
| Section C | Experimental setup | 5 Marks |
| Section D | Spotters ( 5 spotters x5 marks ) | 25 Marks |
| Section E | Record note | 10 Marks |
| Section F | Vivo voce | 10 Marks |

Dissertation /Project report Maximum 150 Marks

| | |
|---|---|
| Dissertation /Project report | 100 Marks |
| Vivo voce | 50 Marks |

Internship report Maximum 75 Marks

| | |
|---|---|
| Internship report | 50 Marks |
| Vivo voce | 25 Marks |

**Guidelines For setting OBE Question Paper**

- Prepare question paper as per O B E pattern based on Blooms Taxonomy level**.**
- There are three types of OBE question papers (up to K3 Level, up to K5 Level, and up to K6 level). This question will be of up to K6 level category.
- The questions need not be chosen based on their corresponding CO level alone (for instance, **if the outcome of Unit-1 i.e. CO -1** is of Remember Level, apart from remember level,

questions can be chosen from other levels also.

- ❖ The unit wise, course outcome wise, and Bloom's level wise equity of questions and marks must be maintained.
- ❖ The estimated **easy, average, and difficulty level of questions must be 20%, 60%, and 20% respectively** (i.e.15 marks for easy, 45 marks for average, and 15 marks for difficult level questions).
- ❖ The questions may vary in their difficult level. Thus, QP setter may verify the level of COs and POs correlation (Strong =3, Medium = 2, and Low = 1) and choose verbs accordingly.

| LEVEL | | ACTION VERBS |
|---|---|---|
| **KI** | **Remember** | Arrange, collect, define, describe, duplicate, enumerate, examine, find, identify, label, list, locate, memorise, name, order, outline, present, quote, recall, recognise, recollect, record, recount, relate, repeat, reproduce, show, state, tabulate, tell. |
| **K2** | **Comprehension** | Associate, change, clarify, classify, construct, contrast, convert, decode, defend, describe, differentiate, discriminate, discuss, indicate, infer, interpret, locate, predict, recognise, report, restate, distinguish, estimate, explain, express, extend, generalise, identify, illustrat, select, solve, translate. |
| **K3** | **Apply** | Apply, assess, calculate, change, choose, complete, compute, construct, demonstrate, develop, design, discover, dramatise, employ, examine, experiment, find, illustrate, interpret, manipulate, modify, operate, organise, practice, predict, prepare, produce, relate, schedule, select, show, sketch, solve, transfer, use. |
| **K4** | **Analyse** | Analyse, appraise, arrange, break down, calculate, categorise, classify, compare, connect, contrast, criticise, debate, deduce, determine, differentiate, discriminate, distinguish, divide, examine, experiment, identify, illustrate, infer, inspect, investigate, order, outline, point out, question, recognise, relate, separate, solve, sub-divide, test. |
| **K5** | **Evaluate** | Appraise, ascertain, argue, assess, attach, choose, compare, conclude, contrast, convince, criticise, decide, defend, discriminate, explain, evaluate, interpret, judge, justify, measure, predict, rate, recommend, relate, resolve, revise, score, summarise, support, validate, value. |
| **K6** | **Create** | categorise, collect, combine, compile, compose, construct, create, design, develop, devise, establish, explain, formulate, generalise, generate, infer, integrate, invent, make, manage, modify, organise, originate, plan, |

| LEVEL | | ACTION VERBS |
|---|---|---|
| | | prepare, propose, rearrange, reconstruct, relate, reorganise, revise, rewrite, set up, summarise. |

**OBE QUESTION PAPER (MODEL)**
**41103-Research Methods in Education**

**Time 3 hours**
**Total Marks: 75**

| COs | Level | Q. No. | Items | Action Verb |
|---|---|---|---|---|
| **PART – A (10 X 1=10 MARKS)**<br>**I. ANSWER ALL THE FOLLOWING OBJECTIVE QUESTIONS BY CHOOSING THE CORRECT OPTION** | | | | |
| CO1 | K1 | 1 | Research gap is **identified** out of<br>a) Related Studies b) Meta Analysis c) Content Analysis d) Methodology | Find out |
| CO1 | K2 | 2 | If a hypothesis simply states that there will be a difference between the two groups/conditions but does not say which will be greater/smaller, quicker/slower etc., what **kind** it is?<br>a) Non-directional b) Directional c) Research d) Simple | Categorise |
| CO2 | K2 | 3 | The investigation should mandatorily be employed **only afterfact** occurred is / an<br>a) Survey b) Case-study c) Cross-Sectional<br>d) Expost - facto | Infer |
| CO2 | K2 | 4 | One of the following is **comparatively least effective** in fetching multiple data<br>a) Rating Scale b) Likert Scale c) Checklist d) Ranklist | Generalise |
| CO3 | K5 | 5 | Content analysis **involves**<br>a) Text only b) Text and Image only c) Text, Image, and Audio only d) Text, Image, Audio, and Video all | Determine |
| CO3 | K5 | 6 | If you want to learn about **a unique phenomenon**, the---------- case study is to be adopted<br>a) Instrumental b) Intrinsic c) Collective d) Multiple | Justify |
| CO4 | K4 | 7 | To Grade a student against a set of pre-specified qualities, **you have to use** ----------test<br>a) Diagnostic b) Prognostic c) Norm referenced<br>d) Criterion referenced | Categorise |
| CO4 | K1 | 8 | If your tool is correlated with pre standardised tool, **it is said to be** ---------- validity<br>a) Content b) Construct c) Concurrent d) Criterion | Recognise |

**OBE QUESTION PAPER (MODEL)**
**41103-Research Methods in Education**

**Time 3 hours**
**Total Marks: 75**

| COs | Level | Q. No. | Items | Action Verb |
|---|---|---|---|---|
| CO5 | K1 | 9 | The Ogive graph explains **data values on** a) horizontal plane axis b) vertical plane axis c) Bothd) None of the above | Label |
| CO5 | K2 | 10 | A test comparing **individual's performance with that of** a group is a) Diagnostic b) Prognostic c) Norm referenced d) Criterion referenced | Compare |
| **PART – B ( 5 X 5=25 MARKS)** **II. ANSWER ALL THE QUESTIONS NOT MORE THAN 200 WORDS EACH.** | | | | |
| CO1 | K4 | 11a | **Compare and contrast** science and social science research | Compare |
| (OR ) | | | | |
| CO1 | K2 | 11b | **Interpolate** the problems faced by the Educational Researcher | interpolate |
| CO2 | K5 | 12a | **Rationale** the importance of a good Hypothesis with example. | Justify |
| (OR ) | | | | |
| CO2 | K6 | 12b | **Draw a brief note** on the merits of Non- probability sampling techniques. | Construct |
| CO3 | K5 | 13a | " Expost - facto study is an unique one". **Justify** the assertion with suitable evidence. | Rationale |
| (OR ) | | | | |
| CO3 | K2 | 13b | **Why** Interdisciplinary approach is an important in the contemporary research? Explore. | Explore |
| CO4 | K2 | 14a | **Distinguish** between NRT and CRT | Distinguish |
| (OR ) | | | | |
| CO4 | K3 | 14b | How would you **arrange** DVs of stems through item analysis? **Calculate** using your own example. | Demonstrate |
| CO5 | K5 | 15a | **Critique** the necessity of APA style in preparing research report. | Critique |
| (OR ) | | | | |
| CO5 | K6 | 15b | **Formulate** a skeleton for the research proposal with examples | Formulate |
| **PART – C ( 5 X 8=40 MARKS)** **III. ANSWER ALL QUESTIONS NOT MORE THAN 1500 WORDS EACH** | | | | |
| CO1 | K1 | 16a | **List and tabulate** the types of educational research in detail. | List and tabulate |

**OBE QUESTION PAPER (MODEL)**
**41103-Research Methods in Education**

**Time 3 hours**
**Total Marks: 75**

| COs | Level | Q. No. | Items | Action Verb |
|---|---|---|---|---|
| | | | (OR ) | |
| CO1 | K4 | 16b | How would you operationalise the key terms of your research title? **Outline** in detail. | Outline |
| CO2 | K3 | 17a | "Quasi-experimental research **is not a true** experimental research". **Manipulate** the assertion in detail. | Manipulate |
| | | | (OR ) | |
| CO2 | K5 | 17b | Draw a **research design for** the Longitudinal Survey using your own example | Recommend |
| CO3 | K5 | 18a | How phenomenological research **is areal** qualitative approach? Rationalise with valid points. | Justify |
| | | | (OR ) | |
| CO3 | K2 | 18b | **Why** participant observation is essential for ethnographical research? | Defend |
| CO4 | K2 | 19a | Draw a **detailed sketch** on the observation for both quantitative and qualitative techniques. | Interpret |
| | | | (OR ) | |
| CO4 | K3 | 19b | How will you **administer** semi-structured interview? Write in qualitative data perspectives. | Apply/Assess |
| CO5 | K4 | 20a | **Illustrate** a brief Synopsis using your own example | Illustrate |
| | | | (OR ) | |
| CO5 | K1 | 20b | **What are** the components will you **expect** while evaluating research report?Write in detail. | Recall |

**Results**

The results of all the examinations will be published through the Department where the student underwent the course as well as through University Website

**Passing minimum**

- A candidate shall be declared to have passed in each course if he/she secures not less than 40% marks in the End Semester Examinations and 40% marks in the Internal Assessment and not less than 50% in the aggregate, taking Continuous assessment and End Semester Examinations marks together.
- The candidates not obtained 50% in the Internal Assessment are permitted to improve their Internal Assessment marks in the subsequent semesters (2 chances will be given) by writing the CIA tests and by submitting assignments.

- Candidates, who have secured the pass marks in the End-Semester Examination and in the CIA but failed to secure the aggregate minimum pass mark (E.S.E + C I.A), are permitted to improve their Internal Assessment mark in the following semester and/or in university examinations.
- A candidate shall be declared to have passed in the Project / Dissertation / Internship if he /she gets not less than 40% in each of the Project / Dissertation / Internship and Viva-Voce and not less than 50% in the aggregate of both the marks for Project / Dissertation / Internship Report and Viva-Voce.
- A candidate who gets less than 50% in the Project Report must resubmit the Project Report. Such candidates need to take again the Viva-Voce on the resubmitted Project.

**Grading of the Courses**

The following table gives the marks, Grade points, Letter Grades and classifications meant to indicate the overall academic performance of the candidate.

Conversion of Marks to Grade Points and Letter Grade (Performance in Paper / Course)

| Range of Marks | Grade Points | Letter Grade | Description |
|---|---|---|---|
| 90 - 100 | **9.0 – 10.0** | **O** | **Outstanding** |
| 80 - 89 | **8.0 – 8.9** | **D+** | **Excellent** |
| 75 - 79 | **7.5 – 7.9** | **D** | **Distinction** |
| 70 - 74 | **7.0 – 7.4** | **A+** | **Very Good** |
| 60 - 69 | **6.0 – 6.9** | **A** | **Good** |
| 50 - 59 | **5.0 – 5.9** | **B** | **Average** |
| 00 - 49 | **0.0** | **U** | **Re-appear** |
| Absent | **0.0** | **AAA** | **ABSENT** |

a) Successful candidates passing the examinations and earning GPA between 9.0 and 10.0 and marks from 90 – 100 shall be declared to have Outstanding (O).
b) Successful candidates passing the examinations and earning GPA between 8.0 and 8.9 and marks from 80 - 89 shall be declared to have Excellent (D+).
c) Successful candidates passing the examinations and earning GPA between 7.5 – 7.9 and marks from 75 - 79 shall be declared to have Distinction (D).
d) Successful candidates passing the examinations and earning GPA between 7.0 – 7.4 and marks from 70 - 74 shall be declared to have Very Good (A+).
e) Successful candidates passing the examinations and earning GPA between 6.0 – 6.9 and marks from 60 - 69 shall be declared to have Good (A).
f) Successful candidates passing the examinations and earning GPA between 5.0 – 5.9 and marks from 50 - 59 shall be declared to have Average (B).
g) Candidates earning GPA between 0.0 and marks from 00 - 49 shall be declared to have Re-appear (U).
h) Absence from an examination shall not be taken as an attempt.

From the second semester onwards the total performance within a semester and continuous performance starting from the first semester are indicated respectively **by Grade Point Average (GPA) and Cumulative Grade Point Average (CGPA).** These two are calculated by the following formulate.

$$\text{GRADE POINT AVERAGE (GPA)} = \Sigma_i C_i G_i / \Sigma_i C_i$$

$$\text{GPA} = \frac{\text{Sum of the multiplication of Grade Points by the credits of the courses}}{\text{Sum of the credits of the courses in a Semester}}$$

**Classification of the final result**

| CGPA | Grade | Classification of Final Result |
|---|---|---|
| 9.5 – 10.0 | **O+** | First Class – Exemplary* |
| 9.0 and above but below 9.5 | **O** | |
| 8.5 and above but below 9.0 | **D++** | First Class with Distinction* |
| 8.0 and above but below 8.5 | **D+** | |
| 7.5 and above but below 8.0 | **D** | |
| 7.0 and above but below 7.5 | **A++** | First Class |
| 6.5 and above but below 7.0 | **A+** | |
| 6.0 and above but below 6.5 | **A** | |
| 5.5 and above but below 6.0 | **B+** | Second Class |
| 5.0 and above but below 5.5 | **B** | |
| 0.0 and above but below 5.0 | **U** | Re-appear |

The final result of the candidate shall be based only on the CGPA earned by the candidate.

a) Successful candidates passing the examinations and earning CGPA between 9.5 and 10.0 shall be given Letter Grade (O+), those who earned CGPA between 9.0 and 9.4 shall be given Letter Grade (O) and declared to have First Class –Exemplary*.
b) Successful candidates passing the examinations and earning CGPA between 7.5 and 7.9 shall be given Letter Grade (D), those who earned CGPA between 8.0 and 8.4 shall be given Letter Grade (D+), those who earned CGPA between 8.5 and 8.9 shall be given Letter Grade (D++) and declared to have First Class with Distinction*.
c) Successful candidates passing the examinations and earning CGPA between 6.0 and 6.4 shall be given Letter Grade (A), those who earned CGPA between 6.5 and 6.9 shall be given Letter Grade (A+), those who earned CGPA between 7.0 and 7.4 shall be given Letter Grade (A++) and declared to have First Class.
d) Successful candidates passing the examinations and earning CGPA between 5.0 and 5.4 shall be given Letter Grade (B), those who earned CGPA between 5.5 and 5.9 shall be given Letter Grade (B+) and declared to have passed in Second Class.

i) Candidates those who earned CGPA between 0.0 and 4.9 shall be given Letter Grade (U) and declared to have Re-appear.
e) Absence from an examination shall not be taken as an attempt.

$$\text{CUMULATIVE GRADE POINT AVERAGE (CGPA)} = \Sigma_n \Sigma_i C_{ni} \; G_{ni} / \Sigma_n \Sigma_i C_{ni}$$

CGPA = Sum of the multiplication of Grade Points by the credits of the entire Programme
Sum of the credits of the courses for the entire Programme

Where '**Ci**' is the Credit earned for Course i in any semester; '**Gi**' is the Grade Point obtained by the student for Course i and 'n' refers to the semester in which such courses were credited.

**CGPA** (Cumulative Grade Point Average) = Average Grade Point of all the Courses passed starting from the first semester to the current semester.

Note: * The candidates who have passed in the first appearance and within the prescribed Semesters of the PG Programme are alone eligible for this classification.

**Maximum duration of the completion of the programme**

The maximum period for completion of MBA in Logistics and Supply Chain Management shall not exceed eight semesters continuing from the first semester.

**Conferment of the master's degree**

A candidate shall be eligible for the conferment of the Degree only after he/ she has earned the minimum required credits for the Programme prescribed therefore (i.e. 95 credits).

**Village Extension Programme**

The Sivaganga and Ramnad Districts are very backward districts where most people Lives in poverty. The rural mass is economically and educationally backward. Thus, the aim of the introduction of this Village Extension Programme is to extend out to reach environmental awareness, social activities, hygiene, and health to the rural people of this region. The students in their third semester must visit any one of the adopted villages within the jurisdiction of Alagappa University and can arrange various programs to educate the rural mass in the following areas for three days based on the theme environmental awareness and hygiene and health. A minimum of two faculty members can accompany the students and guide them.

**What to do after for MBA (Logistics and Supply Chain Management):** Doctor of Philosophy and Post Doctoral Philosophy in Management Specialization in Logistics and Supply Chain Management.

**Job and Career option:** MBA Logistics and Supply Chain Management offers a wide range of career opportunities, with a chance to work as a Strategic Sourcing Manager, Operations Excellence Manager, Supply Chain Performance Analyst, Business Operations Manager, VP of Supply Chain Operations, Manager of Global Sourcing, Logistics and Transportation Analyst, and Warehouse operations.

**Employment Areas**

- Logistics and shipping companies.
- Export and Import houses.
- C & F Agents
- Manufacturing firms.

- IT companies.
- Trading companies.
- Port trusts across the nation.
- Warehousing companies.
- FMCG Sector
- Banking Sector

**GRADUATE ATTRIBUTES (GAs)**

GAs- Skills/Knowledge/Abilities/attitudes of the students beyond the disciplinary content knowledge but are applicable in a range of contexts in their lives. Domine expertise, technical competency, Transferrable skills, interdisciplinary knowledge, personality, personal growth, communication, critical thinking, problem-solving, individual and teamwork, professional ethics and social values, entrepreneurship quality, environment and sustainability, and life-long learning.

**PROGRAMME EDUCATIONAL OBJECTIVE (PEOs)** -Required 10

The statements that describe the expected achievements of graduates in their career, and also in particular, what the graduates are expected to perform and achieve during the first few years after graduation.

**PROGRAMME OUTCOMES** (POs) align closely with Graduate Attributes (Required10 POs). Programme Outcomes are statements that describe what students are expected to be able to do by the time of graduation.

**PROGRAMME SPECIFIC OBJECTIVE (PSO)** - Required 5

What the graduates are expected to accomplish and attain during the first few years after graduation with reference specific to the programme.

**PROGRAMME SPECIFIC OUTCOMES (PSOs)** -Required 5

Programme Specific Outcomes are what the students should be able to do at the time of graduation with reference to a specific discipline.

**COURSE OUTCOME (COs)**

Statements that describe significant and essential learning that learners have achieved and can be reliably demonstrated at the end of a course.

- o Higher-order thinking/ skills in each domain of learning
- o Unit-wise one outcome each (total 5)
- o Statements are defined by considering the course content covered in each module of a course.
- o Attainment of each COs should lead to the attainment of more than one POs.
- o Should indicate Students' mastery after completing a course
- o Students able to do what they have learnt

**Verbs/Phrase to be used for writing the COs- compile, identify, create, plan, revise,**

**analyze, design, select, utilize, apply, demonstrate, prepare, use, discuss, compute, explain, predict, assess, compare, outline, evaluate, and rate.**

COs of a programme's courses correlated to the attainment of the respective POs and PSOs and POs are mainly formulated on the basics of GAs

**Achievement of POs would lead to the achievement of GAs by passing out.**

**Assessment**

CIA, alternate assessment tools, seminar, end semester exam, laboratory and project work, course exit survey, programme exit survey, alumni survey, employer survey, course expert committee, programme assessment and quality improvement committee, department advisory board, faculty meeting, professional society.

**Bloom taxonomy -Learning/Knowledge level.**

| | | |
|---|---|---|
| **Ll/Kl** | **Remember** | Student recall (or) remember the information Questions: Arrange, Choose, Define, Describe, Find, How, Label, List, Match, Name, Relate, Recall, Show, What, Why) |
| **L2/K2** | **Understand** | Can the student explain ideas (or) concepts Questions: classify, compare, convert, Explain, Express, Illustrate, Outline, Relate, Show, Summaries, Translate. |
| **L3/K3** | **Apply** | Can the student use information in a new way. Question: Construct, Develop, Discover, Identify, Interview, modify, Predict, Practice, Solve. |
| **L4/K4** | **Analyze** | Can the student distinguish between the different analysis parts? Question: Categories, Classify, Compare, Distinguish, Generate, Examine, Interpret, Operate, Simplify. |
| **L5/K5** | **Evaluate** | Can the student justify a stand (or) decision? Question: Assess, Choose, Compare, Determine, Evaluate, Explain, Interpret, Justify, Measure, Priorities, Prove, Select. |
| **L6/K6** | **Create** | Can the student Create a new product (or)point of view) Question: Choose, Compile, Compose, Construct, Create, Develop, Discuss, Elaborate, Estimate, Formulate, Maximize, Minimize, Modify, Propose, Solve. |

**Programme outcome Model.**

| | |
|---|---|
| **PO1** | Basic Science Knowledge |
| **PO2** | Problem Analysis |
| **PO3** | Solutions |
| **PO4** | Investigate Complex problem |
| **PO5** | Modem Tool used |
| **PO6** | The Science/ Arts and Society |
| **PO7** | Environment and Sustainability |
| **PO8** | Ethics |
| **PO9** | Individual and teamwork |
| **PO10** | Communication |
| **PO11** | Project management and Finance |
| **PO12** | Lifelong Learning |

**Bloom Taxonomy (Vs) Programme outcome.**

| **Bloom's Level** | | | **Programme Outcomes (POs)** |
|---|---|---|---|
| Remember | Lower Order Thinking | Knowledge | |
| Understand | | | |
| Apply | | | **PO1** |
| Analyse | Higher Order Thinking | | **PO2** |
| Evaluate | | | **PO3** |
| Create | | Skill | **PO4, PO5, PO10, PO11** |
| | | Attitude | **PO6, PO7, PO8, PO9, PO12** |

- Knowledge is inculcated through - PO1, PO2, PO3, PO4
- Skill is inculcated through- PO5, PO10, PO11
- Attitude is inculcated through- PO6, PO7, PO8,PO9,PO12

## M.B.A., LOGISTICS AND SUPPLY CHAIN MANAGEMENT

## PROGRAMME STRUCTURE

| No. | Course Code | Title of the Paper | | T/P/ V* | Credits | Hours/ Week | Marks | | |
|---|---|---|---|---|---|---|---|---|---|
| **I Semester** | | | | | | | **I** | **E** | **Total** |
| 1 | 654101 | Core 1 | Management Concepts & Organizational Behaviour | T | 4 | 4 | 25 | 75 | 100 |
| 2 | 654102 | Core 2 | Managerial Economics | T | 3 | 3 | 25 | 75 | 100 |
| 3 | 654103 | Core 3 | Accounting and Financial Management | T | 4 | 4 | 25 | 75 | 100 |
| 4 | 654104 | Core 4 | Business Environment | T | 3 | 3 | 25 | 75 | 100 |
| 5 | 654105 | Core 5 | Principles of Logistics & Supply Chain Management | T | 3 | 3 | 25 | 75 | 100 |
| 6 | 654106 | Core 6 | Operations Research | T | 4 | 4 | 25 | 75 | 100 |
| 7 | 654107 | Core 7 | ICT For Business | P | 2 | 4 | 25 | 75 | 100 |
| 8 | 6541EP | Core 8 | Executive Communication Programme | V | 2 | 2 | 25 | 75 | 100 |
| | | | Yoga/Lib/GD | P | | 3 | | | |
| | | | **Sub Total** | | **25** | **30** | **200** | **600** | **800** |
| **II Semester** | | | | | | | **I** | **E** | **Total** |
| 9 | 654201 | Core 9 | Business Research Methodology | T | 4 | 4 | 25 | 75 | 100 |
| 10 | 654202 | Core 10 | Supply Chain Finance Operations | T | 4 | 4 | 25 | 75 | 100 |
| 11 | 654203 | Core 11 | Production and Operations Management | T | 4 | 4 | 25 | 75 | 100 |
| 12 | 654204 | Core 12 | Export & Import Management | T | 3 | 3 | 25 | 75 | 100 |
| 13 | 654205 | Core 13 | Logistics Legal Framework and Maritime Documentation | T | 3 | 4 | 25 | 75 | 100 |
| 14 | 6542EP | Core 14 | Executive Presentation Programme | V | 2 | 3 | 25 | 75 | 100 |
| 15 | 6542P1 | Core 15 | Business Analytics Lab | P | 2 | 4 | 25 | 75 | 100 |
| 16 | - | NME | NME* | T | 2 | 3 | 25 | 75 | 100 |
| | | | Yoga/Lib/Lab | P | | 1 | | | |
| | | | **Sub Total** | | **24** | **30** | **200** | **600** | **800** |
| **III Semester** | | | | | | | **I** | **E** | **Total** |
| 17 | 654301 | Core 16 | Digital Supply Chain Management | T | 4 | 4 | 25 | 75 | 100 |
| 18 | 654302 | Core 17 | International Marketing Management | T | 4 | 4 | 25 | 75 | 100 |
| 19 | | DSE1 | **Choose any two DSE from Group 1 and Group 2** | T | 3 | 3 | 25 | 75 | 100 |
| 20 | | DSE2 | | T | 3 | 3 | 25 | 75 | 100 |
| 21 | | DSE3 | | T | 3 | 3 | 25 | 75 | 100 |
| 22 | | DSE 4 | | T | 3 | 3 | 25 | 75 | 100 |
| 23 | 6543EP | | Executive Leadership Programme | V | 2 | 3 | 25 | 75 | 100 |
| 24 | 6543T1 | | Summer Internship - On- Job Training | V | 2 | | 25 | 75 | 100 |
| 25 | | | NME* | T | 2 | 3 | 25 | 75 | 100 |
| | | | Yoga/Lib/Lab/GD | P | | 4 | | | |
| | | | **Sub Total** | | **26** | **30** | **225** | **675** | **900** |
| **IV Semester** | | | | | | | **I** | **E** | **Total** |
| 26 | 654401 | Core 20 | Warehouse & Distribution Management | T | 4 | 4 | 25 | 75 | 100 |
| 27 | 654402 | Core 21 | Entrepreneurship & Innovation | T | 4 | 4 | 25 | 75 | 100 |
| 28 | | DSE5 | **Choose any three DSE from Group 1 and Group 2 by opting at least one Course either from Group1 or Group 2** | T | 3 | 3 | 25 | 75 | 100 |
| 29 | | DSE6 | | T | 3 | 3 | 25 | 75 | 100 |
| 30 | | DSE7 | | T | 3 | 3 | 25 | 75 | 100 |
| 31 | 6544P1 | | Project / Training | V | 8 | 8 | 25 | 75 | 100 |
| 32 | 6544EP | | Executive Negotiation Programme | V | 2 | 3 | 25 | 75 | 100 |
| | | | Yoga/Lib/ | P | | 2 | | | |
| | | | **Sub Total** | | **27** | **30** | **175** | **525** | **700** |
| | | | **Grand Total** | | **102** | **109** | **800** | **2400** | **3200** |

**V* – Evaluation will be done based on the performance in the Viva Voce examination.**

| List of Discipline Specific Electives offered in III and IV Semester | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **III Semester** | | | | | | | | | |
| **Choose any Two DSE from Group 1 and Group 2** | | | | | | | | | |
| **No.** | **Course Code** | | **Title of the Paper** | **T/P/ V** | **Credit** | **Hours/ Week** | **Marks** | | |
| **Group 1: Logistics Management** | | | | | | | **I** | **E** | **Total** |
| | 6543E1 | | Purchasing & Strategic Sourcing | T | 3 | 3 | 25 | 75 | 100 |
| | 6543E2 | | International Trade Logistics | T | 3 | 3 | 25 | 75 | 100 |
| | 6543E3 | | Materials Management | T | 3 | 3 | 25 | 75 | 100 |
| | 6543E4 | | Containerization and Multimodal transportation | T | 3 | 3 | 25 | 75 | 100 |
| **Group 2: Supply Chain Management** | | | | | | | **I** | **E** | **Total** |
| | 6543E5 | | Supply Chain Planning and Coordinating | T | 3 | 3 | 25 | 75 | 100 |
| | 6543E6 | | Global Supply Chain Management | T | 3 | 3 | 25 | 75 | 100 |
| | 6543E7 | | Retail & Supply Chain Management | T | 3 | 3 | 25 | 75 | 100 |
| | 6543E8 | | Supply Chain Risk Management | T | 3 | 3 | 25 | 75 | 100 |
| **IV Semester** | | | | | | | | | |
| **Choose any three DSE from Group 1 and Group 2 by opting at least one Course either from Group1 or Group 2** | | | | | | | | | |
| **Group 1: Logistics Management** | | | | | | | **I** | **E** | **Total** |
| | 6544E1 | | Port Management | T | 3 | 3 | 25 | 75 | 100 |
| | 6544E2 | | Green Logistics | T | 3 | 3 | 25 | 75 | 100 |
| | 6544E3 | | Logistics Project Planning Management | T | 3 | 3 | 25 | 75 | 100 |
| **Group 2: Supply Chain Management** | | | | | | | **I** | **E** | **Total** |
| | 6544E4 | | Agro Supply Chain Management | T | 3 | 3 | 25 | 75 | 100 |
| | 6544E5 | | Sustainable Supply Chain Management | T | 3 | 3 | 25 | 75 | 100 |
| | 6544E6 | | Supply Chain Analytics | T | 3 | 3 | 25 | 75 | 100 |

**Non-Major Elective (Offered to other Department Students)**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Principles of Logistics and Supply Chain Management | T | 2 | 3 | 25 | 75 | 100 |
| | Distribution Management | T | 2 | 3 | 25 | 75 | 100 |

| SEMESTER - I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code: 654101** | **Management Concepts and Organizational Behaviour** | **T** | **Credits: 4** | **Hours:4** |

| UNIT –I | | |
|---|---|---|
| **Objective 1** | To understand basic information about the fundamentals of Management and basics of organization behaviour. | |
| Management: Definition – Nature – Scope and Functions – Evolution of Management thought – Contributions of F.W Taylor, Henri Fayol, Elton Mayo, Roethlisberger, H. A. Simon, and Peter F Drucker Approaches to the Study of Management-Universality of Management - Relevance of management to different types of organization. | | |
| **Outcome 1** | Learners understand the fundamental concepts of Management and organization behavior. | **K1** |

| UNIT-II | | |
|---|---|---|
| **Objective 2** | To educate value of Planning and Decision Making | |
| Planning and Decision Making: Nature, importance, and planning process – Planning premises – Components of Planning as Vision, Mission, Objective, Goals, Policies, Strategies, Procedures, Methods, Rules, Projects, and Budgets – Decision-making – Meaning – Types – Decision-making Process under Conditions of Certainty and Uncertainty | | |
| **Outcome 2** | Students critically discuss the Projects, Budgets and Decision Making. | **K3** |

| UNIT III | | |
|---|---|---|
| **Objective 3** | To Provide educate the departmentalization and controlling organizational behaviour | |
| Organizing: Nature, purpose, and kinds of organization – Structure – Principles and theories of organization – Departmentalization – Span of Control – Line and staff functions – Authority and responsibility – Centralization and decentralization – Delegation of authority – Committees – Informal organization – Coordination and Controlling: Coordination: Concept, Need, and techniques; Controlling: Objective and Process of Control – Devices of control – Integrated control – Special control techniques. | | |
| **Outcome 3** | Learners acquire knowledge on Centralization and Decentralization and Process of Controlling. | **K4** |

| UNIT IV | | |
|---|---|---|
| **Objective 4** | To truly the Individual Behaviour and Emotions | |
| Individual Behaviour: Personality – types – Factors influencing personality – Theories – Learning – Types of learners – The learning process – Learning theories – Organizational behaviour modification. Misbehaviour – Types – Management Intervention. Emotions - Emotional Labour – Emotional Intelligence – Theories. Attitudes – Characteristics – Components – Formation – Measurement Values. Perceptions – Importance – Factors influencing perception – Interpersonal perception - Impression Management. Motivation – Importance – Types – Effects on work behavior. | | |
| **Outcome 4** | Familiarise knowledge on Individual Behaviour and Emotional Intelligence. | **K3** |

| UNIT V | | |
|---|---|---|
| **Objective 5** | To teach the Group Behaviour and Dynamics | |
| Group Behaviour: Organization structure – Formation – Groups in organizations – Influence – Group dynamics – Emergence of informal leaders and working norms – Group decision-making techniques – Team building - Interpersonal relations – Communication – Control. | | |
| **Outcome 5** | Students to summarize the recent group Behaviour and Dynamics | **K4** |

**Suggested Readings:**: -

Fred Luthans, (2011) *Organizational Behavior*, "Tata McGraw Hill", 11th Edition,

Heinz Weihrich, Mark V. Cannice, and Harold Koontz (2022)., "*Management: A Global, Innovative, and Entrepreneurial Perspective*", 15th Edition, Tata McGraw Hill.

Pareek, U. (2012). *Udai Pareek's Understanding Organizational Behaviour*, 3e. *OUP Catalogue*.

Ricky W Griffin (2010), "*Management*", South-Western College Publications,

Robbins, S. P. (2010)., "*Organizational behavior",* 11th Edition, Pearson Education

**Online Resources:**

Book of "Management concepts and organizational behavior" Dr.Indumathi, Dr.Florence Bharathi, Dr. Pandi Selvi.

https://books.google.co.in/books?id=gPLIEAAAQBAJ&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

Management Concepts & Organisational Behaviour

https://www.sxccal.edu/wp-content/uploads/2020/01/MBA-ManagementConceptsOrganisationalBehaviour-1stYear.pdf

Prof. Rama Prasad Rao, Mr. Madhusudhana Rao, Mr. Alagaiah "Management Concepts and Organisational Behaviour"

https://dde.pondiuni.edu.in/files/StudyMaterials/PG/MCom/1year/MCOM1002ManagementConceptsandOrganizationalBehaviour.pdf

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. V. Sivakumar,** Prof and Head

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | M (2) | S (3) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | L (1) | L (1) | L (1) | L (1) | S (3) | L (1) | L (1) | L (1) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | M (2) |
| **W. Avg** | **2.6** | **2** | **1.8** | **2.2** | **1.8** | **1.2** | **2.2** | **2** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Courses Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.4** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER -I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code: 654102** | **Managerial Economics** | **T** | **Credits: 3** | **Hours:3** |
| **UNIT - I** | | | | | |
| **Objective 1** | To Educate basic concept of managerial economics and business decision | | | | |
| Economics & Business Decisions: Meaning, nature, and scope of Managerial Economics– Relationship between Economic theory and Managerial Economics –Role of Managerial Economics in Business Decisions- Concepts of Opportunity cost, Time Value of Money, Marginalize, Equilibrium and Equi -marginalize and their role in business decision making. | | | | | |
| **Outcome 1** | Students to understand fundamental concepts of managerial economics and business decision making. | | | | **K1** |
| **UNIT- II** | | | | | |
| **Objective 2** | To realize the interplay between demand and supply in a market, understanding their determinants and elasticity. | | | | |
| Demand and Supply Analysis: Meaning, types, and determinants of demand- Elasticity of Demand: Types, Measures and Role in Business Decisions- Determinants of supply- Elasticity of Supply- Measures and Significance. | | | | | |
| **Outcome 2** | Students will compare more analyze and utilize market data to create effective business plans, applying elasticity measures to predict equilibrium, optimize pricing. | | | | **K3** |
| **UNIT - III** | | | | | |
| **Objective 3** | To know more comprehensive exploration of cost, return, and production functions, covering cost functions and various production functions. | | | | |
| Cost, Return, and Production Function: Cost function and cost-output relationship – Economies and Diseconomies of scale – Cost control and Cost reduction- Cost Behavior and Business Decision- Relevant costs for decision making- Cobb-Douglas and other Production Functions. | | | | | |
| **Outcome 3** | Learners to evaluate increased returns, and enhanced overall performance through well-informed decision-making, effective cost management strategies. | | | | **K2** |
| **UNIT - IV** | | | | | |
| **Objective 4** | To provide comprehensive analysis of pricing and profit function in diverse market structures, profit maximization and cost volume profit analysis. | | | | |
| Price and Profit Function: - Pricing and output decisions under Monopoly, Duopoly, Monopolistic Competition, and Perfect Competition –Penetrative and Skimming Pricing- Government control over and decontrol of pricing – Price discrimination –-Concept of Profit- Types and Theories of Profit- Profit maximization – Cost volume profit analysis – Risk and Return Relationship. | | | | | |
| **Outcome 4** | Beneficiaries compare more optimal pricing strategies, profit maximization techniques, and enhance financial performance across various market scenarios. | | | | **K5** |
| **UNIT - V** | | | | | |
| **Objective 5** | To provide the impact of macro-economic factors on managerial decision-making, encompassing business cycle phases, inflation, balance of payment trends. | | | | |
| Macro-economic Factors and Managerial Decision: Business cycle – Phases and Business Decision- Factors causing Inflation and Deflation Control measures – Balance of payment Trend and its implications in managerial decision- National Income: Measures and Sectoral and Population distribution- Utility for Business Decision making. | | | | | |
| **Outcome 5** | Learners will gain a comprehensive understanding of macro-economic | | | | **K6** |

| | | |
|---|---|---|
| | influences, enabling them to adapt strategies to business cycle phases. | |

**Suggested Readings::**


Brooks, Weatherston, Wilkinson, (2010)., "*International Business Environment*: Pearson.

Cherunilam, (2008)., "*Business Environment and Development*: Himalaya Publishing House.

Dominick Salvatore, (2011)., "*Managerial Economics in a Global Economy*: Oxford Univ. Press. Francis

Ian Brooks, Jamie Weatherston& Graham Wilkinson, (2010)., "*International Business Environment*: Pearson

Ivan Png & Dale Lehman, (2007)., "*Managerial Economics*". Wiley-Blackwell.

Sameer Kochhar, (2011)., "*Growth & Finance*: Academic Foundation.

Steiner & Steiner, (2008)., "*Business, Government and Society: A Managerial Perspective*", McGraw-Hill


**Online Resources:**

Ashwani Panesar "Managerial Economics"
https://ebooks.lpude.in/commerce/mcom/term_1/DECO405_MANAGERIAL_ECONOMICS_ENGLISH.pdf

D.N. Dwivedi, Professor of Economics, Dr. Suman Lata, Lecturer, Aditi Sharma, Freelance Author
https://vou.ac.in/slm/mba/MBA-102-Managerial%20Economics.pdf

Books Of B. V. Srinivas Murthy managerial economics
https://new.himpub.com/book-author/b-v-srinivas-murthy/

Digital Notes Managerial Economics - Compiled By: A. LAKSHMI, MBA, Assistant Professor
Dr.G.ARCHANA, Associate Professor, G.VENKATA REDDY,MBA(PhD),Assistant Professor
https://mrcet.com/downloads/MBA/Managerial%20Economics.pdf

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by:Dr. K. Subha, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | L (1) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | L (1) | M (2) |
| **W. Avg** | **2.2** | **1.8** | **2** | **1.8** | **1.8** | **1.2** | **2** | **1.4** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcomes (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.4** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654103** | **Accounting and Financial Management** | **T** | **Credits: 4** | **Hours:4** |

| **UNIT –I** | | |
|---|---|---|
| **Objective 1** | To study the basic accounting balance sheet, profit and loss account, inflation accounting and human resources accounting. | |
| Financial Accounting: Introduction to Financial, Cost, and Management Accounting - Generally accepted accounting principles, Conventions, and Concepts - Balance sheet and related concepts - Profit and Loss account and related concepts - Introduction to inflation accounting- Introduction to human resources accounting. | | |
| **Outcome 1** | Learners understanding of accounting principles, analyze financial statements and appreciate human resources accounting. | **K1** |
| **UNIT-II** | | |
| **Objective 2** | To understand the company accounts and final accounts, share capital alteration, preferential allotment, employee stock options, and buy back of securities. | |
| Company Accounts: Meaning of Company - Maintenance of Books of Account-Statutory Books - Profit or Loss Before incorporation - Final Accounts of Company - Alteration of share capital - Preferential allotment, Employee stock option - Buy back of securities. | | |
| **Outcome 2** | Illustrate company accounting practices and enabling effective financial management, analysis of records, and informed decision-making. | **K2** |
| **UNIT III** | | |
| **Objective 3** | To decode comprehensive financial statement analysis using financial ratios, cash flow analysis and funds flow statement analysis. | |
| Analysis of Financial Statements: Analysis of financial statements – Financial ratio analysis, cash flow (as per Accounting Standard 3), and funds flow statement analysis. | | |
| **Outcome 3** | Illustrate cash flow patterns, enabling informed investment decisions and effective financial strategies for enhanced business performance. | **K2** |
| **UNIT IV** | | |
| **Objective 4** | To know more financial management, investment decisions and fostering informed financial decision-making for optimized outcomes. | |
| Foundations of Finance: Financial management – An overview - Time value of money - introduction to the concept of risk and return of a single asset and of a portfolio - Valuation of bonds and shares - Option valuation - Investment Decisions: Capital Budgeting: Principles and techniques - Nature of capital budgeting - Identifying relevant cash flows - Evaluation Techniques: Payback, Accounting rate of return, Net Present Value, Internal Rate of Return, Profitability Index. | | |
| **Outcome 4** | Critically discuss finance foundation and make informed investment decisions, leading to effective financial management and optimization of outcomes. | **K3** |
| **UNIT V** | | |
| **Objective 5** | To include financing and dividend decision and working capital management. | |
| Financing and Dividend Decision: Financial and operating leverage - capital structure - Cost of capital and valuation - designing the capital structure. Dividend policy - Aspects of dividend policy - practical consideration - forms of dividend policy - forms of dividends - share splits - Working Capital Management: Principles of working capital: Concepts, Needs, Determinants, issues and estimation of working capital - Accounts Receivables Management and factoring - Inventory management - Cash management - Working | | |

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|---|---|---|
| capital finance: Trade credit, Bank finance, and Commercial paper. | | |
| **Outcome 5** | Summarizing and understanding of financing, efficient cash flow management, and enhanced business performance and shareholder value. | **K5** |

**Suggested Readings:**: -


Jan Williams (2010)., "*Financial and Managerial Accounting – The Basis for Business Decisions*", 15th edition, Tata McGraw Hill Publishers.

Khan M.Y. & P.K.Jain (2011)., "*Management Accounting*", Tata McGraw Hill.

Khan, M. Y. (2004)., "*Financial management: text, problems and cases*", Tata McGraw-Hill Education.

Narayanaswamy R. (2011)., "*Financial Accounting – A managerial perspective*", PHI Learning, New Delhi,.

Pandey. M (2010)., "*Financial Management*", Vikas Publishing House Pvt. Ltd, 10th Edition,

Vernimmen, P., Quiry, P., & Le Fur, Y. (2022). *Corporate finance: theory and practice*. John Wiley & Sons


**Online Resources:**

Dr. S. NAZEER KHAN "Accounting and financial management"
https://mis.alagappauniversity.ac.in/siteAdmin/dde-admin/uploads/2/__PG_MCA_Computer%20Applications_315%2021%20Accounting%20and%20Financial%20Management_5777.pdf

Accounting and Financial Management 1 Part – I Financial Accounting
https://www.academia.edu/32197317/Accounting_and_Financial_Management_1_Part_I_Financial_Accounting

Books Of Dr. S. "Anil Kumar Accounting and Financial Management"
https://new.himpub.com/product/accounting-and-financial-management-bangalore-univ/

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. K. Subha,** Teaching Assistant

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | S (3) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | S (3) | L (1) | S (3) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | L (1) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | M (2) |
| **W. Avg** | **2.4** | **2** | **2.2** | **1.8** | **1.8** | **1.2** | **2** | **1.6** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.4** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654104** | **Business Environment** | **T** | **Credits: 3** | **Hours: 3** |

| UNIT –I | | |
|---|---|---|
| **Objective 1** | To teach dynamic business environment, including PESTLE factors and policy aspects, to equip participants with skills for environmental scanning. | |
| Business Environment: Dynamic factors of environment – Importance of scanning the environment –Fundamental issues captured in PESTLE– Political, Economic, Socio-cultural, Technological, Legal and Ecological environment, Opportunities, and Threats as environmental issues to address by Businesses, Policy Environment: Liberalization, Privatization and Globalization (LPG) - Efficiency and Competition- Globalization and Enhanced Opportunities, and Threats. | | |
| **Outcome 1** | Learner's outline understanding of the business environment and develop environmental analysis expertise and success in a dynamic global marketplace. | **K1** |

| UNIT-II | | |
|---|---|---|
| **Objective 2** | To realize political environment on businesses enabling participants to comprehend opportunities and challenges, strategize for sustainable success in a dynamic political landscape. | |
| Political Environment: Government and Business – Political Systems, Political Stability, and Political Maturity as conditions of business growth- Role of Government in Business: Entrepreneurial, Catalytic, Competitive, Supportive, Regulative, and Control functions- Government and Economic planning: Industrial policies and promotion schemes – Government policy and SSI – Interface between Government and public sector. | | |
| **Outcome 2** | Evaluate the political significance for businesses, comprehend government roles and political environment and strategize for sustainable business success. | **K2** |

| UNIT III | | |
|---|---|---|
| **Objective 3** | To Analyze the economic environment's impact on businesses, identifying opportunities and managing financial capital, risks, costs, and taxation measures. | |
| Economic Environment: Phase of Economic Development and its impact, GDP Trend and distribution and Business opportunities- Monetary System and Business capital: Quantum, Types, Risk, and Cost-Role of Banks; Role of Financial Institutions- Role of Central Bank- Fiscal System: Government Budget and Taxation Measures- Fiscal Deficits and Inflation- FDI and Foreign collaboration –Foreign Capital tapping by businesses- Export-Import policy – Foreign Exchange and Business Development. | | |
| **Outcome 3** | Familiarize the foreign capital, strategize tax planning, manage financial risks, and leverage opportunities for business development, fostering enhanced financial stability and growth. | **K3** |

| UNIT IV | | |
|---|---|---|
| **Objective 4** | To introduce social and technological environment on businesses, adoption of appropriate technology, fostering innovation, competitiveness, and sustainable growth. | |
| Social and Technological Environment: Societal Structure and Features, Entrepreneurial Society and its implications for business – Social and cultural factors and their implications for business- Technology Development Phase in the Economy as a conditioner of Business opportunity- | | |

| | | |
|---|---|---|
| Technology Policy- Technology Trade and transfer- Technology Trends in India- Role of Information Technology– Clean Technology. | | |
| **Outcome 4** | Compare more societal structure, cultural factors, technology development, policy, trade, and trends, empowering them to identify business opportunities. | **K3** |
| **UNIT V** | | |
| **Objective 5** | To educate legal and ecological environments on businesses and empowering informed legal decisions and promoting sustainable business practices. | |
| Legal and Ecological Environment: Legal Environment as the all-enveloping factor from inception, location, incorporation, conduct, expansion, and closure of businesses- Legal Aspects of Entering Primary Mand Secondary Capital Markets, Law on Patents- Law on Consumer Protection- Law on Environmental Protection, Need for Clean Energy and Reduction of Carbon footprint. | | |
| **Outcome 5** | Ability of legal and ecological significance, enhancing regulatory compliance, promoting sustainable practices, and making informed legal decisions for responsible business conduct. | **K5** |

**Suggested Readings::**


Adhikary, M. (1978)., "Economic Environment of Business", New Delhi: Sultan Chand.

Francis Cherunilam (2016)., "Business Environment, and Development", Himalaya Publishing House.

Ian Brooks, Jamie Weatherston, Graham Wilkinson (2010)., "International Business Environment", Pearson,

John F. Steiner, George A. Steiner (2011)., "Business, Government and Society: A Managerial Perspective", Tata McGraw Hill.

Mohinder Kumar Sharma (1990)., "Business Environment in India", South Asia Books. IBSN-8171690076.


**Online Resources:**

IIMM Study material of Business Environment
https://iimm.org/wp-content/uploads/2019/04/IIMM_BE_Book.pdf

Francis Cherunilam "BUSINESS ENVIRONMENT TEXT AND CASES"
http://dspace.vnbrims.org:13000/jspui/bitstream/123456789/4950/1/business%20environment.pdf

Understanding the business environment
https://ug.its.edu.in/sites/default/files/Business%20Environment.pdf

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. C. Suresh,** Teaching Assistant

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | M (2) | M (2) | L (1) | S (3) | M (2) | S (3) | S (3) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | S (3) | L (1) | M (2) | L (1) | L (1) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | S (3) | L (1) | L (1) | M (2) | L (1) | M (2) | L (1) |
| **CO5** | L (1) | M (2) | M (2) | M (2) | M (2) | L (1) | L (1) | M (2) | L (1) | M (2) |
| **W. Avg** | **2.2** | **2.4** | **2.2** | **2.2** | **1.8** | **1.2** | **1.8** | **1.6** | **2** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | L (1) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.4** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER -I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course Code 654105** | **Principles of Logistics and Supply Chain Management** | **T** | **Credits:3** | **Hours: 3** |

| UNIT –I | | |
|---|---|---|
| **Objective 1** | To understand Introduction to logistics customer value chain, emphasizing customer service for competitiveness and value-added logistical services. | |
| Introduction to Logistics: Logistics at the center of world trade – A paradigm shift – Logistics Defined – Scope of Logistics – Logistics – a system concept – Customer Value Chain – Logistics Functions – Logistics for business excellence – Logistics management: Objective, solution, and future – Customer service for competitiveness – Customer service phases – Service attributes – Value added logistical services | | |
| **Outcome 1** | Familiarizes the logistics' critical role in global trade, positioning their businesses for future success in the dynamic world trade landscape. | **K1** |

| Unit-II | | |
|---|---|---|
| **Objective 2** | To teach supply chain concept, importance of SCM, Objective, scope, decision phases, process view, dynamics, focus areas, and SCM evolution. | |
| Introduction to Supply Management: What is a supply chain? – Importance of Supply Chain Management (SCM) – Overview, Objective, nature, and scope of SCM – Decision phases in supply chain – process view of a supply chain – Supply Chain dynamics – Focus areas in SCM – Evolution of SCM. | | |
| **Outcome 2** | Critically discuss the supply management, overall supply chain efficiency and effectiveness. | **K3** |

| Unit III | | |
|---|---|---|
| **Objective 3** | To gain the logistics mix, including warehousing challenges, material handling, inventory management, transportation management, packaging, and logistics information systems. | |
| Logistics Mix: Warehousing – A logistical challenge – Role of material handling in logistics – Material storage principles – Inventory management – Transportation management – Logistical packaging – Logistics information system. | | |
| **Outcome 3** | Recall the logistical processes, enhance supply chain efficiency, and address warehousing challenges through effective material handlings. | **K2** |

| Unit IV | | |
|---|---|---|
| **Objective 4** | To realize logistics outsourcing, exploring catalysts, benefits, third-party and fourth-party logistics. | |
| Logistics Outsourcing: Catalysts for outsourcing trends – Benefits of logistics outsourcing – Third-Party logistics – Fourth-Party logistics – Selection of service provider – Value-added services – Logistics service contract – Critical issues – Outsourcing value proposition. | | |
| **Outcome 4** | Compare more comprehensive understanding, identifying catalysts, differentiating logistics providers, leveraging value-added services. | **K4** |

| Unit V | | |
|---|---|---|
| **Objective 5** | To provide current issues virtual supply chain, continuous replenishment, lean, agile, green, flexible supply chains, and world-class SCM. | |
| Current Issues in Supply Chain Management: Benchmarking the supply chain – Reengineering the supply chain – Virtual supply chain – Continuous replenishment supply chains – Lean supply chains – Agile supply chains – Green supply chain – Flexible supply chain – World-class SCM. | | |

| | | |
|---|---|---|
| **Outcome 5** | Learners Outline SCM operations, and world-class SCM approaches. | **K5** |

**Suggested Readings:**


Agarwal, D. K. (2010). Supply chain management: strategy, cases and best practices. Macmillan.

Bhat, K. S. (2014). Logistics and supply chain management. Himalaya Publishing House.

Raghuram, G., & Rangaraj, N. (2000). Logistics and supply chain management cases and concepts.

Sahay, B. S., & Mohan, R. (2003). Supply chain management practices in Indian industry. International Journal of Physical Distribution & Logistics Management.

Senthil M., Fundamentals of Production and Operations Management, 01 October, 2021, ISBN No. 9789393665331, Pages 636

Sople, V. V. (2009). Logistics Management, 2/E. Pearson Education India.


**Online Resources:**

By Richard E. Crandall, William R. Crandall, Charlie C. Chen "Principles of logistics and supply chain management"

https://www.routledge.com/Principles-of-Supply-Chain-Management/Crandall-Crandall-Chen/p/book/9781482212020

https://old.mu.ac.in/wp-content/uploads/2021/02/Logistics-and-Supply-Chain-Management-Martin-Christopher.pdf

https://bakkah.com/knowledge-center/basic-principles-of-supply-chain-management

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. P. Rajan Chinna,** Assistant Professor

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | L (1) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | L (1) | M (2) |
| **W. Avg** | **2.2** | **1.8** | **2** | **1.8** | **1.8** | **1.2** | **2** | **1.4** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.4** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER – I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654106** | **Operations Research** | **T** | **Credits: 4** | **Hours: 4** |
| **UNIT -I** | | | | | |
| **Objective 1** | To educate the basics of Operations Research and Objective, scope in management, models, types, advantages, limitations, and the role of computers in OR. | | | | |
| Basics of Operations Research: Development of operations research – Definition, characteristics, scientific, necessity, and scope of operations research – Applications of various OR techniques – Objective and scope of OR in management – Models in OR – Characteristics, advantage, and limitations of a model – Types of mathematical models – Role of computers in OR. | | | | | |
| **Outcome 1** | Understand OR techniques for optimizing management decisions and problem-solving across diverse fields, with recognition of the role of models and computers in facilitating OR processes. | | | | **K1** |
| **UNIT-II** | | | | | |
| **Objective 2** | To Study Linear Programming, structure, advantages, limitations, application areas, general mathematical model, guidelines, integer linear programming, and goal programming. | | | | |
| Linear Programming: Structure of linear programming model – Advantage, limitations, application areas of linear programming – General mathematical model and guidelines of linear programming model – The graphical method – The simplex method – Duality – Sensitivity – Integer linear programming – Goal programming. | | | | | |
| **Outcome 2** | Student to know about familiarize of Linear Programming and problem-solving effectively across diverse scenarios. | | | | **K2** |
| **UNIT III** | | | | | |
| **Objective 3** | To teach Study Transportation and Assignment Problems, covering mathematical models, initial solution methods, MODI and informed decision-making in operational and logistical contexts. | | | | |
| Transportation and Assignment Problem: Mathematical model of transportation problem – Methods for finding an initial solution – NWCM – LCM – VAM – Test for optimality – Dual of transportation model – Steps of MODI method – Variations in transportation problem – unbalanced supply and demand – Alternate optimal solution – Degeneracy and its resolution – Prohibited transportation routes - maximization transportation problem – Assignment problem: Mathematical models of assignment problem – Hungarian methods for solving assignment problem – Variations of the assignment problem – Multiple optimal solutions – Maximization case in assignment problem – Unbalanced assignment problem – Restrictions on assignments. | | | | | |
| **Outcome 3** | Recall the MODI method, Hungarian methods, enabling effective optimization, complex problem-solving and logistical contexts for transportation. | | | | **K2** |
| **UNIT IV** | | | | | |
| **Objective 4** | To gain Probability and Probability Distributions and apply probability concepts for risk assessment and forecasting in business. | | | | |
| Probability and Probability Distributions: Introduction – Development of probability – Areas and utilization of probability theories in the business – Sample space – Terminology – Types of probability – Theoretical probability distributions – Concept of events – Probability of events – Joint, conditional, and marginal probabilities – Probability distributions: Binomial, poison, and normal distribution. | | | | | |
| **Outcome 4** | Outline the forecasting in business settings through the study of Probability and | | | | **K4** |

| | | |
|---|---|---|
| | Probability Distributions. | |
| **UNIT V** | | |
| **Objective 5** | To truly Simulation Techniques, Queuing Theory, and Decision Tree. | |
| Simulation Techniques, Queuing, and Decision Tree Analysis: Sequencing / Scheduling Methods – Notations, Terminology, and Assumption for scheduling models – Processing n jobs through one, two, three machines, and n jobs with two machines – Simulation Techniques and Queuing theory – Introduction, advantage, and disadvantages of simulation – Applications of simulation models – Queue priorities product launching problems using Monte Carlo simulation – Random number generations –- Queuing theory: M/M/1 queuing model and applications – Decision tree analysis: Decision tree approach to choose an optimal course of action criteria for decisions – Min-max, Maxi-max, Minimizing Maximal regret and their applications. | | |
| **Outcome 5** | Student to illustrate optimal decision-making in operational and managerial situations through the study of Simulation Techniques, Queuing Theory, and Decision Tree Analysis. | **K3** |
| **Suggested Readings::**<br>Gupta P K and D S Hira (1992)., "Operations Research", 7th Editions, Sultan Chand and Sons.<br>Sharma J K (2016)., "Operations Research: Theory and Applications", Trinity Press., 6th Editions,<br>Vohra N D (2017)., "Quantitative Techniques in Management", 5th Editions, Tata McGraw Hill. | | |
| **Online Resources:**<br>https://www.bbau.ac.in/dept/UIET/EME-601%20Operation%20Research.pdf<br>Operations research theory and applications by j k sharma z lib.org-pdf<br>https://www.amirajcollege.in/wp-content/uploads/2020/10/3151910-operations-research-theory-and-applications-by-j.-k.-sharma-z-lib.org_.pdf<br>https://www.bbau.ac.in/dept/UIET/EMER-601%20Operation%20Research%20Queuing%20theory.pdf | | |

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. V.A. Anand,** Assistant Professor

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | M (2) | S (3) | L (1) | M (2) | M (2) | S (3) | S (3) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | S (3) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | L (1) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | M (2) |
| **W. Avg** | **2.6** | **2.4** | **2.2** | **1.8** | **2** | **1.2** | **2** | **1.6** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | S (3) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.6** | **2.2** | **1.4** | **1.8** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER –I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code: 654107** | **I CT for Business** | **P** | **Credits: 2** | **Hours: 4** |

| UNIT –I | | |
|---|---|---|
| **Objective 1** | To Introduce Computing basics, evolution, operating systems, application software and network settings. | |
| Introduction: Basics and Evolution of Computing – Operating Systems (System Software) and Application Software – Introduction to Network Setting – LAN and WAN, Internet and Intranet | | |
| **Outcome 1** | Student Acquire a comprehensive understanding of Computing, including basics, evolution, operating systems, application software, and network settings exchange. | **K1** |

| UNIT-II | | |
|---|---|---|
| **Objective 2** | To educate Microsoft Office for document creation, formatting, data analysis, and manipulation, enabling enhanced productivity and streamlined reporting. | |
| Working with Microsoft Office Suite: MS Word – Creating, Opening, Saving, and Formatting Documents – Mail Merge - Working with Spread Sheets: MS Excel – Tables – Formulas and Functions – Data Analysis using excel – Linking Work Sheets and Workbooks – Charts – Macros Forms – Pivot Tables. | | |
| **Outcome 2** | Predict gain practical skills in MS Word for document management and formatting, and in MS Excel for data analysis, formulas, charts, and pivot tables, enhancing their productivity. | **K2** |

| UNIT III | | |
|---|---|---|
| **Objective 3** | Learners understand MS PowerPoint for dynamic presentations, MS Access for database management and report generation. | |
| MS Power-Point: Creating a Power-Point Presentation (PPT) Using Slide Master, Animation, and Graphics in PPT - MS Access – Creating and Modifying Data Bases – Report Generation – Linking Access Files with Excel Files. MS: Project: Creating Project Design, Schedules, PERT/CPM Charts, and Reports. | | |
| **Outcome 3** | Participants gain practical skills in MS PowerPoint, MS Access, and MS Project, streamlining communication, data management, and project planning, leading to improved productivity and successful project outcomes. | **K1** |

| UNIT IV | | |
|---|---|---|
| **Objective 4** | To know more Internet and E-Commerce, mastering E-Mail Etiquette, web-based communication tools, Wi-Fi environment, and E-Business models. | |
| Internet and E-Commerce: E-Mail Etiquette – Usages of Search Engines and Portals – Website and Web-Based E-mail, FTP and Net Meeting – Wi-Fi Environment in Modern Offices – Basic Models of E-Business: B2B, B2C, C2C, and Mobile Commerce (M-Commerce). | | |
| **Outcome 4** | Summaries the Participants effectively utilize online resources, demonstrate proficiency in E-Mail Etiquette, search engines, and web-based tools. | **K4** |

| UNIT V | | |
|---|---|---|
| **Objective 5** | Explore concepts of online buying and selling, including E-Payment, Payment Gateway, Security Systems, Online Stores, Internet Banking, Smartcards, and Plastic Money. | |
| Buying and Selling through the Internet: E-Payment and Electronic Fund Transfer – Payment Gateway and Security Systems – On-Line Stores – Internet Banking – Smartcards and Plastic Money. | | |

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|---|---|---|
| **Outcome 5** | Familiarize online transactions, utilize digital payment methods, access online stores and internet banking and e-commerce experiences. | **K3** |

**Suggested Readings:**

Goel, R. (2003)., "Computer Applications In Management", New Age International.

Rayudu, C.S(2010)., "E-Commerce, and E-Business", Himalaya Publishing Company.

Sudalaimuthu & Anthony Raj(2015)., "Computer Applications in Management", Himalaya Publishing House.

Vijayaraghavan, G (2015)., Computer Applications for Management, Himalaya Publishing Company.

**Online Resources:**

https://www.studysmarter.co.uk/explanations/business-studies/influences-on-business/information-and-communication-technology-in-business/

https://www.bau.edu.lb/Research/Information-and-Communication-Technology-in-Business

https://www.techtarget.com/searchcio/definition/ICT-information-and-communications-technology-or-technologies

https://www.ringcentral.com/gb/en/blog/information-technology-business-communications/

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. P. Rajan Chinna, Assistant Professor**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | L (1) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | L (1) | M (2) |
| **W. Avg** | **2.2** | **1.8** | **2** | **1.8** | **1.8** | **1.2** | **2** | **1.4** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.4** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER –I | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 6541EP** | **Executive Communication Programme** | **V** | **Credits: 2** | **Hours: 2** |

| **UNIT -I** | | |
|---|---|---|
| **Objective 1** | To introduce participants to Business Communication and fostering strong communication practices. | |
| Introduction to Business Communication: Communication in Business - Importance of Communication - Effective business communication-formal and informal communications – grapevine - communication at the workplace - using technology to improve business communication - the concept of knowledge management - Mastering listening skills – Improving non-verbal communication skills - Communicating in Teams - Interpersonal skills - Management by walking around - Importance of Feedback - positive and negative feedback - practicing effective feedback, Cross-cultural communication challenges in a global field. | | |
| **Outcome 1** | Understand the Participants will gain a comprehensive understanding of Business Communication, mastering diverse communication techniques, applying technology for effective communication. | **K1** |

| **UNIT-II** | | |
|---|---|---|
| **Objective 2** | To teach with effective business communication skills, including writing and productive meetings for organizational success. | |
| Writing Process, Messages, and Meetings: Writing Process: planning, analyzing the situation - gathering information-selecting in the right medium - adapting to the audience - first draft – revision - editing and review - usage of technology -proofreading - creating brief messages – writing routine and positive messages - drafting negative messages - writing persuasive business messages - developing marketing & sales messages - drafting effective email messages - creating effective business blogs - creating podcasts - distribution of blog and podcast content - Meeting-drafting of Notice, Agenda and Minutes. | | |
| **Outcome 2** | Evaluate the writing process and facilitate productive meetings, contributing to enhanced communication and organizational success. | **K3** |

| **UNIT III** | | |
|---|---|---|
| **Objective 3** | To know more business proposals, reports, and research reports, while utilizing technology, adhering to professional norms and ensuring audience suitability. | |
| Proposals and Reports: Planning informational reports - Analytical reports - Planning proposals - Composing reports – Drafting based on style /tone to suit the audience - Helping readers - Use of technology in reports/ proposals - revising reports and proposals - submitting proposals. Research Reports: The written research report - executive summary, introduction, methodology, findings, and conclusions - writing the draft - oral presentation - preparation, delivery, and audio visuals, presenting results and report writing - precautions for report writing - norms for using tables, charts, diagrams-appendix- norms for using Index and Bibliography - Format of Business documents. | | |
| **Outcome 3** | Outline the business recommendations, fostering better decision-making and maximizing the impact of their written and oral communication in the business context. | **K2** |

| **UNIT IV** | | |
|---|---|---|
| **Objective 4** | To clarify student presentation skills and cross-cultural communication, resulting in confident and engaging delivery for effective communication and audience engagement. | |
| Presentation skills: Oral presentation: Audience analysis - composing presentation - preparation to speak - overcoming anxiety - handling questions responsively - communicating across cultures - | | |

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| enhancing presentations with slides and other visuals - creating effective handouts - practicing the delivery - Designing a visual communication - identify points to illustrate - visual design principles - presenting information/ concepts/ideas. | | |
| **Outcome 4** | To recall oral presentations, utilizing audience analysis, effective and persuade diverse audiences and become confident and persuasive presenters. | **K3** |
| **UNIT V** | | |
| **Objective 5** | To provide resume writing, interview preparation, communication abilities, leading to increased confidence and job opportunities. | |
| Developing CVs and Attending Interviews: Organizing approach to employment process - Planning a Resume - writing a resume - writing application letters – follow-ups - Understanding the interview process — common types of interviews - Preparing for a job interview - Interviewing for success - Interviewing across borders - Following up - Letter of acceptance - Letter declining an offer - Avoiding miscues | | |
| **Outcome 5** | Acquire more knowledge CVs, application letters, mastering interview techniques, and effective communication, empowering them to secure job offers, make informed decisions, and advance their careers with confidence. | **K4** |

**Suggested Readings::**

Carol M. Lehman, Debbie D. DuFrene (2010)., "Business Communication", 16th Edition, Cengage Learning.

Stephen P. Robbins, David A. Decenzo, and Mary Coulter (2013)., "Fundamentals of Management: Essential Concepts and Applications", 8th Edition, Pearson.

Sanjay Kumar and Puspa Lata (2015)., "Communication Skills", 2nd Edition, Oxford University Press.

Meenakshi Raman and Shalini Upadhyay (2020)., "Soft Skills: Key to Success in Workplace and Life", 1st Edition, Cengage Learning.

**Online Resources:**

https://www.theknowledgeacademy.com/in/courses/communication-skills-training/executive-communication-training/

https://www.iimcal.ac.in/ldp/executive-programme-communication-strategies-for-corporate-leaders%C2%A0epcscl#:~:text=The%20programme%20presents%20new%20paradigms,including%20public%20speaking%20and%20data

https://www.indeed.com/career-advice/career-development/communication-planning

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. V. Sivakumar,** Prof and Head

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | M (2) | S (3) | L (1) | M (2) | M (2) | S (3) | S (3) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | S (3) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | L (1) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | M (2) |
| **W. Avg** | **2.6** | **2.4** | **2.2** | **1.8** | **0.2** | **1.2** | **0.2** | **1.6** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | S (3) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.6** | **2.2** | **1.4** | **1.8** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Evaluation:**

The students will be evaluated for this course for a total of 100 marks. Out of this the Faculty in charge of this course will assess the students for a maximum of 25 marks on the basis of their performance of the students in activities assigned to them as CIA.

The students will appear for a comprehensive viva-voce examination at the end of the semester in which they will be assessed for a maximum of 75 marks for their understanding as well as presentation of theoretical inputs in the I semester and current practices.

The Viva-Voce will be conducted by a panel of 3 examiners constituted as given below. The average of the marks awarded by the three examiners will be taken for this component of the evaluation.

**Panel Members:**

1. The Head of the Department - Chairman
2. Faculty in charge of the course - Member
3. One external examiner - Member

| SEMESTER –II | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code: 654201** | **Business Research Methodology** | **T** | **Credits: 4** | **Hours: 4** |

| UNIT -I | | |
|---|---|---|
| **Objective 1** | To Familiarize this course is to equip students with a comprehensive understanding of the types, process, and design of research. | |
| Types, Process & Design of Research: Meaning – Importance - Types of Research – Pure - Applied, Historical amp; Futuristic, Analytical; Synthetic, Descriptive - Prescriptive, Survey - Experimental, Qualitative - Quantitative and Case - Generic Research – Process of research – Research problem – Identification, selection, and formulation of a research problem – Review of literature- Research Gaps and Techniques – Hypothesis –Types and Formulation. | | |
| **Outcome 1** | Students will be able to effectively identify, formulate, and articulate research problems, demonstrating a clear understanding of the research process and its various components. | **K2** |
| **UNIT-II** | | |
| **Objective 2** | Provide a comprehensive understanding of research design and sampling, including census vs. sampling, probability and non-probability methods, sample size determination, and handling sampling errors. | |
| Research Design: Sampling: Meaning, Components, and Use of Research Design-Census Vs Sampling- Essentials of a good sampling – Probability and Non-Probability Sampling Methods – Sample Size – Factors affecting the Size of the Sample - Sampling and Non-Sampling Errors. | | |
| | | |
| **Outcome 2** | Equip students with skills to analyze research designs, apply appropriate sampling techniques, and address sampling errors, ensuring accurate and reliable research findings. | **K3** |
| **UNIT - III** | | |
| **Objective 3** | Familiarize students with sources of data, data collection methods (interviews, surveys), and questionnaire design while understanding scaling techniques, validity, reliability, pre-testing, and pilot studies. | |
| Sources and Collection of Data: Sources of Data – Primary Sources of Data, Secondary Sources of Data, Data Collection Methods, Interviews, Structured Interviews, Unstructured Interviews, Face and Telephone Interviews. Observational Surveys, Format of a good questionnaire, Organizing Questions, Structured and Unstructured Questionnaires, Guidelines for Construction of Questionnaires. Scaling Techniques- Meaning, Importance, Methods of scale construction - Validity and Reliability - Pre-Testing - Pilot Study. | | |
| **Outcome 3** | Enable students to utilize diverse data sources, conduct effective interviews, design reliable questionnaires, and apply scaling techniques, ensuring high-quality research data and accurate analysis for meaningful research insights. | **K4** |
| **UNIT - IV** | | |
| **Objective 4** | To enable students to understand data processing, statistical analysis (measures of central value, relationship, and hypothesis testing), and interpret research results effectively. | |
| Processing of Data: Editing, Coding, Classification and Tabulation Analysis of Data – Measures of Central Value: Arithmetic Mean, Median and Mode – Measures of Relationship: Correlation and Regression Analysis – Association of Attributes. Hypothesis Testing: Parametric Tests: Testing for Means – One and Two Populations – One Way and Two Way ANOVA – Testing of Proportions: One and Two Populations Chi-square Test - Ideas on Non-parametric test – Result Interpretation. | | |

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|---|---|---|
| **Outcome 4** | Students will possess the skills to process data, conduct statistical analyses, and interpret research findings, facilitating evidence-based decision-making and contributing to research advancement. | **K4** |

**UNIT V**

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|---|---|
| **Objective 5** | Educate students on research report components and guidelines for oral presentations, enabling them to create well-structured reports and deliver impactful presentations. |

The Research Report: Research Reports, Components, The Title Page - Table of Contents, The Executive Summary, The Introductory Section, The Body of the Report, The Final Part of the Report, Acknowledgements, Suggested Readings: Appendix, Guidelines for Preparing a Good Research report Oral Presentation, Deciding on the Content, Visual Aids, The Presenter, The Presentation and Handling Questions.

| | | |
|---|---|---|
| **Outcome 5** | Students will proficiently construct comprehensive research reports and deliver engaging oral presentations, effectively disseminating research findings with confidence and clarity. | **K5** |

**Suggested Readings:** -


Alan Bryman and Emma Bell (2019)., "*Business Research Methods*", 3rd Edition, Oxford University Press.

Donald R. Cooper, Pamela S. Schindler, and J K Sharma (2013)., "*Business Research Methods*", 11th Edition, Tata Mc Graw Hill.

Kothari C R and Gaurav Garg (2004)., "*Research Methodology*: *Methods and Techniques*", 4th Edition, New Age International Limited.

Uma Sekaran and Roger Bougie (2010)., "*Research Methods for Business*", 5th Edition, Wiley India.


**Online Resources:**

Books of Business Research methodology Dr. sue Greener

https://kosalmath.files.wordpress.com/2010/08/introduction-to-research-methods.pdf

https://sde.uoc.ac.in/sites/default/files/sde_videos/V%20Sem.%20-%20Business%20Research%20Methods.pdf

https://www.imit.ac.in/note/18MBA204br.pdf

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. C. Suresh,** Teaching Assistant

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | L (1) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | L (1) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | L (1) | M (2) | L (1) | L (1) | S (3) | M (2) | L (1) | L (1) | S (3) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | S (3) | L (1) | M (2) | S (3) | L (1) | M (2) |
| **W. Avg** | **2.4** | **1.6** | **2** | **1.8** | **2** | **1.6** | **1.8** | **1.8** | **1.8** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcomes (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | S (3) | L (1) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | L (1) | M (2) | M (2) | M (2) |
| **CO5** | L (1) | M (2) | M (2) | M (2) | M (2) |
| **W. Avg** | **2.2** | **2** | **1.8** | **1.8** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - II | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654202** | **Supply Chain Finance Operations** | **T** | **Credits: 4** | **Hours: 4** |

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|---|---|---|
| **UNIT -I** | | |
| **Objective 1** | To familiarize participants with the significance of supply chain and operations for CEOs, understanding its value proposition, financial impact, and multiple perspectives. | |
| Introduction – Importance to the CEO – Supply chain and operations value proposition – The role of supply chain and operations – Value chain – Supply chain and operations financial impact – Value from a different perspective. | | |
| **Outcome 1** | Empower participants with a comprehensive understanding, enabling informed decision-making and optimizing supply chain performance for organizational success. | **K1** |
| **UNIT-II** | | |
| **Objective 2** | Gain an understanding of financial statements, their uses, and the elements they comprise and explore the interrelationships between these financial statements. | |
| Financial Statements Overview: Financial statements and their uses – A closer look at the elements of financial statements – Balance sheet, Income statement – Statement of cash flows – Relationship between financial statements. | | |
| **Outcome 2** | Enable participants to analyze financial statements effectively, make informed business decisions, and utilize financial information for strategic planning and performance evaluation. | **K2** |
| **UNIT - III** | | |
| **Objective 3** | To offer a comprehensive primer on financial statements, covering asset valuation, noncash transactions, foreign exchange, stockholders, and financial ratios. | |
| Financial Statement Primer Essentials – Introduction – Value of assets – Property example – Plant and building example- Equipment – Noncash transactions – Foreign exchange – Stockholders – Ration analysis – Financial ratios – Liquidity ratios – Profitability ratios – Valuation ratios – Asset management ratios – Debt management ratios. | | |
| **Outcome 3** | Students will acquire the skills to analyze financial health, make informed investment decisions, and assess business performance across various financial aspects, using financial statements and ratios effectively. | **K4** |
| **UNIT - IV** | | |
| **Objective 4** | To equip participants with a comprehensive understanding of company valuation, competitive advantage, financial statement reorganization, project management, and the use of performance and KPI trees. | |
| Company Valuation – Value – Competitive advantage – Reorganizing traditional financial statements – Cost of capital – Performance trees – Project success and failure – Project selection – Project implementation – Project completion – Projects and KPI trees. | | |
| **Outcome 4** | Participants will be empowered to make informed financial and strategic decisions, applying valuation techniques, leveraging competitive advantage, optimizing project management, and utilizing performance. | **K4** |
| **UNIT - V** | | |
| **Objective 5** | To equip participants with the knowledge and skills to strategically design supply chain networks, analyze locations, and integrate them with business strategy. | |

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|---|---|---|
| Supply Chain Network Design and Location Analysis: Business strategy and competition – Supply chain network design – Location selection – Cost behavior – Supply chain network modeling – Network design analysis – DuPont model – Supply and value metrics – Supply chain and Competition. | | |
| **Outcome 5** | Participants will be adept at optimizing supply chain performance, making informed decisions, and enhancing competitiveness. | **K5** |

**Suggested Readings:**

Lima Zhao and Arnd Huchzermeier (2018)., "*Supply Chain Finance: Integrating Operations and Finance in Global Supply Chains*", 1st Edition, Springer.

Steven M. Leon (2015)., "*Financial Intelligence for Supply Chain Managers: Understand the Link Between Operations and Corporate Financial Performance*", 1st Edition, Pearson Education.

**Online Resources:**

https://taulia.com/glossary/what-is-supply-chain

https://www.pwc.com/vn/en/deals/assets/supply-chain-finance-jul17.pdf

https://www.researchgate.net/publication/305558990_Introduction_to_Supply_Chain_Finance

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. K. Subha,** Teaching Assistant

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | M (2) | S (3) | L (1) | M (2) |
| **CO3** | S (3) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | L (1) | L (1) | S (3) | L (1) | S (3) | L (1) | L (1) | L (1) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | M (2) |
| **W. Avg** | **2.6** | **2.2** | **1.8** | **2** | **2.2** | **1.2** | **2.2** | **2** | **1.6** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Courses Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | S (3) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.4** | **1.6** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - II | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654203** | **Production and Operations Management** | **T** | **Credits: 4** | **Hours: 4** |

| | | |
|---|---|---|
| **UNIT - I** | | |
| **Objective 1** | To learn the production and operation functions, various manufacturing systems, and product design concepts. | |
| Introduction to Production and Operation Functions: Types of Manufacturing Systems: Job Shop, Batch/Intermittent, Continuous/Assembly Line, Process and Project Systems. Designing the Product – Standardization: Modularization: Reverse Engineering. | | |
| **Outcome 1** | Enable leaners to optimize production processes, enhance operational efficiency, and make informed decisions in diverse manufacturing settings through an understanding of production and operation | **K2** |
| **UNIT- II** | | |
| **Objective 2** | To equip students with capacity planning knowledge, including capacity determination for manufacturing and service industries. | |
| Capacity Planning – Importance, Capacity Determination for Manufacturing and Service Industry: Capacity Planning Strategies - Facility Planning: Location of Facilities, Locational Flexibility, Facility Design Process and Techniques, Locational Break-Even Analysis. | | |
| **Outcome 2** | Learners will make informed decisions, optimize resource allocation, and enhance operational efficiency in diverse industries through capacity planning. | **K3** |
| **UNIT - III** | | |
| **Objective 3** | To introduce students to process planning, production process systems' characteristics, and study methods. | |
| Process Planning – Procedure, Characteristics of Production Process Systems- Introduction to Study Methods – Work-study, Time – Study and Method-Study, Evolution of Normal/Standard Time. | | |
| **Outcome 3** | Equip leaners to apply study methods effectively, determine normal/standard time, and optimize productivity and efficiency in diverse industrial environments through comprehensive process planning knowledge. | **K3** |
| **UNIT - IV** | | |
| **Objective 4** | To familiarize participants with layout planning, PPC functions, and aggregate production planning, providing essential knowledge for effective learning of efficient production processes. | |
| Layout, Importance, and Function, Objective, Flow patterns, Layout types – Product, Process, Group Technology/Cellular Layout, Factors for Good Layout, layout Design Procedure, CRAFT, ALDEP, REL Chart, Assembly Line Balancing. PPC: Functions – Planning Phase, Action Phase, Control Phase. Aggregate Production Planning, Line of balance. | | |
| **Outcome 4** | Students will gain proficiency in layout design, PPC functions, and production planning, optimizing operational efficiency. | **K4** |
| **UNIT - V** | | |
| **Objective 5** | To provide students with essential project and production management tools and modern production tools, enabling effective application and optimization in project and production management. | |
| Project and Production Management Tools: Project Management: CPM – Gantt Chart – PERT – GERT – Modern Production Management Tools: JIT – CIM – FMS – TQM – ISO 9000 Series – Poka-Yoke – Kaizen – BPR – Lean Manufacturing. | | |

| | | |
|---|---|---|
| **Outcome 5** | Students will gain proficiency in utilizing project and production management tools, optimizing scheduling, quality control, and continuous improvement, leading to enhanced efficiency. | K5 |

**Suggested Readings:** -

Chary S N (1469)., "*Production and Operations Management*", 6th Edition, Tata McGraw Hill.

Jay Heizer, Larry Render (1993)., "*Production and Operations Management*", 3rd Edition, Prentice-Hall.

Muhlemann, Oakland & Lockyer (1994)., "*Production and Operation Management*", 6th Edition, Macmillan.

Pannerselvam R. (2012)., "*Production and Operations Management*", 3rd Edition, PHI Learning.

Senthil M. (2022)., "*Fundamentals of Production and Operations Management*", 1st Edition, Vijay Nicole Imprints Pvt. Ltd.

**Online Resources:**

Books of Production and operations management- R.Panneer Selvam

https://books.google.co.in/books?id=ecJWJZjuC-cC&printsec=frontcover&redir_esc=y#v=onepage&q&f=false

https://managementstudyguide.com/production-and-operations-management.htm

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Mr. K. Aravindaraj,** Teaching Assistant

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | M (2) | M (2) | L (1) | S (3) | M (2) | S (3) | S (3) |
| **CO2** | M (2) | M (2) | L (1) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | M (2) | L (1) | M (2) | L (1) | L (1) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | S (3) | L (1) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO5** | 5(3) | L (1) | M (2) | M (2) | M (2) | L (1) | L (1) | M (2) | L (1) | M (2) |
| **W. Avg** | **2.6** | **2.2** | **2** | **2** | **1.8** | **1.4** | **1.8** | **1.6** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | L (1) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | L (1) | L (1) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | L (1) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.4** | **1.8** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER –II | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654204** | **Export & Import Management** | **T** | **Credits: 3** | **Hours: 3** |

| UNIT - I | | |
|---|---|---|
| **Objective 1** | To provide students with a comprehensive understanding of export and import operations organization, covering compliance departments, documentation, record-keeping, and legal considerations | |
| Organizing for Export and Import Operations: Export compliance department – Import department – Combined export and import departments – Manuals of procedures and documentation – Record-keeping compliance – Software – Federal, State, International, and Foreign Law. | | |
| **Outcome 1** | Students will be proficient in managing export and import operations efficiently, ensuring compliance, and navigating legal complexities, facilitating smooth international trade transactions. | **K2** |
| **UNIT- II** | | |
| **Objective 2** | To provide leaners with a comprehensive understanding of exporting and sales documentation, encompassing isolated and ongoing transactions, export distributor and sales agent agreements. | |
| Exporting – Sales Documentation: Isolated sales transactions – Ongoing sales transactions – Export distributor and sales agent agreements – Foreign corrupt practices act compliance. | | |
| **Outcome 2** | Learners will gain proficiency in managing exporting and sales documentation for successful international transactions, negotiating agreements, and ensuring compliance with legal regulations. | **K2** |
| **UNIT - III** | | |
| **Objective 3** | To provide students with a comprehensive understanding of importing and purchase documentation, encompassing isolated and ongoing purchase transactions. | |
| Importing – Purchase Documentation: Isolated purchase transactions – Ongoing purchase transactions – Import distributor and sales agent agreements – Import sales agent agreements. | | |
| **Outcome 3** | Students will gain proficiency in managing importing and purchase documentation for successful procurement transactions, negotiating agreements. | **K3** |
| **UNIT - IV** | | |
| **Objective 4** | To Provide leaners with a comprehensive understanding of global customs considerations, including product classification, value declaration, and country of origin determination. | |
| Global Customs Considerations: Determining the Proper Classification of a Product: The organization of the tariff schedules – The general rules of interpretation – Duty rates – Determining the Proper Value to Declare: Transaction value – Transaction value of identical merchandise – Transaction value of similar goods – Deductive value – Computed Value – Fall-back methodology – First-sale transactions – Determining the Proper Country of Origin: Preferential duty laws – The 35 percent agreements – The free trade agreement tariff-shift or tariff-shift plus regional value content rules – Country of origin making laws – Government procurement. | | |
| **Outcome 4** | Learners will gain proficiency in navigating customs regulations, accurately classifying products, declaring values, and determining country of origin, leading to efficient and compliant international trade practices. | **K4** |
| **UNIT - V** | | |
| **Objective 5** | To equip students with specialized knowledge in drawback, foreign processing, assembly operations, and barter and countertrade transactions, enabling efficient and | |

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|---|---|---|
| | compliant practices for specialized exporting and importing. | |
| Specialized Exporting and Importing: Drawback – Unused drawback – Rejected merchandise drawback – Manufacturing drawback – Foreign processing and assembly operations – Barter and countertrade transactions | | |
| **Outcome 5** | Students will effectively implement specialized exporting and importing practices, utilizing their knowledge of drawback, foreign processing, assembly operations, and barter and countertrade transactions. | **K5** |

**Suggested Readings:**: -

Donna L. Bade (2005)., "*Export / Import Procedures and Documentation*", 5th Edition, AMACOM.

Thomas A. Cook, Rennie Alston, and Kelly Raia (2004)., "*Mastering Import & Export Management"*, 2nd Edition, AMACOM.

Rama Gopal C. (2019)., "*Export-Import Procedures: Documentation and Logistics*", 2nd Edition, New Age International

**Online Resources:**

https://www.eiilmuniversity.co.in/downloads/Import-Export-Management.pdf

https://kamarajcollege.ac.in/Department/Commerce/II%20Year/e004%20Core%2012%20-%20Import%20&%20Export%20Procedures%20-%20IV%20Sem.pdff

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. P. Rajan Chinna,** Assistant Professor

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | S (3) | M (2) | S (3) | L (1) | M (2) | L (1) | S (3) | M (2) |
| **CO2** | M (2) | S (3) | L (1) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | M (2) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | L (1) | L (1) | M (2) | M (2) | L (1) | L (1) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **2** | **1.8** | **2** | **1.2** | **2** | **1.6** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcomes (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | L (1) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | S (3) | M (2) | L (1) |
| **CO4** | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.6** | **2.4** | **2** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - II | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654205** | **Logistics Legal Framework and Maritime Documentation** | **T** | **Credits: 3** | **Hours: 4** |
| **UNIT - I** | | | | | |
| **Objective 1** | To provide students with a comprehensive understanding of the Indian Contract Act, 1872, and related concepts | | | | |
| Indian Contract Act, 1872 – Contract – Meaning – Essential elements – Offer and acceptance – Consideration – Capacity – Consent – Legality of object – Quasi-contract – Discharge of contract – Breach of contract – Remedies. Contract of indemnity and guarantee - Bailment: Rights and duties of Bailor and Bailee – Contract of agency: –Creation of agency– Rights and duties of agent and principal – Termination of agency | | | | | |
| **Outcome 1** | Students will possess the skills to apply contract law principles, understand the legal aspects of indemnity. | | | | **K2** |
| **UNIT - II** | | | | | |
| **Objective 2** | To familiarize leaners with bills of lading act, carriage of goods by sea act, and non-contractual actions, enabling effective handling of contracts. | | | | |
| Lawson Carriage of Goods: The bills of lading act, 1855 and the carriage of goods by sea act, 1992 - non-contractual actions - Functions of the bill of lading contracts of carriage - Modifications to the traditional carriage contract model - Third-party rights under the initial carriage contract act - Common law and in equity - Statutory transfers. | | | | | |
| **Outcome 2** | Learners will possess comprehensive understanding to handle contracts, apply modifications, comprehend third-party rights. | | | | **K2** |
| **UNIT - III** | | | | | |
| **Objective 3** | To provide knowledge on cargo claim enquiry, common carriers' duties, rights, liabilities and Indian Consumer Protection Act, enabling effective consumer dispute handling. | | | | |
| The Cargo Claim Enquiry - Duties, Rights, and Liabilities of Common Carriers under: (i) The Carriers Act, 1865 (ii) The Railways Act, 1989, (iii) The Carriage by Road Act, 2007 (iv) The Carriage by Air Act, 1972 – Indian Consumer Protection Act, 1986: Objects – Rights of consumers – consumer dispute – Procedure of filing complaint – Procedure for redressal of complaints. | | | | | |
| **Outcome 3** | To equip students to handle cargo claims, address consumer complaints, and ensure efficient resolution of disputes. | | | | **K3** |
| **UNIT - IV** | | | | | |
| **Objective 4** | To provide comprehensive knowledge in maritime logistics, covering concepts, Objective, relevance to global marketing and supply chain. | | | | |
| Maritime Logistics: Concept, Objective – Importance, and relevance to global marketing and supply chain management - Coastal and Ocean transportation - World Seaborne Transport - Global Sea Routes and the trade volume - Characteristics of shipping transport - Types of Ships - Container, Roll-on/roll-off (ro-ro) vessels, General cargo ships, Bulk carriers, Tankers, etc.- Busiest Sea routes: East-West and North-South and Intra Region- International Maritime Organization (IMO): Formation and functions-Regulations concerning dangerous and polluting cargoes, including the class structure. | | | | | |
| **Outcome 4** | Learners acquire to make informed decisions in global marketing and supply chain, optimize maritime transportation, and comply with IMO regulations. | | | | **K4** |
| **UNIT - V** | | | | | |
| **Objective 5** | To learn and understanding of chartering principles, charter types, freight | | | | |

| | | |
|---|---|---|
| | determination, conference vs. competitive system. | |
| Chartering Principles and Practices – Types of Charters - Voyage, Time, and Bare Boat charters - Freight determination and determinants - Conference System Vs Competitive System - Freight structure and practice – Rate Dynamics - Multi-modal Transport system - Technological Developments in ocean transportation: Size, Tracking, Speed and Security. | | |
| **Outcome 5** | Learners to acquire chartering practices, freight analysis, competitive systems, freight structure management, rate dynamics, multi-modal transport optimization. | **K4** |

**Suggested Readings:**

Alan E. Branch. (2007)., "*Elements of Shipping:* Rutledge"

Kapoor N. D. (2010)., "*Mercantile Law*", New Delhi: Sultan Chand & Sons.

Martin Stop ford. (2008)., "*Maritime Economics*", Rutledge.

Pandit M. S., Shobha Pandit. (2010)., "*Business Law*". Mumbai: HPH.

Peter Lorange. (2007)., "*Shipping Strategy: Innovating for Success*: Rutledge".

Shukla M. C. (2011)., "*Mercantile Law*", New Delhi: S. Chand & Co.

**Online Resources:**

https://mis.alagappauniversity.ac.in/siteAdmin/ddeadmin/uploads/4/__PG_M.B.A%20Logistics%20Management_English_Maritime%20Logistics%20and%20Documentation_CRC_6554.pdf

https://unctad.org/system/files/official-document/rmt2021ch6_en.pdf

https://legalinstruments.oecd.org/public/doc/314/314.en.pdf

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. V.A. Anand,** Assistant Professor

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | S (3) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | S (3) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | S (3) | M (2) | L (1) | M (2) | L (1) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | M (2) | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) |
| **W. Avg** | **2.6** | **2.4** | **2.2** | **2** | **1.8** | **1.8** | **2** | **1.6** | **2** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.6** | **2.2** | **2** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER – II | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 6542EP** | **Executive Presentation Programme** | **V** | **Credits: 2** | **Hours: 3** |

| | | |
|---|---|---|
| **UNIT - I** | | |
| **Objective 1** | To familiarize presentation and public speaking's significance in competitive job environments and cover basic elements for effective delivery. | |
| Presentation Skills Basics: Presentation and Public Speaking - Its significance in competitive job environment - Introduction to Public Speaking - Basic elements of presentation and public speaking. | | |
| **Outcome 1** | Students will acquire skills for engaging public speaking and delivering effective presentations. | **K1** |
| **UNIT-II** | | |
| **Objective 2** | To provide presentation techniques for one-way and two-way communication, outlining Objective, pre-planning, engaging during presentation, and crafting an attractive ending. | |
| Presentation Techniques: One-way and two-way communication - Objective of presentation - Pre-plan for presentation - plan for during presentation - before the presentation - attractive ending. Preparing the Contents: 1. Delineate a timeline for the preparation of the presentation. 2. Describe how to analyze general and specific purposes including the audience. 3. Explain how to gather proof, evidence, and support. 4. Demonstrate structuring of a presentation. | | |
| **Outcome 2** | Learners will gain skills in timeline preparation, analyzing purposes and audience, gathering evidence, and structuring effective presentations. | **K2** |
| **UNIT - III** | | |
| **Objective 3** | To Address the challenges in presentation and public speaking, overcome fear and obstacles, emphasize rehearsal importance, avoid common mistakes. | |
| Main challenges or barriers of presentation and public speaking: Methods for overcoming the fear and obstacles during the presentation - Importance of Rehearsals - Common mistakes in Presentation and Public speaking - Tips for Smart speech. | | |
| **Outcome 3** | Students will master presentation and public speaking skills, confidently deliver engaging speeches, and effectively overcome obstacles for successful communication. | **K3** |
| **UNIT - IV** | | |
| **Objective 4** | To familiarize participants with presentation staging, including space considerations, the role of the Master of Ceremonies, and bodily aspects of speech delivery. | |
| Staging the Presentation: Space - The presentation area, Lecterns, Lighting, Acoustics, and Optional extras - The Role of the Master of Ceremonies - Bodily Aspects of Speech Delivery - Body Language-gesture, and posture, movement, and anatomy of good posture - The beauty of rhythm and voice modulation. | | |
| **Outcome 4** | Learners will confidently utilize body language and voice modulation, enhancing stage presence and delivering engaging speeches effectively. | **K4** |
| **UNIT - V** | | |
| **Objective 5** | To educate instruction on equipment and visuals, preparing attractive PowerPoint presentations, and discussing world-famous public speeches with audio-visual records. | |

| | | |
|---|---|---|
| Equipment and Visuals: Preparing and using visual aids, i.e. Clicker/Wireless Pocket Presenter/Presentation Remote, USB flash drive, Image Banks, Presentation Checklist, and After the presentation and some important instructions for describing data from visual aids - Introduction to Microsoft Power Points: Tips for preparing attractive and powerful PowerPoint presentations - Discussions on World Famous Public Speech with the audio-visual record. | | |
| **Outcome 5** | Students will gain proficiency in using visuals, preparing effective presentations, and enhancing presentation skills. | **K4** |

**Suggested Readings:** -

Access to Microsoft Power point 2016.

Access YouTube Video.

Meenakshi Raman and Shalini Upadhyay (2020)., "*Soft Skills: Key to Success in Workplace and Life*", 1st Edition, Cengage Learning.

Sanjay Kumar and Puspa Lata (2015)., "*Communication Skills",* 2nd Edition, Oxford University Press.

**Online Resources:**

https://www.techtarget.com/whatis/feature/How-to-create-a-successful-executive-presentation

https://visualsculptors.com/design-professional-executive-presentation/

https://open.baypath.edu/courseresources/chapter/executive-presentations/

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|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Mr. K. Aravindaraj,** Teaching Assistant

**Evaluation:**

The students will be evaluated for this course for a total of 100 marks. Out of this the Faculty in charge of this course will assess the students for a maximum of 25 marks on the basis of their performance of the students in activities assigned to them as a CIA.

The students will appear for a comprehensive viva-voce examination at the end of the semester in which they will be assessed for a maximum of 75 marks for their understanding as well as presentation of theoretical inputs in the II semester and current practices.

The Viva-Voce will be conducted by a panel of 3 examiners constituted as given below. The average of the marks awarded by the three examiners will be taken for this component of the evaluation.

**Panel Members:**

1. The Head of the Department - Chairman
2. Faculty in charge of the course - Member
3. One external examiner - Member

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | S (3) | S (3) |
| **CO2** | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | S (3) | L (1) | M (2) | L (1) | M (2) | S (3) | M (2) | L (1) |
| **CO4** | L (1) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | S (3) | S (3) | M (2) | L (1) | S (3) | L (1) | M (2) | M (2) | M (2) | M (2) |
| **W. Avg** | **2.4** | **2.6** | **2.4** | **1.8** | **2.2** | **1.6** | **2** | **1.8** | **2** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | M (2) | M (2) | S (3) |
| **CO2** | M (2) | M (2) | M (2) | S (3) | M (2) |
| **CO3** | S (3) | L (1) | L (1) | M (2) | M (2) |
| **CO4** | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **W. Avg** | **2.4** | **2.2** | **1.6** | **2.2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER – II | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 6542P1** | **Business Analytics Lab** | **P** | **Credits: 2** | **Hours: 4** |

| | | |
|---|---|---|
| **UNIT - I** | | |
| **Objective 1** | To introduce basics of statistics, covering statistical terms, population and sample, data types, and measurement scales (nominal, ordinal, interval, ratio). | |
| Basics of Statistics: Basic Statistical Terms - Population and Sample (Theory), Understanding Data- Qualitative Vs Quantitative Data / Continuous vs Discrete (Theory) -Measurement Scales - Nominal, Ordinal, Interval & Ratio. | | |
| **Outcome 1** | Learners gain foundational understanding, enabling effective data interpretation and analysis in diverse contexts. | **K1** |
| **UNIT- II** | | |
| **Objective 2** | To provide Teach basic data analysis using Excel (Pivot table, Vlookup, Hlookup), Chi Square Analysis, Independence and Goodness of fit tests. | |
| Basic Data analysis using Excel Pivot table – Vlookup – Hlookup - Chi Square Analysis - Test of Independence - Test of Goodness of fit. Analysis of Variance - One-Way Classification - Two-way Classification. Correlation, Regression. | | |
| **Outcome 2** | Students will gain proficiency in Excel-based data analysis techniques and statistical tests, enhancing their analytical skills for decision-making and research. | **K2** |
| **UNIT - III** | | |
| **Objective 3** | To introduce basics of R: software installation (R and R Studio), data reading and writing, data cleaning, and library installation. | |
| Basics of R: Installation of software (R and R Studio) – Reading and writing data from local files (.txt,.csv,.xls) – Data Cleaning - Installing libraries | | |
| **Outcome 3** | Learners will gain proficiency in R for data analysis and manipulation. | **K4** |
| **UNIT - IV** | | |
| **Objective 4** | To provide data visualization using R, covering ggplot and types of charts: Bar/Pie Charts, Histogram, Box and Whisker Chart, and Scatter Diagram. | |
| Data visualization using R: ggplot- types of charts - Bar/Pie Charts -Histogram -Box and Whisker Chart - Scatter Diagram. | | |
| **Outcome 4** | Students will be familiar in data visualization using R, creating various types of charts for effective data representation and analysis. | **K6** |
| **UNIT - V** | | |
| **Objective 5** | To provide Python basics, installing Python, pandas with pip, and reading/writing data from local files (.txt, .csv, .xls, .json, etc). | |
| Basics of Python: Introducing to Python – Installing Python – installing pandas using pip - Reading and writing data from local files (.txt,.csv,.xls,.json, etc) | | |
| **Outcome 5** | Learners will learn Python skills, install pandas, and effectively handle data in various formats, enhancing data manipulation proficiency. | **K6** |

**Suggested Readings:**: -


Berk & Carey (2009)., *"Data Analysis with Microsoft Excel*", 3rd Edition, Cengage Learning.

David Ascher and Mark Lutz (2001)., "*Learning Python*", 2nd Edition, O'Reilly Media.

Eric Goh Ming Hui (2019)., "*Learn R for Applied Statistics with Data Visualizations, Regressions, and Statistics*", 1st Edition, APRESS.

Garrett Grolemund and Hadley Wickham (2017)., "*R for Data Science*", 1st Edition, O'Reilly Media.

Garrett Grolemund (2014)., "*Hands-On Programming with R*", 1st Edition, O'Reilly Media.

Linda Herkenhoff and John Fogli(2013)., "*Applied Statistics for Business and Management using Microsoft Excel*", 1st Edition, Springer.

Thomas Mailund (2017)., "*Beginning Data Science in R: Data Analysis, Visualization, and Modelling for the Data Scientist*", 1st Edition, APRESS.

Wayne L. Winston (2014)., "*Microsoft Excel 2013 Data Analysis and Business Modeling*", 1st Edition, O'Reilly Media.

**Online Resources:**

1. https://www.learnpython.org/
2. https://www.tutorialspoint.com/python/
3. https://www.rstudio.com/online-learning/
4. Pivot Tables in Excel (In Easy Steps) (excel-easy.com)
5. VLOOKUP in Excel (Formula, Examples) | How to Use? (educba.com)

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. P. RajanChinna,** Assistant Professor

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | S (3) | L (1) | S (3) | L (1) | M (2) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | L (1) | M (2) | M (2) | L (1) | L (1) | M (2) | M (2) | L (1) | L (1) | L (1) |
| **CO5** | M (2) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | M (2) |
| **W. Avg** | **2** | **2.2** | **2** | **1.8** | **1.6** | **1.6** | **2** | **1.6** | **1.8** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | M (2) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | L (1) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | M (2) | S (3) | M (2) |
| **CO5** | M (2) | M (2) | S (3) | M (2) | L (1) |
| **W. Avg** | **2.6** | **2.2** | **1.8** | **2** | **1.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654301** | **Digital Supply Chain Management** | **T** | **Credits: 4** | **Hours: 4** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To identify the various digital technologies used in the Supply Chain Management | |
| **Introduction:** Emergence of e-commerce – Enterprise Resource Planning – Geographic Information System – Intelligent Transportation Systems – Barcoding systems – Radio Frequency Identification – Artificial Intelligence – Information Technology Project Management – Future trends of IT in Global Commerce | | |
| **Outcome 1** | Students understand the basic information of various digital technologies used in the Supply Chain Management. | **K1** |

| **UNIT – II** | | |
|---|---|---|
| **Objective 2** | To discuss Digital SCOM and Database Management used in the supply chain management | |
| **Digital Supply Chain Operations Management:** SCOM Excellence and Digitalization – Development of technology in SCOM – Industry 3.0 – Industry 4.0 – Digital SCOM Framework - Information Technology Infrastructure**:** The next wave computing – Cloud computing – Open-source software – Programming languages – Database Management – Fundamental data concepts – Database structures and developments – Types of databases – Big Data – Data Warehouses and Data Mining – Traditional file processing – The database management approach. | | |
| **Outcome 2** | Students acquire knowledge on Digital SCOM and Database Management used in the supply chain management. | **K2** |

| **UNIT – III** | | |
|---|---|---|
| **Objective 3** | To design plan and source process using digital technologies in the supply chain management | |
| **Digital Technology in the 'PLAN' and 'SOURCE' Process:** Plan process – Big data analytics – The digital twin – Source process – e-procurement – Supplier collaboration portals – Digital trends for excellence in sourcing – Blockchain – Robotic process automation and Artificial Intelligence in procurement. | | |
| **Outcome 3** | Students understand the plan and source process using digital technologies in the supply chain management**.** | **K4** |

| **UNIT – IV** | | |
|---|---|---|
| **Objective 4** | To design make and delivery process using digital technologies in the supply chain management | |
| **Digital Technology in the 'MAKE' and 'DELIVERY' Process:** Make process – 3D printing and Additive Manufacturing – Virtual Reality and Augmented Reality – Robotics – Delivery process – Drones or Unmanned Aerial Vehicles – Smart driverless transportation system – Smart forklifts, Pallet movers, and Cranes. | | |
| **Outcome 4** | Students understand the plan and source process using digital technologies in the supply chain management. | **K4** |

| **UNIT – V** | | |
|---|---|---|
| **Objective 5** | **To evaluate qualitative and quantitative potential of digital technology in SCOM** | |
| **Qualitative and Quantitative Potential of Digital Technology in SCOM:** Qualitative improvements of Digital SCOM – Quantitative potential assessments of Digital SCOM – Possible obstacles and limitations of Digital SCOM - Development and Security Challenges**:** IS | | |

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|---|---|---|
| developments – The systems development life cycle – Starting the systems development process – Systems analysis – System development methodologies: Waterfall model – Prototyping – RAD – Agile – XP – JAD – RUP – Design thinking – Ethical responsibility – Computer crime – Privacy issues – Cyber-security and Cryptography – Blockchain- the new secured technology. | | |
| **Outcome 5** | Students critically evaluate the qualitative and quantitative potential of digital technology in SCOM. | **K5** |

**Suggested Readings:**

Dmitry Ivanov, Alexander Tsipoulanidis, Jörn Schönberger(2016)., "*Global Supply Chain and Operations Management A Decision-Oriented Introduction to the Creation of Value*", 2nd Edition, Springer.

Hokey Min (2015)., "*The Essential of Supply Chain Management – New Business Concepts and Applications*", 2nd Edition, Paul Boger.

Jane P. Laudon and Kenneth C. Laudon (2011)., "*Essentials of Management Information Systems*", 11th Edition, Pearson.

Ramesh Behl, James A. O'Brien, and George M. Marakas(2006)., "*Management Information Systems*", 11th Edition, Tata McGraw Hill.

**Online Resources:**

https://www.coursera.org/articles/digital-supply-chain

https://www.business.rutgers.edu/executive-education/supply-chain-management/curriculum

https://www.bitsight.com/blog/what-is-digital-supply-chain-management

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. P. Rajan Chinna, Assistant Professor**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | L (1) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | L (1) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | L (1) | L (1) | M (2) | L (1) | M (2) | M (2) | M (2) | L (1) |
| **CO5** | M (2) | S (3) | L (1) | M (2) | S (3) | L (1) | M (2) | M (2) | M (2) | M (2) |
| **W.Avg** | **2.6** | **2.4** | **1.4** | **1.4** | **2.6** | **1.4** | **2** | **2.4** | **2** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | S (3) | L (1) | M (2) |
| **CO2** | S (3) | L (1) | S (3) | L (1) | M (2) |
| **CO3** | M (2) | L (1) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **W.Avg** | **2.4** | **1.4** | **2.4** | **1.6** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654302** | **International Marketing Management** | **T** | **Credits: 4** | **Hours: 4** |

| UNIT – I | | |
|---|---|---|
| **Objective 1** | To outline the international marketing management | |
| **The International Marketing Environment:** Global Environmental Drivers: The international marketplace – International marketing defined – Environment and sustainability – The importance of world trade – New source for outsourcing – Opportunities and challenges in international marketing – International Trade Framework and Policy: A trade negotiator's – The modern-day pirate global division – Transnational institutions affecting world trade – IMF, World bank, and Regional institutions – The impact of trade and investment. | | |
| **Outcome 1** | Students reckon the importance of international marketing management. | **K1** |

| UNIT – II | | |
|---|---|---|
| **Objective 2** | To compare PESTLE in international marketing management | |
| **Political, Sociological, Legal, and Environmental in International Marketing:** Society, Culture, and Global Consumer Culture: Attitudes, beliefs, and values – Religion – Aesthetics – Dietary preferences – Language and communication – Marketing impacts on culture – The Political, Legal, and Regulatory Environments: The political environment – International law – Sidestepping legal problems – Conflict resolution, dispute settlement, and litigation. | | |
| **Outcome 2** | Students understand knowledge on comparison of PESTLE in international marketing management. | **K2** |

| UNIT – III | | |
|---|---|---|
| **Objective 3** | To discuss the global market approach in international marketing management. | |
| **Approaching Global Markets:** Segmentation, Testing, and Positioning: Global market segmentation – Assessing market potential and choosing target markets – Product-market decisions – Targeting and target market strategy options – Positioning. | | |
| **Outcome 3** | Students acquire the knowledge on the importance of global market approach in international marketing management. | **K4** |

| UNIT – IV | | |
|---|---|---|
| **Objective 4** | To analyze the importance of importing, exporting, and sourcing in the international marketing management. | |
| **Importing, Exporting, and Sourcing:** Export selling and export marketing: A comparison – Organizational export activities – National policies governing exports and imports – Tariff systems – Key export participants – Organizing for exporting in the manufacturer's country – Organizing for exporting in the market country – Trade financing and methods of payment – Sourcing. | | |
| **Outcome 4** | Students analyze the importance of importing, exporting, and sourcing in the international marketing management. | **K4** |

| UNIT – V | | |
|---|---|---|
| **Objective 5** | To learn the global marketing mix in international marketing management | |
| **The Global Marketing Mix:** Brand and product decisions in global marketing – Pricing decisions – Distribution channels: Objective, Terminology, and Structure: Consumer products and services – Industrial products – Establishing channels and working with channel intermediaries – Global retailing – Global advertising – Global sales promotion - Global e-commerce. | | |

| | | |
|---|---|---|
| **Outcome 5** | Students critically evaluate the global marketing mix in international marketing management. | **K5** |

**Suggested Readings:**

Michael R. Czinkota and Ilkka A. Ronkainen (2010)., "*International Marketing with Course Mate*", 10th Edition, Cengage Learning.

Philip Kotler and Kevin Lane Keller (2012)., "*Marketing Management*", 15th Edition, Pearson.

Warren J. Keegan and Mark C (2017)., "*Green, Global Marketing*", 9th Edition, Pearson.

**Online Resources:**

https://egyankosh.ac.in/handle/123456789/3143

https://www.geektonight.com/international-marketing-notes/

https://old.mu.ac.in/wp-content/uploads/2014/04/MANAGEMENT-Paper-IV-INTERNATIONAL-MARKETING-Book-final.pdf

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. C. Suresh, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) |
| **W.Avg** | **3** | **2.4** | **2** | **2** | **2.4** | **2** | **2.4** | **2** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | S (3) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | S (3) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **W.Avg** | **2.6** | **2** | **2.6** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E1** | **Group I: – Logistics Management**<br>**Purchasing and Strategic Sourcing** | **T** | **Credits: 3** | **Hours: 3** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To provide knowledge on Purchasing in logistics and supply chain management. | |
| Introduction to Purchasing and Supply Chain Management: Purchasing – Definitions – Perspectives of purchasing – Purchasing and supply chain management – Achieving purchasing and supply chain benefits – Four Enablers of purchasing and supply chain management - Evolution of purchasing and supply chain management. | | |
| **Outcome 1** | Students understand the importance of purchasing in logistics and supply chain management. | **K1** |
| **UNIT – II** | | |
| **Objective 2** | To understand the importance of purchasing in logistics management. | |
| The Purchasing and Supply Process: Purchasing Objective – Strategic supply management roles and responsibilities – Improving the procure to pay process – Approval, contract, and purchase order preparation – Types of purchases. | | |
| **Outcome 2** | Students impart knowledge of the importance of purchasing in logistics management. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To analyze purchasing policy and procedures in logistics management. | |
| Purchasing Policy and Procedures: Purchasing policies – Providing guidance and direction - Traditional purchasing procedures – e-commerce, e-business, and e-SCM – EDI, E-hubs, exchanges, portals, and marketplaces – e-catalogues – e-auctions-e-payment – Purchasing manuals – Supplier manuals – Legal aspects of purchasing. | | |
| **Outcome 3** | Students acquire purchasing policy and procedures in logistics management. | **K4** |
| **UNIT – IV** | | |
| **Objective 4** | To discuss the importance of strategic sourcing in logistics management. | |
| Strategic Sourcing: Integrating strategy development – Category strategy development – Build the team and the project charter – Conduct market research on suppliers – Strategy development – Contract negotiation – Supplier relationship management – Evolving sourcing strategies – Basic beginnings – Moderate development – Limited integration – Fully integrated supply chain. | | |
| **Outcome 4** | Students learnt the importance of strategic sourcing in logistics management. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | To evaluate the supplier evaluation and selection in logistics management. | |
| Supplier Evaluation and Selection: The supplier evaluation and selection process – Identify key sourcing requirements – Identify potential supply sources – Use of preferred suppliers – Select supplier and reach agreement – Key supplier evaluation criteria – Tools and approaches. | | |
| **Outcome 5** | Students critically evaluate the supplier evaluation and selection in logistics management. | **K5** |

**Suggested Readings:**

Handfield, Monczka, Giunipero, Patterson (2011)., "*Sourcing and Supply Chain Management",* 5th Edition, Cengage Learning.

Kenneth Lysons, Brian Farrington (2010)., "*Purchasing and Supply Chain Management*", 7th

| |
|---|
| Edition, Pearson.<br>Leenders, Johnson, Flynn, Fearon (2010)., "*Purchasing and Supply Chain Management*", 13th Edition, Tata McGraw-Hill. |
| **Online Resources:**<br>**Strategic Sourcing Definition, Process & Examples**<br>https://study.com/learn/lesson/strategic-sourcing-process-examples.html<br>**Strategic Sourcing: Importance, Objective & Steps**<br>https://happay.com/blog/strategic-sourcing/<br>https://www.american-purchasing.com/coursedetail.php?id=85 |

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

Course Designed by: Mr. K. Aravindaraj, Teaching Assistant

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | S (3) |
| **CO3** | M (2) | M (2) | S (3) | M (2) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | S (3) | S (3) | M (2) | S (3) | S (3) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | M (2) |
| **W.Avg** | **2.6** | **2** | **2.6** | **2.4** | **2.2** | **2.6** | **2.2** | **2.4** | **2** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | L (1) | M (2) |
| **CO2** | S (3) | M (2) | S (3) | L (1) | M (2) |
| **CO3** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **CO4** | S (3) | S (3) | M (2) | S (3) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **3** | **2.6** | **2.6** | **2.2** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E2** | **Group I: Logistics Management**<br>**International Trade Logistics** | **T** | **Credits: 3** | **Hours: 3** |

| UNIT – I | | |
|---|---|---|
| **Objective 1** | To compile knowledge on international trade logistics. | |
| **Introduction to International Trade Logistics:** Concept of trade logistics - Evolution and development of international trade logistics – Importance of trade logistics – Sub-system elements in trade logistics. | | |
| **Outcome 1** | Students learnt the fundamentals of international trade logistics. | **K1** |

| UNIT – II | | |
|---|---|---|
| **Objective 2** | To understand the importance of transportation decisions in international trade logistics. | |
| **International Logistics:** Importance of transportation decision – Factors affecting the choice of transport mode – Types of transport carriers – Challenges in information processing – Logistics information system – Need for packaging in international trade logistics – labeling and marking in international logistics. | | |
| **Outcome 2** | Students reveal the importance of transportation decisions in international trade logistics. | **K1** |

| UNIT – III | | |
|---|---|---|
| **Objective 3** | To discuss the importance of inventory in international trade logistics. | |
| **Inventory Management in Trade Logistics:** Nature of inventory in trade logistics – Types of inventories in trade logistics – Contemporary developments in inventory management – Models of Inventory in trade logistics – Procedures of warehousing the imported and exported cargo – FTWZ. | | |
| **Outcome 3** | Students gain knowledge of the importance of inventory in international trade logistics. | **K2** |

| UNIT – IV | | |
|---|---|---|
| **Objective 4** | To analyze the reputation of dry ports in international trade logistics. | |
| **Dry Ports:** Concept of dry ports – Advantage and Increasing role of dry ports – Functions of dry ports – Facilities at dry ports – Export and Import clearance at dry ports – Essential requirements for ICDS/CFSS – Challenges in the growth of dry ports in India. | | |
| **Outcome 4** | Students realized the significance of dry ports in international trade logistics. | **K4** |

| UNIT – V | | |
|---|---|---|
| **Objective 5** | To evaluate the incoterms used in international trade logistics. | |
| **INCOTERMS:** Factors influencing the choice of delivery terms – Purpose and scope of shipping terms – Types of INCOTERMS – EXW – FCA – FAS – FOB – CFR – CIF – CPT – CIP – DAT – INCOTERMS and freight payments in trade logistics – Choosing INCOTERMS for international trade deals. | | |
| **Outcome 5** | Students critically evaluate the incoterms in international trade logistics. | **K5** |

**Suggested Readings:**

Ram Singh (2009)., "*International Trade Logistics*", 1st Edition, Oxford Higher Education.

**Online Resources:**

Introduction to International Trade Logistics

https://campus360.iift.ac.in/Secured/Resource/194/I/NB%2013/293861382.pdf

**Components, Process, Channels and Examples**

https://www.netsuite.com/portal/resource/articles/inventory-management/international-logistics.shtml

**Pierre David "International Logistics"**

https://books.google.co.in/books/about/International_Logistics.html?id=3XNSc7F4TRgC&source=kp_book_description&redir_esc=y

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Mr. K. Aravindaraj, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | L (1)) | M (2) | M (2) | L (1) | L (1) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | L (1) | M (2) | M (2) | L (1) | L (1) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) |
| **W.Avg** | **2.4** | **2.4** | **2** | **2.6** | **2.4** | **2.2** | **2** | **2.4** | **2** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | L (1) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | L (1) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | S (3) | M (2) | S (3) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.4** | **2.4** | **2.2** | **2** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E3** | **Group I: Logistics Management**<br>**Materials Management** | **T** | **Credits: 3** | **Hours: 3** |

| UNIT – I | | |
|---|---|---|
| **Objective 1** | To gather knowledge on the significance of materials management in logistics. | |
| **Introduction to Materials Management:** Introduction – Operating environment – The supply chain concept – Manufacturing planning and control system – Sales and operations planning – Enterprise resource planning – Making the production plan. | | |
| **Outcome 1** | Students learnt the essentials of materials management in logistics. | **K2** |

| UNIT – II | | |
|---|---|---|
| **Objective 2** | To analyze the status of materials requirement planning in logistics. | |
| **Materials Requirement Planning:** Relationship to production plan – Developing an Aggregate planning and master production schedule – Bills of Materials – Materials Requirement Planning process – Manufacturing Requirement Planning – Capacity Requirement Planning. | | |
| **Outcome 2** | Students expose the strategy of material requirement planning in logistics. | **K4** |

| UNIT – III | | |
|---|---|---|
| **Objective 3** | To know the impact of inventory fundamentals in logistics. | |
| **Inventory Fundamentals:** Aggregate inventory management – Item inventory management – Inventory and the flow of materials – Supply and Demand patterns – Functions of inventories – Inventory costs – Financial statements and Inventory – ABC Inventory control – Economic Order Quantity – Period – Over Quantity. | | |
| **Outcome 3** | Students gain knowledge on the impact of inventory fundamentals in logistics | **K2** |

| UNIT – IV | | |
|---|---|---|
| **Objective 4** | To analyze the product and process development in logistics. | |
| **Products and Processes:** Need for new products – Product development principles – Product specifications and design – Process design – Factors influencing process design – Processing equipment – Process system – Selecting the process – Continuous Process Improvement. | | |
| **Outcome 4** | Students understand the product and process development in logistics. | **K4** |

| UNIT – V | | |
|---|---|---|
| **Objective 5** | To evaluate the quality fundamentals in logistics. | |
| **Quality Fundamentals:** Just-in-time philosophy – Just-in-time environment – Manufacturing planning and control in a JIT environment – Lean production – Total Quality Management – Process capability – Process control – ISO 9000:2000 – Benchmarking – Quality functions deployment. | | |
| **Outcome 5** | Students critically evaluate the quality fundamentals in logistics. | **K5** |

**Suggested Readings:**

Gopalakrishnan P., (1990) *Purchasing and Materials Management*., Tata McGraw Hill, 2012.

Tony Arnold J. R., Stephen N. Chapman, Lloyd M. Clive (2001)., *Materials Management*, Pearson, 2012.

**Online Resources:**

Dr. Dilfraz Singh "Materials Management"

https://ebooks.lpude.in/management/mba/term_4/DMGT525_MATERIALS_MANAGEMENT.pdf

https://books.google.co.in/books?id=oYdHBQAAQBAJ&printsec=frontcover&redir_esc=y#v=onepage&q&f=false

https://indiaclass.com/materials-management-reference-books/

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. P. Rajan Chinna, Assistant Professor**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | S (3) | M (2) | M (2) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | M (2) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) |
| **W.Avg** | **2.6** | **2.2** | **2.4** | **2** | **2.4** | **2.4** | **2.6** | **2.4** | **2** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **CO3** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.6** | **2.4** | **2.8** | **2.4** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E4** | **Group I: – Logistics Management**<br>**Containerization and Multimodal Transportation** | **T** | **Credits:3** | **Hours: 3** |

| | | |
|---|---|---|
| **UNIT – I** | | |
| **Objective 1** | To compile on the significance of containerization in logistics. | |
| **Containerization:** Introduction – Major container trades – Two container operators – Container ships terminals – Container distribution – Container types – non-containerize cargo – Features of containerization – Container bases – International Convention for safe containers. | | |
| **Outcome 1** | Students acquired the significance of containerization in logistics. | **K2** |
| **UNIT – II** | | |
| **Objective 2** | To identify the different characterization of cargoes in logistics. | |
| **Cargoes:** Cargo stowage packing overview – Stowage of cargo – Types and characterization of cargo – Cargo and container handling equipment – Types of packing – Dangerous cargo – Temperature-controlled cargo guide. | | |
| **Outcome 2** | Students learnt the different characterization of cargoes in logistics. | **K1** |
| **UNIT – III** | | |
| **Objective 3** | To compute the development of multi modalism in logistics. | |
| **Multi-Modalism:** Factors in favor of multi-modalism – Rationale for the development of multi-modalism – Basic intermodal system – Features of multi-modalism – multi-modalism strategy – Multi-modal transportation in India - Container Corporation of India (CONCOR), Dedicated Freight Corridors (DFCC). | | |
| **Outcome 3** | Students gain knowledge on the impact of multi modalism in logistics | **K2** |
| **UNIT – IV** | | |
| **Objective 4** | To analyze the different types of transportation in port logistics. | |
| **Physical multi-modal operations:** Liners - Tramps - Specialized Vessels - Terms - Road transport vehicle – Road Transport Weight and Measurement - Rail Transport Vehicle and Equipment – Air Transport - Ports - LCL - FCL - NVOCC - Freight forwarders - Consolidator - ICD CFS- Free Trade Area - SEZ - Factors affecting mode and route choice. | | |
| **Outcome 4** | Students understand the different types of transportation in port logistics. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | To evaluate the fundamentals of cargo liability convention in logistics. | |
| **Conventions relating to multimodal transport:** Cargo Liability Convention: International Conventions relating to Bill of Lading (the Hague and Hague/Visby Rules (Appendix 8) - Hamburg Rule - Convention relating through Transport operation by Land, Rail, Air - Conventions relation to Dangerous Cargo - Carriage of Perishable Goods - International Convention for safe containers1972 (CSC). | | |
| **Outcome 5** | Students assessed the fundamentals of cargo liability convention in logistics. | **K5** |

**Suggested Readings:**


Alan E Branch, Micheal Roberts (2014)., *Branch's Elements of Shipping*, 9th Edition, Routledge.

CLAUS, HYLDAGER (2013)., "*Logistics, and Multi-modal Transport*". 2013 Edition, Institute of Charted Shipbrokers.

HARIHARAN, K. V. (2002)., "*A Textbook on Containerization and Multimodal Transport", Shroff Publishers and Distributors*: New Delhi.

HARIHARAN, K. V. (2002)., "*Containerization, Multimodal Transport, and Infrastructure Development in India*", 5th edition, Shroff Publishers and Distributors Pvt. Ltd.

| **Online Resources:** | | | | | |
|---|---|---|---|---|---|
| https://www.nios.ac.in/media/documents/377_TWM/Chapter-11.pdf<br>https://cdn.tcil.in/website/tcil//publication/Enroute_Jan-March-2018.pdf<br>https://www.inboundlogistics.com/articles/multimodal-transportation/ | | | | | |
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |
| **Course Designed by: Dr. V. A. Anand, Assistant Professor** | | | | | |

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | L (1) | L (1) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | L (1) | L (1) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M(3) |
| **W.Avg** | **2.2** | **2** | **2.6** | **2.2** | **1.6** | **1.6** | **2** | **2.2** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | L (1) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | L (1) | L (1) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | L (1) |
| **CO4** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **W.Avg** | **2.2** | **2** | **2.2** | **1.6** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E5** | **Group II: – Supply Chain Management**<br>**Supply Chain Planning and Coordinating** | **T** | **Credits: 3** | **Hours: 3** |

| | | |
|---|---|---|
| **UNIT – I** | | |
| **Objective 1** | To understand the role of forecasting for both an enterprise and supply chain. | |
| **Demand Forecasting in a Supply Chain:** The role of forecasting – Characteristics of forecasts – Components of a forecast and forecasting methods – Basic approach to demand forecasting – Time-series forecasting method – Measures of forecast error – Selecting the best smoothing constant – The role of IT in the forecast. | | |
| **Outcome 1** | Students gained the knowledge of forecasting for both an enterprise and supply chain. | **K2** |
| **UNIT – II** | | |
| **Objective 2** | To realize the importance of aggregate planning as a supply chain activity. | |
| **Aggregate Planning in a Supply Chain:** The role of aggregate planning in a supply chain – The aggregate planning problem – aggregate planning strategies – Aggregate planning using linear programming – The role of IT in aggregate planning. | | |
| **Outcome 2** | Students understood the importance of aggregate planning as a supply chain activity. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To use sales and operations planning to maximize profitability when faced with predictable variability in a supply chain. | |
| **Planning Supply and Demand in a Supply Chain:** Responding to predictable variability in the supply chain – Managing supply – Managing demand – Implementing sales and operations planning in practice – Tackling predictable variability in practice. | | |
| **Outcome 3** | Student's acquisition sales and operations planning to maximize profitability when faced with predictable variability in a supply chain. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To discuss managerial levers that help achieve coordination in a supply chain. | |
| **Coordination in a Supply Chain:** Lack of supply chain coordination and the Bullwhip effect – The effect on the performance of lack of coordination – Obstacles to coordination in a supply chain – Managerial levers to achieve coordination – Continuous Replenishment and Vendor-Managed Inventories – Collaborative Planning, Forecasting, and Replenishment | | |
| **Outcome 4** | Students analyzed managerial levers that help achieve coordination in a supply chain. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | To evaluate the impact of safety inventory in a supply chain. | |
| **Safety Inventory in a Supply Chain:** The role of safety inventory in a supply chain – Factors affecting the level of safety inventory – Determining the appropriate level of safety inventory – Impact of supply uncertainty on safety inventory – Impact of replenishment policies on safety inventory – The role of IT in inventory management. | | |
| **Outcome 5** | Students measured the impact of safety inventory in a supply chain. | **K5** |

**Suggested Readings:** Alan E Sunil Chopra, Peter Meindl, Dharam Vir Kalra (2016)., "*Supply Chain Management: Strategic, Planning, and Operation*", 6th Edition, Pearson.

Shridhara Bhat K. (2014)., "*Logistics and Supply Chain Management*", 5th Edition, Himalaya Publishing House.

**Online Resources:**

https://learntransformation.com/best-supply-chain-books-for-leaders/

**Supply Chain Planning, And Business Benefits**

https://www.gartner.com/en/supply-chain/topics/supply-chain-planning

**Supply Chain Planning: Strategy, Processes and Practices**

https://www.netsuite.com/portal/resource/articles/erp/supply-chain-planning-scp.shtml

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. K. Subha, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | M (2) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) |
| **CO2** | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M(3) |
| **W.Avg** | **2.8** | **2.4** | **2.8** | **2** | **2.4** | **2.2** | **2.6** | **2.6** | **2.2** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **CO2** | S (3) | S (3) | M (2) | M (2) | S (3) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | S (3) |
| **CO4** | M (2) | S (3) | S (3) | S (3) | M (2) |
| **CO5** | M (2) | S (3) | S (3) | M (2) | S (3) |
| **W.Avg** | **2.4** | **2.8** | **2.6** | **2.4** | **2.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E6** | **Group II: – Supply Chain Management**<br>**Global Supply Chain Management** | **T** | **Credits: 3** | **Hours: 3** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To identify the role of the supply chain in the global. | |
| **Role of the Supply Chain:** Managing the Supply Pipeline for Global Trade Flows - The Global Logistics Operator - Comparison between National and International Logistics - International Transport - International Trade Law - Employment Law - Globalization and International Trade Environment. | | |
| **Outcome 1** | Students got the knowledge of the importance of the role of supply chain in the global. | **K1** |
| **UNIT – II** | | |
| **Objective 2** | **To accomplish the importance of free trade movement in global supply chain management.** | |
| **Global Supply Chain Management:** The impact of the free trade movement – Global market penetration strategy of Multinational Firms – Strategic alliances among multinational firms – Global outsourcing trends – Managing international distribution channels – Foreign Trade Zones and Free Trade Zones – Import and Export documentation – INCOTERMS and international payments – Countertrade – Transfer pricing – Cross-Cultural Negotiations. | | |
| **Outcome 2** | Students grasped the importance of free trade movement in global chain management. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To classify the factors and challenges driving logistic and supply chain in global. | |
| **Factors and Challenges Driving Logistics and Supply Chain Management:** Factors Driving Global Supply Chain Management - Customs and Global Supply Chain Management - Management of the Inventory in the Supply Chain Analysis Including Vendor Management - Factors Contributing to the Development of Logistics - Asset Management in the Supply Chain. | | |
| **Outcome 3** | Students evaluated the different factors and challenges driving logistic and supply chain in global. | **K5** |
| **UNIT – IV** | | |
| **Objective 4** | To analyze the export sales contract in global supply chain management. | |
| **Export Sales Contract:** Market Environment - Market Entry Strategy - Constituents of the Export Sales Contract - Modern Logistics Concepts - Logistics Providers Are Taking on More Responsibilities as the Industry Goes Global - Contract of Affreightment: Terms of Delivery – Incoterms - Factors Determining Choice of Incoterms - Trade Finance – Currency - Credit Terms - UCP 600 – Documentary Credits and Allied Documents - Market Development Strategy with Global Logistics Focus - Business to Business (B2B) and Business to Consumer (B2C) – Value-Added Benefit - Identifying Priorities | | |
| **Outcome 4** | Students analyzed the export sales contract in global supply chain management. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | To identify and analyzed selecting the international logistics operator in global. | |
| **Selecting the International Logistics Operator:** Criteria of Selecting the Third-Party Logistics Operator - The Key Factors in the Development of a Successful 3PL - Contract Logistics - International Organization for Standardization – ISO Supply Chain Management Selection – Six-Core Products – Supply Chain Management – Warehousing – Customs Clearance – Air Freight – Consolidation – Project Cargo - International Transport - Trade-Offs Inherent in International Logistics – Multi-Modalism - Key Factors in a Transport Mode(s) Trade-Off - Speed - Frequency - Packing - Insurance - Warehousing - IT and E- | | |

| Commerce - Project Installation Management. | | |
|---|---|---|
| **Outcome 5** | Students analyzed the selecting the international logistics operator in global. | **K5** |

**Suggested Readings:**

Alan E. Branch (2008)., "*Global Supply Chain Management and International Logistics*", 1st Edition, Routledge.

Dmitry Ivanov, Alexander Tsipoulanidis, Jörn Schönberger(2016)., "*Global Supply Chain and Operations Management A Decision-Oriented Introduction to the Creation of Value*", 2nd Edition, Springer.

Hokey Min (2015)., "*The Essential of Supply Chain Management – New Business Concepts and Applications*", 2nd Edition, Paul Boger.

**Online Resources:**

https://archive.nptel.ac.in/courses/110/108/110108056/

https://aims.education/study-online/global-supply-chain-management/

https://www.academia.edu/40751643/GLOBAL_SUPPLY_CHAIN_MANAGEMENT_NOTES_MSC_PROCUREMENT_AND_LOGISTICS_Q

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. V. A. Anand, Assistant Professor**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) | S (3) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) | S (3) |
| **W.Avg** | **2.4** | **2.6** | **2.4** | **2.4** | **2.6** | **2.4** | **2.4** | **2** | **2.4** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **CO4** | M (2) | M (2) | S (3) | S (3) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | M (2) | S (3) |
| **W.Avg** | **2.4** | **2.2** | **2.6** | **2.4** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E7** | **Group II: – Supply Chain Management**<br>**Retail & Supply Chain Management** | **T** | **Credits: 3** | **Hours: 3** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To understand the basic information of retail in the supply chain management. | |
| **Retail Supply chain:** Definition– retail as a business– the importance of customer segments– value chain– types or retail chain business– comparative advantages– CSR and retail industry- Supply chain contours: Backward and forward linkages- Supply chain efficiency. | | |
| **Outcome 1** | Students got the knowledge of the basic information of retail in the supply chain management. | **K1** |
| **UNIT – II** | | |
| **Objective 2** | To compile retail supply chain environment in the supply chain management. | |
| **Retail supply chain environment:** drivers of retail supply chain change– globalization–nature of demand– quality function deployment– retail supply chain risk– retail supply chain metrics. | | |
| **Outcome 2** | Students grasped the importance of retail supply chain environment in the supply chain management. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To outline the retail strategy in the supply chain management. | |
| **Retail strategy and supply chains:** Product lifecycle– innovative and functional products– retail market segments– supply chain management excellence– skill requirement. | | |
| **Outcome 3** | Students gained the importance of the retail strategy in the supply chain management. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To analyze the significance of retail supply chain process improvement. | |
| **Retail supply chain process improvement:** improvement approaches: PDCA, DMAIC, CPFR– supply chain collaboration– core competency– demand-driven supply chain: tools and techniques– product tracking: Barcoding, RFID. | | |
| **Outcome 4** | Students analyzed the significance of retail supply chain process improvement. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | To analyze the financial aspect of retail supply chain management. | |
| **Finance And retail supply chain:** Supply chain costs– root causes for cost – retail returns– opportunities in retail returns- Supply chain engineering –4PL Value- GS1 System of the worldwide supply-chain standards system. | | |
| **Outcome 5** | Students analyzed the financial aspect of retail supply chain management. | **K4** |

**Suggested Readings:**

James B. Ayers and Mary Ann Odegaard (2018)., "*Retail Supply Chain Management*", 2nd Edition, CRC Press.

Kerstin Gustafsson, Gunilla Joonson, David Smith, and Leigh Sparks (2009)., "*Retailing Logistics & Fresh Food Packaging: Managing Change in the Supply Chain*", 1st Edition, Kogen Page.

**Online Resources:**

**Retail Supply Chain Management Guide: Importance & Strategies**

https://www.netsuite.com/portal/resource/articles/erp/retail-supply-chain-management.shtml

| | | | | | |
|---|---|---|---|---|---|
| https://www.udemy.com/course/retail-supply-chain-management/?couponCode=NVDPRODIN35<br>**Book of Retail Supply Chain Management- James B. Ayers**<br>https://www.adityabooks.in/details/retail-supply-chain-management/1626 | | | | | |
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |
| **Course Designed by: Dr. P. Rajan Chinna, Assistant Professor** | | | | | |

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | S (3) |
| **CO3** | M (2) | S (3) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | S (3) | S (3) | M (2) | M (2) | S (3) | M (2) | S (3) | S (3) |
| **W.Avg** | **2** | **2.2** | **2.2** | **2.6** | **2.4** | **2** | **2.2** | **2** | **2.2** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | M (2) | S (3) |
| **W.Avg** | **2.2** | **2** | **2.6** | **2** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6543E8** | **Group II: – Supply Chain Management**<br>**Supply Chain Risk Management** | **T** | **Credits: 3** | **Hours: 3** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To discuss the importance of supply chain risk. | |
| A Framework for Understanding Risk: An analysis of supply chain threats – The severity of threat – Understanding the cause of supply chain disruptions – External risk categories. | | |
| **Outcome 1** | Students learnt the basics of risks in the supply chain risk. | **K1** |
| **UNIT – II** | | |
| **Objective 2** | To explain the resilience on supply chain risk management. | |
| Industry Sector Resilience to Supply Chain Threats: Automotive – High Tech – Consumer goods/retail – Food – Fashion – Pharma/Healthcare. | | |
| **Outcome 2** | Students understood the impact of resilience on supply chain risk management. | **K5** |
| **UNIT – III** | | |
| **Objective 3** | To outline the significance of sustainability in the supply chain risk management. | |
| Environmental Risks: Natural disasters, Climate change, and Pandemics: The impact of natural disasters on supply chains – Climate change – Pandemics – Economics Risk to the Supply Chain: Demand shocks – Currency fluctuations – Supply shocks – Industrial unrest – Societal Risks to the Supply Chain: Fair labour – 'conflict-free' materials – Environmental practices of supply chain partners – Food shortage in developing countries – Terrorism and Security: Risk and security in air cargo supply chains – Sea freight security. | | |
| **Outcome 3** | Students gained the significance of sustainability in the supply chain risk management. | **K4** |
| **UNIT – IV** | | |
| **Objective 4** | To understand the corruption in the logistics industry. | |
| Corruption in the Logistics Industry: The logistics industry prone to corruption – 'Anti-bribery, anti-corruption legislation – Freight forwarding and Customs corruption – Dealing with corrupt officials: WEF best practice – Smuggling and Customs corruption – VAT fraud schemes – Unofficial tolls and crossing controls -Allegations of corruption in government contract negotiations – Humanitarian aid logistics corruption – Organized crime in transport operations. | | |
| **Outcome 4** | Students learnt the knowledge on how corrupted in the logistics industry. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | To compile cargo crime and piracy in the supply chain management. | |
| Cargo Crime and piracy: Cargo crime – Theft from trucks and warehouses – Combating vehicle-based cargo crime – Cargo crime in emerging markets – Theft from airports – Cyber threats to supply chains – Piracy. | | |
| **Outcome 5** | Students analyzed the cargo crimes and piracy in the supply chain management. | **K4** |

**Suggested Readings:**

George A. Zsidisin and Bob Ritchie (2009)., "*Supply Chain Risk: A Handbook of Assessment, Management, and Performance*".

John Manners, Bell (2014)., *Supply Chain Risk: Understanding Emerging Threats to Global Supply Chains*, 1st Edition, Kogan Page.

**Online Resources:**

**A practical approach to supply-chain risk management**

https://www.mckinsey.com/capabilities/operations/our-insights/a-practical-approach-to-supply-chain-risk-management

**Supply Chain Risk Management Strategies**

https://global.hitachi-solutions.com/blog/supply-chain-risk-management/

**Supply Chain Risk Management Definition, Examples, and Strategies**

https://www.inboundlogistics.com/articles/supply-chain-risk-management/

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. C. Suresh, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) | S (3) | S (3) | S (3) | S (3) |
| **CO3** | M (2) | S (3) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | S (3) | S (3) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) |
| **W.Avg** | **2.6** | **2.4** | **2.6** | **2.2** | **2** | **2.6** | **2.2** | **2.4** | **2.6** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | M (2) | M (2) |
| **W.Avg** | **2.4** | **2.2** | **2.4** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| III- Semester | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 6543EP** | **Executive Leadership Programme** | **V** | **Credits: 2** | **Hours: 3** |

**UNIT – I**

| | | |
|---|---|---|
| **Objective 1** | To understand the concept of leadership. | |
| **The concept and Theories of Leadership:** Introduction – Importance – Leader vs Manager – Qualities of Leadership – Formal and Informal leadership – Leadership Trait Questionnaire – Classification of Leadership theories: Trait – Behavioral – Situation – Path-goal – Fielder's contingency – McGregor's Theory X and Theory Y – Charismatic – Transformational. | | |
| **Outcome 1** | Students learnt the concept of leadership. | **K1** |

**UNIT – II**

| | | |
|---|---|---|
| **Objective 2** | To recognize the leadership styles of Indian Managers. | |
| **Leadership Styles of Indian Managers:** Leadership styles – Styles based on behavioral theories – situational theories – modern theories – The effective leadership styles of Indian Managers. | | |
| **Outcome 2** | Students understood the impact of leadership styles of Indian managers. | **K1** |

**UNIT – III**

| | | |
|---|---|---|
| **Objective 3** | **To outline the significance of women's role in leadership.** | |
| **Women and Leadership:** Concept of women leadership – Women as employees and managers – Can women be leaders? – Difference between male and female leaders – Why do female leaders reach the top? – Case study. | | |
| **Outcome 3** | Students gained the significance of women's role in leadership. | **K1** |

**UNIT – IV**

| | | |
|---|---|---|
| **Objective 4** | To understand the importance of training in management development programs. | |
| **Training and Development:** Need for training – Objective – Types of training – Management development programs – ethical theories – Central points to leadership ethics – Research trends on leadership ethics. | | |
| **Outcome 4** | Students learnt the knowledge on the importance of training in management development programs. | **K1** |

**UNIT – V**

| | | |
|---|---|---|
| **Objective 5** | To understand the impact of teams and teamwork in the management. | |
| **Teams and Teamwork:** Difference between groups and teams – Types of teams – Teamwork – Team building – Roles of team members – Team effectiveness – Building trust – Team development | | |
| **Outcome 5** | Students gain the importance of teams and teamwork in the management. | **K1** |

**Suggested Readings:**

Chandra Mohan (2015)., "*A Leadership and Management: Text, Cases, and Exercises*", 2nd Edition, Himalaya Publishing House.

Tripathi D. K. (2011)., "*Team Building and Leadership: With Text and Cases*", 1st Edition, Himalaya Publishing House.

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. P. Rajan Chinna, Assistant Professor**

**Evaluation:**

The students will be evaluated for this course for a total of 100 marks. Out of this the Faculty in charge of this course will assess the students for a maximum of 25 marks on the basis of their performance of the students in activities assigned to them as a CIA.

The students will appear for a comprehensive viva-voce examination at the end of the semester in which they will be assessed for a maximum of 75 marks for their understanding as well as presentation of theoretical inputs in the II semester and current practices.

The Viva-Voce will be conducted students 1 of 3 examiners constituted as given below. The average of the marks awarded by the three examiners will be taken for this component of the evaluation.

**Panel Members:**

1. The Head of the Department - Chairman
2. Faculty in charge of the course - Member
3. One external examiner - Member

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | L (1)) | M (2) | S (3) | L (1) | S (3) | M (2) | S (3) | S (3) |
| **CO2** | S (3) | S (3) | L (1)) | M (2) | S (3) | L (1)) | S (3) | M (2) | S (3) | S (3) |
| **CO3** | S (3) | M (2) | L (1)) | M (2) | M (2) | L (1)) | S (3) | M (2) | M (2) | S (3) |
| **CO4** | S (3) | M (2) | L (1)) | M (2) | M (2) | L (1)) | M (2) | M (2) | S (3) | S (3) |
| **CO5** | S (3) | M (2) | L (1)) | M (2) | S (3) | L (1)) | S (3) | M (2) | S (3) | M (2) |
| **W.Avg** | **3** | **2.4** | **1** | **2** | **2.6** | **1** | **2.8** | **2** | **2.8** | **2.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **W.Avg** | **3** | **1** | **2** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER-III | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 6543T1** | **Summer Internship on Job Training** | **V** | **Credits: 2** | |
| **Objective** | Students will have to undergo training for 6 to 8 weeks at the end of the II semester. A training report should be submitted to the Department within 40 days after completing the training. Thereafter the students will appear for a Viva-Voce examination conducted by a Panel consisting of the HoD, faculty guide, and an external examiner. | | | | |
| **Evaluation** | ❖ The performance of students under this course will be assessed by the Faculty Guide and the report submitted by the students will be evaluated by the Faculty Guide and an External Examiner for 75 marks.<br>❖ A Viva-Voce will be conducted by a panel consisting of an External Examiner, the HOD and the<br>❖ Faculty Guide jointly for 25 marks.<br>❖ The students who secure not less than 40% in each component and a cumulative 50% of the total shall be declared to have passed the course.<br>❖ If a student fails to complete the training and / or fails to submit the training report in time, he / she has to redo the training in the ensuing semester or academic year as decided by the Department.<br>❖ If a student scores less than 40 % (i.e., less than 30 marks) in the Training Report Valuation, he / she has to redo the training in the ensuing semester or academic year as decided by the Department.<br>❖ If a student scores 40 % or above in the Training Report, but scores less than 40 % (10 marks) in the Viva Voce, he / she has to reappear for the Viva Voce in the ensuing semester or academic year as decided by the Department.<br>❖ When a faculty guide is not present on the date of the Viva Voce, the HOD will nominate some other faculty to the Panel. | | | | |
| **Outcomes** | By helping students achieve success in the area of the study or industry they have opted. | | | | |
| **Course Designed by: Dr. P. Rajan Chinna,** Assistant Professor | | | | | |

| SEMESTER - IV | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654401** | **Warehouse and Distribution Management** | **T** | **Credits: 4** | **Hours: 4** |

| UNIT – I | | |
|---|---|---|
| **Objective 1** | To understand the importance of warehouse management in logistics. | |
| **Introduction to Warehouse:** The role of the warehouse – Types of warehouse operation – Why do we hold stock? – Warehouse location – Number of warehouses – Supply chain trends affecting warehouses – The growth of e-fulfillment and its effect on the warehouse – Specialized warehousing. | | |
| **Outcome 1** | Students reckon the importance of warehouse management in logistics. | **K1** |

| UNIT – II | | |
|---|---|---|
| **Objective 2** | To discuss the warehouse processes in logistics. | |
| **Warehouse Processes: Receiving and Put-away:** Receiving – Pre-receipt – In-handling – Offloading – Cross-docking – Recording – Quality control – Put-away – Pick Preparation: Preparation – Warehouse pick area layout – Picking Strategies and Equipment: Picker to goods – Goods to picker – Types of automated picking – Handling equipment – Storage equipment – Replenishment to Dispatch and Beyond: Replenishment – Value-adding services – Indirect activities – Stock management – Inventory counting – Cycle counting – Security – Returns processing – Dispatch. | | |
| **Outcome 2** | Students understood knowledge on the warehouse processes in logistics. | **K2** |

| UNIT – III | | |
|---|---|---|
| **Objective 3** | To understand the importance of storage and handling equipment in warehouse. | |
| **Storage and Handling Equipment:** Storage equipment – Storage options – Order-picking Methods: Paper pick lists – Pick by the label – Pick by voice – Barcode scanning – RFID – Pick by light/Pick to light – Deciding on the type of picking system and equipment - Shuttle technology with a difference – Very high bay warehouses – Other storage media – Warehouse handling equipment – Vertical and horizontal movement – Automated storage and retrieval systems (AS/RS) – Specialized equipment – Warehouse management system (WMS). | | |
| **Outcome 3** | Students acquired the importance of storage and handling equipment in warehouse. | **K3** |

| UNIT – IV | | |
|---|---|---|
| **Objective 4** | To discuss the importance of physical distribution in logistics. | |
| **Concept of Physical Distribution:** Introduction – Need for physical distribution – Functions of physical distribution – Marketing forces affecting physical distribution – The physical distribution concept: A total system perspective. | | |
| **Outcome 4** | Students analyzed the importance of importance of physical distribution in logistics. | **K3** |

| UNIT – V | | |
|---|---|---|
| **Objective 5** | To learn the fundamentals of distribution channels in logistics. | |
| **Channels of Distribution:** Distribution channels – Role of marketing channels – Channel functions – Channel structure – Factors affecting the choice of distribution channels – Functions and types of intermediaries – Variables to be considered or selecting channel members – Evaluating, motivating, and modifying channel members. | | |
| **Outcome 5** | Students understood the fundamentals of distribution channels in logistics. | **K3** |

**Suggested Readings:**

Gwynne Richards (2003)., "*Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse*", 2nd Edition, Kogan Page.

Reguram G, Rangaraj N. (1999)., "*Logistics and Supply Chain Management Cases and Concepts: Macmillan*", India Ltd., New Delhi

Sahay B. S (2003)., "*Supply Chain Management for Global Competitiveness*", Macmillan India Ltd., New Delhi.

Satish K. Kapoor and Purva Kansal (2003)., "*Basics of Distribution Management: A Logistical Approach*", 7th Edition, PHI Learning.

**Online Resources:**

https://www.dmg-freight.com/importance-warehousing-distribution-supply-chain-management/

https://www.freeportcenter.com/what-is-the-importance-of-warehousing-and-distribution-management/

https://www.shipbob.com/warehouse-management/

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. P. Rajan Chinna, Assistant Professor**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | S (3) | S (3) | S (3) | S (3) | M (2) | M (2) | S (3) |
| **CO3** | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | S (3) | M (2) |
| **CO5** | M (2) | S (3) | M (2) | M (2) | S (3) | S (3) | S(2) | S (3) | S(2) | M (2) |
| **W.Avg** | **2.4** | **2.4** | **2** | **2.2** | **2.6** | **2.4** | **2.6** | **2.6** | **2.4** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | S (3) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | S (3) | S (3) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | M (2) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.4** | **2** | **2.6** | **2.4** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - IV- | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 654402** | **Entrepreneurship and Innovation** | **T** | **Credits: 4** | **Hours: 4** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To identify the various entrepreneurial process in the business environment. | |
| **The Entrepreneurial Process:** Critical Factors for starting a new enterprise – Personal attributes – Environmental factors – Other sociological factors – Evaluating Opportunity for new businesses – The opportunity – The customer – The timing – The entrepreneur and the management team – Resources – Determining resource needs and acquiring resources – Startup Capital – Profit potential – Ingredients for a successful new business. | | |
| **Outcome 1** | Students understand the basic information of various entrepreneurial process in the business environment. | **K1** |
| **UNIT – II** | | |
| **Objective 2** | **To discuss the significance of technological enhancement in entrepreneurship.** | |
| **Introduction to Technological Entrepreneurship:** Introduction – Types of Entrepreneurships: Mixed – Pure –Social – Collaborative – Internal – External – Sustainable entrepreneurship – The model of the learning life cycle and the learning strategy: Environmental context – Learning strategy – Incubators: Business intelligence – Determination of the five incubator services**.** | | |
| **Outcome 2** | Students acquire knowledge on the significance of technological enhancement in the entrepreneurship. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To understand the innovation practices in entrepreneurship. | |
| **Entrepreneurship and Innovation Practices:** Technology Management and transfer – General – Technology – technology transfer – Technology transfer mechanisms, and models – The vicious circle of underdevelopment versus technology transfer – Technology transfer obstacles – Success factors for technology transfer – Cooperative research and development agreements – Spin offs – Strategic alliances – Technology transfer and commercialization metrics. | | |
| **Outcome 3** | Students got the knowledge on the usage of the innovation practices in entrepreneurship. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To analyze the entrepreneurial growth in the businesses. | |
| **Entrepreneurial Growth:** Making the transition from startups to growth – Looking Forward: The choice to grow or not or sell – A model of driving forces of growth – The growth process – Execution – Opportunity domain – Organizational resources and capabilities – Leadership. | | |
| **Outcome 4** | Students understand the entrepreneurial growth in the businesses. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | **To understand the significance of social entrepreneurship in the organization.** | |
| **Social Entrepreneurship:** Definition – Imitative nonprofit organizations – Innovative nonprofit organizations – hybrids – For-profits – Getting started – Identifying an opportunity – Forming an organization – Securing resources – Evaluating results – Going to scale. | | |
| **Outcome 5** | Students got the knowledge of the importance of social entrepreneurship in the organization. | **K3** |

**Suggested Readings::**

Elias G. Carayannis, Elpida T. Samara, and Yannis L. Bakouros(2013)., "*Innovation and Entrepreneurship: Theory, Policy, and Practice*", 1st Edition, Springer.

| |
|---|
| Howard Frederick, Allan O'Connor, and Donald F. Kuratko (2016)., "*Entrepreneurship: Theory, Process, and Practice*", 4th Edition, Cengage Learning.<br>William Bygrave and Andrew Zacharakis (2010)., *Entrepreneurship*, 2nd Edition, John Wiley & Sons. |
| **Online Resources:**<br>**Understanding the innovation in entrepreneurship**<br>https://aicontentfy.com/en/blog/role-of-innovation-in entrepreneurship#:~:text=Entrepreneurship%20is%20about%20starting%20and,key%20to%20success%20in%20entrepreneurship.<br>https://www.researchgate.net/publication/283090695_Entrepreneurship_and_Innovation<br>https://www.jbrmr.com/cdn/article_file/i-3_c-12.pdf |

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. V. A. Anand, Assistant Professor**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | L (1) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | S (3) | S (3) | S (3) | S (3) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | M (2) | S (3) | M (2) | S (3) | M (2) | S (3) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | M (2) | S (3) | M (2) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.6** | **2.4** | **1.8** | **2.6** | **2.6** | **2.6** | **2.4** | **2.4** | **2.2** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | S (3) | S (3) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | S (3) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | S (3) |
| **CO4** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.6** | **1.8** | **2.4** | **2.6** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - IV | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6544E1** | **Group I: – Logistics Management**<br>**Port Management** | **T** | **Credits: 3** | **Hours: 3** |

| UNIT - I | | |
|---|---|---|
| **Objective 1** | To provide knowledge on port management and its operations in logistics. | |
| **Introduction to Port Management and Operations:** Port authorities and department and activities - Ports strategies in the theories of transition – The history of ports: Advanced thinking, Planning, and Development – Port ownership, structure, and organization – Port workforce: Productivity, growth, and empowerment strategies | | |
| **Outcome 1** | Students understand the importance of port management and its operations in logistics. | **K1** |

| UNIT – II | | |
|---|---|---|
| **Objective 2** | To understand the importance of the integration of infrastructure in port logistics. | |
| **Connecting Hub Port Gateways to the Inland Infrastructures:** Logistics integration of port activities – Strategic location and market accessibility for existing and emerging seaports – Supply chain opportunities, competition, and conflict of prevention. | | |
| **Outcome 2** | Students impart knowledge of the importance of the integration of infrastructure in port logistics. | **K2** |

| UNIT – III | | |
|---|---|---|
| **Objective 3** | To recognize the importance of economic growth in port logistics. | |
| **Port Management and Economic Growth:** Establishing a port's competitive edge in a niche world – Economic growth as the space between stimulus and response – Risk assessment and risk management. | | |
| **Outcome 3** | Students acquire the knowledge on the importance of economic growth in port logistics. | **K3** |

| UNIT – IV | | |
|---|---|---|
| **Objective 4** | To discuss the importance of port operations and its functions in logistics. | |
| **Port Operations:** Port management services: Terminal operators, property leasing and opportunities – Berths, facilities, and equipment – The port and charter party terms – Port agents: Linear services, tramp trade, and offshore support agents – Port-related claims and Legal liabilities. | | |
| **Outcome 4** | Students learnt the importance of port operations and its functions in logistics. | **K3** |

| UNIT – V | | |
|---|---|---|
| **Objective 5** | To discuss the port authorities and regulatory framework in port logistics. | |
| **Port Authorities and Regulatory Framework:** International Safety Management – International Ship and Port Facility Security Code – Occupational Safety and Health Administration – Vessel General Permit by the US Environmental Protection Agency – ISO 14001 – Hazardous Materials – Hazardous Waste Operations and Emergency Response – Ballast Water Management – Incident Investigation and Root Cause Analysis – Inspections, Surveys, and Audits – Global and National Regulatory Compliance for Ships. | | |
| **Outcome 5** | Students impart knowledge on port authorities and regulatory framework in port logistics. | **K3** |

**Suggested Readings:**

Alan. E. Branch (2021)., "*Elements of Port Operations and Management*", 1st Editions,

Chapman and Hall.

Maria G. Burns (2015)., "*Port Management and Operations*", 1st Edition, CRC Press.

Patrick Alderton, Lloyd's Practical Shipping Guides (2008)., "*Port Management and Operations*", 3rd Editions, Informa.

**Online Resources:**

**Introduction to port and terminal management**

https://www.studocu.com/in/document/mangalore-university/bba-degree/port-management-study-material/39443852

https://www.marineinsight.com/shipping-books/port-management-books/

**Port Operations & Management**

https://www.icm.education/subjects/port-operations-management

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. C. Suresh, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | S (3) |
| **CO4** | M (2) | S (3) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.4** | **2.6** | **2.2** | **2.4** | **2.6** | **2.2** | **2** | **2.2** | **2.2** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | M (2) | S (3) | M (2) | S (3) |
| **CO4** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.6** | **2.2** | **2.4** | **2.2** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER [ IV | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6544E2** | **Group I: – Logistics Management**<br>**Green Logistics** | **T** | **Credits: 3** | **Hours: 3** |

| **UNIT - I** | | |
|---|---|---|
| **Objective 1** | To compile knowledge on green logistics. | |
| **Introduction to Green Logistics:** Environmental sustainability – Assessing the external impacts of freight transport – Carbon auditing of companies, supply chains, and products. | | |
| **Outcome 1** | Students learnt the fundamentals of green logistics. | **K1** |
| **UNIT – II** | | |
| **Objective 2** | To understand the development of greener logistics. | |
| **Development of Greener Logistics:** Transferring freight to greener transport modes – Development of greener vehicles, aircraft, and ships – Reducing the environmental impact of warehousing. | | |
| **Outcome 2** | Students reveal the importance of development of greener logistics. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To discuss the importance of optimization of greener logistics. | |
| **Optimization of Greener Logistics:** Opportunities for improving vehicle utilization – Optimizing the routing of vehicles – Increasing fuel efficiency in the road freight sector – Reverse logistics for the management of waste. | | |
| **Outcome 3** | Students gain knowledge of the importance of optimization of greener logistics. | **K2** |
| **UNIT – IV** | | |
| **Objective 4** | To analyze the issues in greener logistics. | |
| **Issues in Greener Logistics:** The food miles debate – Sustainability strategies for city logistics – Benefits and costs of switching to alternate fuels – e-business, e-logistics, and the environment. | | |
| **Outcome 4** | Students realized the significance of issues in greener logistics. | **K2** |
| **UNIT – V** | | |
| **Objective 5** | To understand the government policy on greener logistics. | |
| **Policy on Greener Logistics:** The role of government in promoting green logistics – policy measures – Improving energy efficiency – Cutting emissions relative to energy use – Government-sponsored advisory and accreditation programmes. | | |
| **Outcome 5** | Students gain knowledge on the importance of government policy on greener logistics. | **K2** |

**Suggested Readings:**

Alan McKinnon, Michael Browne, Anthony Whiteing (2010)., "*Green Logistics: Improving the Environmental Sustainability of Logistics,* 2nd Edition, Kogan Page.

David B. Grant, Alexander Trautrims, Chee Yew Wong (2020)., "*Sustainable Logistics and Supply Chain Management: Principles and Practices for Sustainable Operations and Management*", Kogan Page.

**Online Resources:**

**Green Logistics**

https://www.slideshare.net/catherinecolemanknox/green-logistics

https://mbahub.in/search/green+supply+chain/

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Mr. K. Aravindaraj, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | S (3) | M (2) | M (2) | S (3) | S (3) | M (2) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | M (2) | M (2) | S (3) | S (3) | S (3) | S (3) | M (2) | M (2) |
| **W.Avg** | **2.2** | **2.4** | **2** | **2** | **2.4** | **2.4** | **2.2** | **2.4** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | S (3) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | S (3) | M (2) |
| **W.Avg** | **2.2** | **2** | **2.2** | **2.4** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - IV | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6544E3** | **Group I: – Logistics Management**<br>**Logistics Project Planning Management** | **T** | **Credits: 3** | **Hours: 3** |

| | | |
|---|---|---|
| **UNIT - I** | | |
| **Objective 1** | To compile on the significance of project management in different business arena. | |
| **Project Definition:** Time-bound project – Cost-bound project – Performance-bound project – Safety-bound project – Project Manager's charter – Portfolio management – Project environment – Political – Economic – Social – Technical – Legal – Environmental – Sustainability. | | |
| **Outcome 1** | Students acquired the importance of project management in different business arena. | **K2** |
| **UNIT – II** | | |
| **Objective 2** | To illustrate the logistics business case in the project planning management. | |
| **Logistics Business Case –** The project sponsor – Project viability – Stakeholder management – Project success criteria – Organizational Structures – Organizational rules – Project life cycles – Project management plan. | | |
| **Outcome 2** | Students learnt the logistics business case in the project planning management. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To analyze the risk management during the project planning management. | |
| **Risk Management:** Risk awareness – Risk identification – Risk assessment – Risk evaluation – Risk Management and Monitoring – Effective risk management – Positive risk or opportunity. | | |
| **Outcome 3** | Students gain knowledge on the impact of risk management in the project planning management. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To compute quality management during the project planning management. | |
| **Quality Management:** Explanation of quality management – Policy – Assurances – Systems – Control – Manual – Programme – Plan – Audit – Reviews – Failure mode analysis – Pareto analysis – Trend analysis – Total Quality Management – Quality Management Systems | | |
| **Outcome 4** | Students understand the quality aspects of the project planning management. | **K3** |
| **UNIT – V** | | |
| **Objective 5** | To analyze the procurement strategy during the project planning management. | |
| **Procurement:** Procurement strategy – Pre-tender survey – Bidder selection – Request for Quotation – Tender evaluation – Purchase order – Expediting, monitoring, and inspection – Shipping and storage – Erection and installation – Commissioning and handover – Types of Contracts – Subcontracts – Subcontract documents – Insurance – Discounts – Countertrade. | | |
| **Outcome 5** | Students assessed the fundamentals procurement strategy of the project planning management. | **K3** |

**Suggested Readings:**

Alan E Albert Lester (2017)., "*Project Management, Planning, and Control: Managing Engineering, Construction, and Manufacturing Projects to PMI, APM, and BSI Standards*", 7th Edition, Butterworth – Heinemann.

Prasanna Chandra (2014)., "*Projects: Planning, Analysis, Selection, Financing, Implementation, and Review*", 8th Edition, Tata McGraw Hill.

**Online Resources:**

Introduction to project management

https://www.manage.gov.in/studymaterial/PM.pdf

Overview of Project Planning

https://opentextbc.ca/projectmanagement/chapter/chapter-8-overview-of-project-planning-project-management/

Project management

https://www.coursesidekick.com/management/2751196

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. K. Subha, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | S (3) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) | S (3) | S (3) |
| **W. Avg** | **2.4** | **2.4** | **2.2** | **2.4** | **2.6** | **2.2** | **2** | **2.2** | **2.2** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | S (3) | M (2) |
| **CO4** | S (3) | M (2) | S (3) | S (3) | M (2) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.4** | **2.2** | **2.4** | **2.6** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - IV | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6544E4** | **Group II:– Supply Chain Management**<br>**Agro Supply Chain Management** | **T** | **Credits: 3** | **Hours: 3** |

| | | |
|---|---|---|
| **UNIT – I** | | |
| **Objective 1** | To understand the role of supply chain management in agricultural products. | |
| **Introduction to Food Supply Chains:** The actors in a food supply chain – Types of the food chain – Factors influencing food supply chains – The milk processing value chain. | | |
| **Outcome 1** | Students gained the significance of supply chain management in agricultural products. | **K2** |
| **UNIT – II** | | |
| **Objective 2** | To realize the importance of agriculture supply chain in the global economy. | |
| **Food Production and Manufacturing:** Entities in the agriculture supply chain – Agriculture and poverty alleviation – The barriers to the development of the agri-industry – Future steps for the agriculture sector – The importance of food processing – Changing marketing conditions – Food processing – Food packaging -Inventory management – Food safety – Procurement. | | |
| **Outcome 2** | Students understood the importance of agriculture supply chain in the global economy. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To understand the food retail challenges in the entire supply chains. | |
| **Operational Challenges:** Food retailing – How does the food reach the consumer? – Online grocery retailing – Challenges to the future of food retailing – Food Logistics: movement of food – ICT future trends in agri-food logistics – Packaging in Logistics – Temperature controlled supply chains – Challenges in international food supply chains – Managing risks in food supply chains. | | |
| **Outcome 3** | Students got the knowledge of the food retail challenges in the entire supply chains. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To discuss food sourcing and procurement in the entire supply chains. | |
| **Food Sourcing and Procurement:** Sourcing – Purchasing models – Supplier segmentation – Supplier development – Strategic sourcing – Sustainable procurement – APEDA – Recent developments in Agro-transportation in India. | | |
| **Outcome 4** | Students analyzed the importance of food sourcing and procurement in the entire supply chains. | **K3** |
| **UNIT – V** | | |
| **Objective 5** | To impart the knowledge on recent technology trends in food supply chains. | |
| **Technology Trends in Food Supply Chains:** Traceability and use of technology – Food production – Food processing in a technological context – Food packaging in a technological context – Food logistics – Food Apps – Internet of Things and Big Data – Blockchain – 3D printing – Sustainable food supply chains. | | |
| **Outcome 5** | Students analyzed the importance of recent technology trends in food supply chains. | **K3** |

**Suggested Readings:**

Samir Dani (2015)., "*Food Supply Chain Management and Logistics: Understanding the Challenges of Production, Operations, and Sustainability in the Food Industry*", 2nd Edition, Kogan Pages.

Dionvsis Bochtis, Claus Aage Gron Sorensen, Dimitrious Kateris (2018)., "*Operations Management in Agriculture*", 1st Edition, Academic Press.

**Online Resources:**

**Supply Chain Management in Agriculture**

https://www.manage.gov.in/studymaterial/scm-e.pdf

**Agri_Food_Supply_Chain_Management.pdf**

https://iimmumbai.ac.in/storage/uploads/pages/pages_docs/Agri_Food_Supply_Chain_Management.pdf

**Supply Chain Management In Agriculture Importance**

https://www.agristudoc.com/supply-chain-management-in-agriculture/#google_vignette

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Mr. K.Aravindaraj, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | M (2) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | S (3) | M (2) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) |
| **W.Avg** | **2.6** | **2.4** | **2** | **2** | **2.4** | **2.4** | **2** | **2** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | S (3) | M (2) |
| **W.Avg** | **2.6** | **2** | **2.2** | **2.2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - IV | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6544E5** | **Group II: Supply Chain Management**<br>**Sustainable Supply Chain Management** | **T** | **Credits: 3** | **Hours: 3** |

| | | |
|---|---|---|
| **UNIT – I** | | |
| **Objective 1** | To know the role of the sustainability in supply chain management. | |
| **Logistics and Supply Chain Management:** The nature of logistics and supply chain management – Logistics and SCM trends affecting sustainability – Sustainable logistics and supply chains | | |
| **Outcome 1** | Students got the knowledge of the importance of sustainability in supply chain management. | **K2** |
| **UNIT – II** | | |
| **Objective 2** | To understand the term sustainability in general. | |
| **Science of Sustainability:** Concepts of sustainability – Species and ecosystems – Energy – Industry – Food – Population and urban growth – Water | | |
| **Outcome 2** | Students grasped the term sustainability in general. | **K1** |
| **UNIT – III** | | |
| **Objective 3** | To impart knowledge of sustainability dimensions of transportation and warehouse. | |
| **Freight Transport and Sustainable Warehousing:** Impact of freight transport on sustainability – Strategies to reduce the environmental impact of freight transport – Wider aspects of sustainability in freight transport – The environmental impact of warehouses – Assessing the impact – Reduction of the environmental impact – Social dimensions of sustainability in warehousing – Risks and vulnerability in warehousing. | | |
| **Outcome 3** | Students got the knowledge of sustainability dimensions of transportation and warehouse. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To analyze the importance of sustainable packaging and procurement in supply chain. | |
| **Sustainable Packaging and Procurement:** Product design for environmental and sustainable logistics – Cleaner production – Packaging for the environment – Green procurement – Lifecycle assessment – Reverse logistics and recycling – Product recovery options. | | |
| **Outcome 4** | Students analyzed the significance of sustainable packaging and procurement in supply chain. | **K3** |
| **UNIT – V** | | |
| **Objective 5** | To identify and analyzed risks involved in the sustainable supply chain management. | |
| **Risk and Strategy in SSCM:** Risk in logistics and supply chain on sustainability – corporate social responsibility – Ethical framework and codes of conduct – Global and industrial initiatives – Concepts of corporate strategy – Sustainable logistics and supply chain performance measurement – Environmental management systems. | | |
| **Outcome 5** | Students analyzed the risks involved in the sustainable supply chain management. | **K3** |

**Suggested Readings:**

David B. Grant, Alexander Trautrims, Chee Yew Wong (2020)., "*Sustainable Logistics and Supply Chain Management: Principles and Practices for Sustainable Operations and Management*", Kogan Page.

Alan McKinnon, Michael Browne, Anthony Whiteing (2010)., "*Green Logistics: Improving the Environmental Sustainability of Logistics*", 2nd Edition, Kogan Page.

**Online Resources:**

**Sustainable Supply Chain Management**

https://www.edx.org/learn/supply-chain-management/massachusetts-institute-of-technology-sustainable-supply-chain-management

**Step by step Guide to sustainable supply chain management**

https://www.bmuv.de/fileadmin/Daten_BMU/Pools/Broschueren/nachhaltige_lieferkette_en_bf.pdf

**Sustainable Supply Chain Management**

https://www.wiley.com/en-us/Sustainable+Supply+Chain+Management-p-9781848215269

| *K1-Remember* | *K2-Understand* | *K3- Apply* | *K4-Analyze* | *K5-Evaluate* | *K6-Create* |
|---|---|---|---|---|---|

**Course Designed by: Dr. V. A. Anand, Assistant Professor**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | S (3) | S (3) | M (2) |
| **CO5** | S (3) | S (3) | M (2) | S (3) | M (2) | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.8** | **2.2** | **2** | **2.8** | **2** | **2.2** | **2.6** | **2.4** | **2.4** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO4** | S (3) | M (2) | S (3) | S (3) | M (2) |
| **CO5** | S (3) | M (2) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.8** | **2** | **2.6** | **2.4** | **2.2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - IV | | | | | |
|---|---|---|---|---|---|
| **DSE** | **Course code 6544E6** | **Group II: Supply Chain Management**<br>**Supply Chain Analytics** | **T** | **Credits: 3** | **Hours: 3** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To understand the basic information of supply chain analytics. | |
| **Introduction to Supply Chain Analytics:** Overview of Supply Chain–Requirements of Manufacturing, Supply Chain Management, Purchasing in Supply Chain, E-Commerce, Types of Supply Chain, Supply Chain Metrics, Relationship between Supply Chain Metrics and Financial Metrics. | | |
| **Outcome 1** | Students got the knowledge of the basic information of supply chain analytics. | **K2** |
| **UNIT – II** | | |
| **Objective 2** | To compile location and distribution decisions in supply chains. | |
| **Location and Distribution Decisions in Supply Chain:** Modeling with Binary Variables – Capital Budgeting, Fixed Charge, Set covering, Continuous Location Models–Single Facility, Gravity, and Mini max methods. | | |
| **Outcome 2** | Students grasped the importance of location and distribution decisions in supply chains. | **K2** |
| **UNIT – III** | | |
| **Objective 3** | To outline the procurement and strategic sourcing in supply chain analytics. | |
| **Procurement and Strategic Sourcing:** Inventory Modeling aggregate planning and resource allocation decisions - Procurement Analytics- Production modeling- Prescriptive Analytics: Making the Best Decisions in Settings with Low Uncertainty- Decision Trees, Making the Best Decisions in Settings with High Uncertainty- Warehouse location and the GRG Multi start and Evolutionary Solver engines. | | |
| **Outcome 3** | Students learned the importance of the procurement and strategic sourcing in supply chain analytics. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To analyze the significance of building blocks in supply chain analytics. | |
| **Introduction and Basic Building Blocks:** Value of Supply Chain Network Modeling- Intuition Building with Center of Gravity Models- Locating Facilities Using a Distance-Based Approach- Alternative Service Levels and Sensitivity Analysis- Adding Capacity to the Model. | | |
| **Outcome 4** | Students analyzed the significance of building blocks in supply chain analytics. | **K4** |
| **UNIT – V** | | |
| **Objective 5** | To analyze the industrial strength results using analytics in the supply chains. | |
| **How to get Industrial Strength Results:** Adding Outbound Transportation to the Model - Baseline and Optimal Baselines- The Art of Modeling- Data Aggregation in Network Design. | | |
| **Outcome 5** | Students analyzed the industrial strength results using analytics in the supply chains. | **K4** |

**Suggested Readings:**

Ravi Ravindran A, Donald P. Warshing (2013)., "*Supply Chain Engineering, Models and Application*", CRC Press.

Watson M, (2014)., "*Supply Chain Network Design: Applying Optimization and Analytics to the Global Supply Chain*", Pearson Education.

| | | | | | |
|---|---|---|---|---|---|
| **Online Resources:**<br>**Supply chain analytics Benefits and best practices**<br>https://www.qlik.com/us/data-analytics/supply-chain-analytics<br>**Supply chain analytics explained: How it works and top use cases**<br>**https://www.thoughtspot.com/data-trends/analytics/supply-chain-analytics** | | | | | |
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |
| **Course Designed by: Dr. P. Rajan Chinna, Assistant Professor** | | | | | |

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | S (3) | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | S (3) | S (3) | M (2) | S (3) | S (3) | M (2) | M (2) | S (3) |
| **CO3** | M (2) | M (2) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) |
| **CO4** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | M (2) | S (3) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.6** | **2.4** | **3** | **3** | **2.6** | **3** | **2.8** | **2.6** | **2.2** | **3** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | M (2) | S (3) | S (3) |
| **CO2** | S (3) | S (3) | M (2) | S (3) | S (3) |
| **CO3** | S (3) | S (3) | S (3) | M (2) | S (3) |
| **CO4** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **CO5** | S (3) | S (3) | S (3) | S (3) | S (3) |
| **W.Avg** | **2.8** | **3** | **2.6** | **2.8** | **3** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - IV | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 6544EP** | **Core** | **V** | **Credits: 2** | **Hours: 3** |
| | | **Executive Negotiation Programme** | | | |

| UNIT - I | | |
|---|---|---|
| **Objective 1** | To understand the concept of negotiation globally. | |
| **International Negotiations:** Science and art of negotiation – Process, data, and cultures – Mapping critical & analytical questions – From data to facts – Suspending disbelief – Critical thinking process – Clarity – Illustrating issues – Understanding logic of individuals, groups, and organizations. | | |
| **Outcome 1** | Students learnt the concept of negotiation globally | **K1** |

| UNIT – II | | |
|---|---|---|
| **Objective 2** | To recognize the different perspectives of negotiation process. | |
| **Negotiation Processes:** Everything is negotiable – Goals, Aims, and requirements – Time – Power to take decisions – Information – Winning at all costs. Pre-Negotiation – Negotiation – Post – Negotiation – Win-Win Negotiation Techniques – Making the first move developing a negotiating style – Establishing Trust and Building – Communication – Persuasion and Ethics in Negotiation. Negotiations with multiple parties, coalitions, and teams. | | |
| **Outcome 2** | Students understood the impact of different perspectives of negotiation process. | **K1** |

| UNIT – III | | |
|---|---|---|
| **Objective 3** | To outline the significance of cross-cultural negotiations. | |
| Cross-Cultural Negotiations: Role of Cultures in cross-border negotiations – Tacit negotiations and social dilemmas. | | |
| **Outcome 3** | Students gained the significance of cross-cultural negotiations. | **K1** |

| UNIT – IV | | |
|---|---|---|
| **Objective 4** | To understand the importance of technology influence on negotiations. | |
| Technology & Negotiations: Negotiating via information Technology – Negotiating on the Internet – Interplay of Play of new social media in negotiations. | | |
| **Outcome 4** | Students learnt the knowledge on the importance of technology influence on negotiations. | **K1** |

| UNIT – V | | |
|---|---|---|
| **Objective 5** | To understand the impact of negotiations cases in India and Globally. | |
| Negotiations Cases: Comparative negotiations in India and different cultures specific to nations across the globe Australasia – Europe – Latin and North America – Negotiation Strategies – Cases. | | |
| **Outcome 5** | Students gain the importance of negotiations cases in India and Globally. | **K1** |

**Suggested Readings:**

Cellich & Jain (2004)., "*Global Business Negations – A practical Guide*", Thomson

Thompson L. (2011)., "*The mind and heart of the negotiator*", 5th Edition, Pearson

Sarkar (2015)., "*Global Business Negotiation*", 1st Edition, Atlantic Publishers

**Online Resources:**

**How to Build Negotiating Capacity**

https://www.exed.hbs.edu/changing-game-negotiation-competitive-decision-

**Executive Negotiation Workshop: Negotiate with Confidence**

https://executiveeducation.wharton.upenn.edu/for-individuals/all-programs/executive-negotiation-

| workshop/ | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |
| **Course Designed by: Mr. K. Aravindaraj, Teaching Assistant** | | | | | |

**Evaluation:**

The students will be evaluated for this course for a total of 100 marks. Out of this the Faculty in charge of this course will assess the students for a maximum of 25 marks based on their performance of the students in activities assigned to them as a CIA.

The students will appear for a comprehensive viva-voce examination at the end of the semester in which they will be assessed for a maximum of 75 marks for their understanding as well as presentation of theoretical inputs in the II semester and current practices.

The Viva-Voce will be conducted students 1 of 3 examiners constituted as given below. The average of the marks awarded by the three examiners will be taken for this component of the evaluation.

**Panel Members:**

1. The Head of the Department - Chairman
2. Faculty in charge of the course - Member
3. One external examiner - Member

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | S (3) | L (1)) | M (2) | S (3) | L (1) | S (3) | M (2) | S (3) | S (3) |
| **CO2** | S (3) | S (3) | L (1)) | M (2) | M (2) | L (1)) | S (3) | M (2) | S (3) | S (3) |
| **CO3** | S (3) | S (3) | L (1)) | M (2) | M (2) | L (1)) | S (3) | M (2) | M (2) | S (3) |
| **CO4** | S (3) | M (2) | L (1)) | M (2) | M (2) | L (1)) | M (2) | M (2) | S (3) | S (3) |
| **CO5** | S (3) | M (2) | L (1)) | M (2) | S (3) | L (1)) | S (3) | M (2) | S (3) | M (2) |
| **W.Avg** | **3** | **2.6** | **1** | **2** | **2.4** | **1** | **2.8** | **2** | **2.8** | **2.8** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO2** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO3** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO4** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **CO5** | S (3) | L (1) | M (2) | M (2) | M (2) |
| **W.Avg** | **3** | **1** | **2** | **2** | **2** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER-IV | | | | | |
|---|---|---|---|---|---|
| **Core** | **Course code 6544P1** | **Project / Training Report** | **V** | **Credits: 8** | **Hours: 8** |
| **Objective** | Students will have to undergo training for 6 weeks at the end of the II semester. A training report should be submitted to the Department within 40 days after completing the training. Thereafter the students will appear for a Viva-Voce examination conducted by a Panel consisting of the HoD, faculty guide, and an external examiner. | | | | |
| **Evaluation** | ❖ The performance of students under this course will be assessed by the Faculty Guide and the report submitted by the students will be evaluated by the Faculty Guide and an External Examiner for 75 marks.<br>❖ A Viva-Voce will be conducted by a panel consisting of an External Examiner, the HOD and the Faculty Guide jointly for 25 marks.<br>❖ The students who secure not less than 40% in each component and a cumulative 50% of the total shall be declared to have passed the course.<br>❖ If a student fails to complete the training and / or fails to submit the training report in time, he / she has to redo the training in the ensuing semester or academic year as decided by the Department.<br>❖ If a student scores less than 40 % (i.e., less than 30 marks) in the Training Report Valuation, he / she has to redo the training in the ensuing semester or academic year as decided by the Department.<br>❖ If a student scores 40 % or above in the Training Report, but scores less than 40 % (10 marks) in the Viva Voce, he / she has to reappear for the Viva Voce in the ensuing semester or academic year as decided by the Department.<br>❖ When a faculty guide is not present on the date of the Viva Voce, the HOD will nominate some other faculty to the Panel. | | | | |
| **Outcomes** | By helping students achieve success in the area of the study or industry they have opted. | | | | |
| | | | | **Course Designed by: Dr. V. Sivakumar,** Prof and Head | |

| SEMESTER – II | | | | | |
|---|---|---|---|---|---|
| **NME** | **Course code** | **Principles of Logistics and Supply Chain Management** | **T** | **Credits: 2** | **Hours: 3** |
| **UNIT - I** | | | | | |
| **Objective 1** | To educate introduction of logistics, its significance in world trade, system concept, customer value chain, logistics functions, and customer service for business excellence. | | | | |
| Introduction to Logistics: Logistics at the center of world trade – A paradigm shift – Logistics Defined – Scope of Logistics – Logistics – a system concept – Customer Value Chain – Logistics Functions – Logistics for business excellence – Logistics management: Objective, solution, and future – Customer service for competitiveness – Customer service phases – Service attributes – Value added logistical services. | | | | | |
| **Outcome 1** | Learners will understand logistics principles, apply customer service for competitiveness, and use value-added logistical services for organizational success and growth. | | | | K1 |
| **UNIT - II** | | | | | |
| **Objective 2** | To familiarize students with supply management's importance, scope, and decision phases, enabling effective application of various skills for optimizing supply chain operations. | | | | |
| Introduction to Supply Management: What is a supply chain? – Importance of Supply Chain Management (SCM) – Overview, Objective, nature, and scope of SCM – Decision phases in supply chain – process view of a supply chain – Supply Chain dynamics – Focus areas in SCM – Evolution of SCM. | | | | | |
| **Outcome 2** | Students will gain skills in various aspects of supply management, leading to optimized operational efficiency and enhanced learning in supply chain practices. | | | | **K2** |
| **UNIT - III** | | | | | |
| **Objective 3** | To provide leaners with logistics mix components and provide comprehensive education to learn how to compile and rate logistical strategies for efficient supply chain management. | | | | |
| Logistics Mix: Warehousing – A logistical challenge – Role of material handling in logistics – Material storage principles – Inventory management – Transportation management – Logistical packaging – Logistics information system. | | | | | |
| **Outcome 3** | Leaners will acquire expertise in logistical skills, enabling efficient supply chain management through comprehensive learning. | | | | **K3** |
| **UNIT - IV** | | | | | |
| **Objective 4** | To explore logistics outsourcing, its catalysts, benefits, value-added services, logistics service contracts, critical issues, and outsourcing value proposition. | | | | |
| Logistics Outsourcing: Catalysts for outsourcing trends – Benefits of logistics outsourcing – Third-Party logistics – Fourth-Party logistics – Selection of service provider – Value-added services – Logistics service contract – Critical issues – Outsourcing value proposition. | | | | | |
| **Outcome 4** | Equip students to create valuable outsourcing value propositions, optimizing logistics operations for enhanced efficiency and competitiveness. | | | | **K3** |
| **UNIT - V** | | | | | |
| **Objective 5** | This course aims to analyze and discuss current issues in supply chain management, and world-class SCM. | | | | |

| | | |
|---|---|---|
| Current Issues in Supply Chain Management: Benchmarking the supply chain – Reengineering the supply chain – Virtual supply chain – Continuous replenishment supply chains – Lean supply chains – Agile supply chains – Green supply chain – Flexible supply chain – World-class SCM. | | |
| **Outcome 5** | Upon completion of the course, leaners will be proficient in analyzing supply chain practices and enhance supply chain performance in their respective organizations. | **K5** |

**Suggested Readings: -**


Agrawal D K (2010)., "*Supply Chain Management: Strategy, Cases, and Best Practices*", 1st Edition, Macmillan.

Reguram G, Rangaraj N. (1999)., "*Logistics and Supply Chain Management Cases and Concepts*", Macmillan India Ltd., New Delhi.

Sahay B. S. (2007)., "*Supply Chain Management for Global Competitiveness*", Macmillan India Ltd., New Delhi.

Shridhara Bhat K. (2014)., "*Supply Chain Management*", 2nd Edition, Himalaya Publishing House.

Vinod V. Sople(2012)., "*Logistics Management: The Supply Chain Imperative*", 3rd Edition, Pearson.


**Online Resources:**

https://old.mu.ac.in/wp-content/uploads/2021/02/Logistics-and-Supply-Chain-Management-Martin-Christopher.pdf

https://bakkah.com/knowledge-center/basic-principles-of-supply-chain-management

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. P. Rajan Chinna,** Assistant Professor

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | S (3) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) | M (2) |
| **CO2** | M (2) | S (3) | L (1) | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) |
| **CO3** | S (3) | M (2) | M (2) | M (2) | L (1) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | L (1) | M (2) | L (1) | M (2) | L (1) | M (2) | L (1) |
| **CO5** | M (2) | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) |
| **W. Avg** | **2.4** | **2.2** | **2.2** | **2** | **1.8** | **1.6** | **2** | **1.6** | **2.2** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | M (2) | M (2) | L (1) |
| **CO2** | S (3) | M (2) | L (1) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | L (1) | S (3) | L (1) |
| **CO4** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO5** | S (3) | M (2) | M (2) | M (2) | M (2) |
| **W. Avg** | **2.4** | **2.2** | **1.8** | **2** | **1.6** |

***S –Strong (3), M-Medium (2), L- Low (1)***

| SEMESTER - III | | | | | |
|---|---|---|---|---|---|
| **NME-2** | **Course code** | **NME - 2**<br>**Distribution Management** | **T** | **Credits: 2** | **Hours: 3** |

| **UNIT – I** | | |
|---|---|---|
| **Objective 1** | To discuss the importance of physical distribution in logistics. | |
| Concept of Physical Distribution: Introduction – Need for physical distribution – Functions of physical distribution – Marketing forces affecting physical distribution – The physical distribution concept total system perspective – Physical distribution and India. | | |
| **Outcome 1** | Students got the knowledge of the significance of physical distribution in logistics. | **K2** |
| **UNIT – II** | | |
| **Objective 2** | To outline the significance of channels of distribution in logistics. | |
| Channels of Distribution: Introduction – Distribution channels: Role of marketing channels – Channel functions – Channel structure: Designing distribution channel – Factors affecting the choice of distribution channels – Functions of intermediaries: Types of intermediaries – Variables to be considered or selecting channel members – Motivating channel members – Training, Evaluating, and Modifying channel arrangements. | | |
| **Outcome 2** | Students gained the knowledge on the significance of channels of distribution in logistics. | **K3** |
| **UNIT – III** | | |
| **Objective 3** | **To discuss the impact of transportation in logistics.** | |
| Transportation: Introduction – Scope of Transportation: Principles of transportation function – Relationship of transportation to other business functions – Transportation management: Legal types and modes of transportation – Transport mode selection: Methods of selection – Transport costs – Rate profiles – Transport regulations: Intra and interstate transport of goods. | | |
| **Outcome 3** | Students learnt the impact of transportation in logistics. | **K3** |
| **UNIT – IV** | | |
| **Objective 4** | To know the importance of inventory management in logistics. | |
| Inventory Management: Introduction – Functions of inventories – Types and classes of inventories – Costs of inventories – Inventory control – Inventory control under conditions of uncertainty – Selective inventory control. | | |
| **Outcome 4** | Students understood the significance of inventory management in logistics. | **K3** |
| **UNIT – V** | | |
| **Objective 5** | To gather the impact of warehouse management in logistics. | |
| Warehousing: Introduction – Nature and types of warehouses – Warehouse functions: Movement and storage function – Basic concept of warehouses: Size and number of warehouses – Warehousing location – Legal forms of the warehouse – Warehousing cost – Selecting right warehouse system – Automation in warehousing – Automated warehouse equipment | | |
| **Outcome 5** | Students learnt the impact of warehouse management in logistics. | **K3** |

**Suggested Readings:**

Alan Rushton, Phil Croucher, and Peter Baker (2000)., "*The Handbook of Logistics and Distribution Management: Understanding the Supply Chain*", 5th Edition, Kogan Page.

Gwynne Richards (2011)., "*Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse*", 2nd Edition, Kogan Page.

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|---|
| Sahay B. S.(2004)., "*Supply Chain Management for Global Competitiveness*", Macmillan India Ltd., New Delhi.<br>Satish K. Kapoor and Purva Kansal (2003)., "*Basics of Distribution Management: A Logistical Approach*", 7th Edition, PHI Learning. |
| **Online Resources:**<br>https://corporatefinanceinstitute.com/resources/valuation/distribution-management/<br>https://www.scribd.com/document/532589984/Notes-in-Distribution-Management-2-2<br>https://wareiq.com/resources/blogs/distribution-management-system/ |

| | | | | | |
|---|---|---|---|---|---|
| ***K1-Remember*** | ***K2-Understand*** | ***K3- Apply*** | ***K4-Analyze*** | ***K5-Evaluate*** | ***K6-Create*** |

**Course Designed by: Dr. C. Suresh, Teaching Assistant**

**Course Outcomes (COs) Vs Programme Outcomes (POs)**

| CO | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 |
|---|---|---|---|---|---|---|---|---|---|---|
| **CO1** | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | M (2) | M (2) | S (3) |
| **CO2** | S (3) | M (2) | M (2) | S (3) | S (3) | M (2) | M (2) | M (2) | M (2) | M (2) |
| **CO3** | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | M (2) | S (3) |
| **CO4** | M (2) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) | S (3) | S (3) | M (2) |
| **CO5** | S (3) | M (2) | M (2) | S (3) | S (3) | M (2) | M (2) | S (3) | M (2) | M (2) |
| **W.Avg** | **2.4** | **2.4** | **2** | **2.4** | **2.6** | **2** | **2** | **2.4** | **2.2** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***

**Course Outcome (COs) Vs Programme Specific Outcome (PSOs)**

| CO | PSO1 | PSO2 | PSO3 | PSO4 | PSO5 |
|---|---|---|---|---|---|
| **CO1** | M (2) | M (2) | S (3) | M (2) | M (2) |
| **CO2** | S (3) | M (2) | M (2) | M (2) | S (3) |
| **CO3** | M (2) | M (2) | M (2) | S (3) | M (2) |
| **CO4** | M (2) | M (2) | M (2) | S (3) | S (3) |
| **CO5** | S (3) | M (2) | M (2) | S (3) | M (2) |
| **W.Avg** | **2.4** | **2** | **2.2** | **2.6** | **2.4** |

***S –Strong (3), M-Medium (2), L- Low (1)***


## MANAGEMENT CAMPUS