



KARNATAK UNIVERSITY, DHARWAD
ACADEMIC (S&T) SECTION
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NAAC Accredited
'A' Grade 2014

website: kud.ac.in

No. KU/Aca(S&T)/JS-91/BOS/BBA(Log)/2022-23/384

Date: 20 JUN 2023

NOTIFICATION

Sub: Regarding syllabus of 3 years BBA (Logistics Management) - I to VI Sem
w.e.f. 2023-24 & onwards under NEP.

- Ref: 1. BOS Res. No. 01, dt. 22.05.2023.
2. Academic Council Res. No. 05, dt. 27.05.2023.
3. Vice-Chancellor's order dated: 19/06/2023

Adverting to the above, it is hereby informed to the Principal, Karnatak Arts & Commerce College, Dharwad that the syllabus of 3 years BBA (Logistics Management) - I to VI Semester (Self-finance) w.e.f. 2023-24 & onwards under NEP.

Hence, the contents of this notification may please be brought to the notice of the students and all concerned. The said syllabus may be obtained through K.U.website (www.kud.ac.in).


REGISTRAR

To,

1. The Chairman, Dept. of KIMS, K.U.Dharwad.
2. The Principal, Karnatak Arts / Commerce College, Dharwad.
3. The Registrar (Evaluation), K.U.Dharwad.

Copy fives to:

1. Dr. A.M.Kadacol, Dean, Faculty of Management, Dept. of KIMS, K.U.Dharwad.
2. The Director, IT Section, Examination Section, K.U.Dharwad for information and to upload on K.U.Website (www.kud.ac.in).

Copy to:

1. PS to Vice-Chancellor, K.U.Dharwad.
2. S.A. to Registrar, K.U.Dharwad.
3. O.S., Exam UG / Confl / QP / GAD Section, K.U.Dharwad.
4. The Director, IT Branch, Exam Section, K.U.Dharwad.
5. The Nodel Officer, UUCMS / E-Governance Cell, K.U.Dharwad

KARNATAK UNIVERSITY, DHARWAD



**APPRENTICESHIP BASED BBA
DEGREE PROGRAMME IN
LOGISTICS MANAGEMENT**

**REGULATIONS GOVERNING THREE YEARS
UNDER GRADUATE PROGRAMME AS PER NEP-2020**

Effective from 2023-24

PREAMBLE

Apprenticeship-based BBA Degree Programme in Logistics Management is offered by Karnatak University, Dharwad in collaboration with Logistics Sector Skill Council (LSC). Logistics Sector Skill Council, established by the Ministry of Skill Development and Entrepreneurship (MSDE) through the National Skill Development Corporation of India (NSDC), has taken up several initiatives to create adequate skills for gainful employment at various levels in Logistics Industry. The apprenticeship-based BBA Degree Programme in Logistics is one of the UG programmes.

The KUD in Collaboration with LSC taken up the following responsibilities for BBA Degree Programme in Logistics:

- Curriculum Development and Continuous Improvement
- Sensitisation of Students on Apprenticeship Assignment
- Create Course Materials on all Domain Courses and provide access to students through Logistics Learning Management System
- Securing Apprenticeship Training (On-the-job Training) in Logistics Companies for all students of this Programme under the provisions of Apprentices Act, 1961
- Securing a monthly stipend, as fixed by the Government from time to time, during the Apprenticeship Training period for every student.
- Assessing the performance & learning of students in Apprenticeship
- Arrange the conduct of final placement drive for the students of this Programme
- Assessment of the progress made by the Collaborating Institutions(CI) in the Programme, and offering suggestions & help achieve the objective of making the students skilful.

1. Title and Commencement :

- a. These regulations shall be called as ‘Regulations’ governing Three Years Bachelor Degree titled Bachelor of Business Administration in Logistics (BBA-Logistics Programme) undergraduate Programmes as per NEP-2020 for the Karnatak University, Dharwad.
- b. These regulations are framed as per section 44(1c) of K.S.U. Act 2000 for introduction of Programmes.
- c. As per Section 44(3) of K.S.U. Act 2000, these Regulations shall come into effect from the academic year: 2023-24 after H.E. the Chancellor’s assent.

2. The Salient Features of the Three Years BBA-Logistics Programme:

- a. It is a Choice Based Credit System under Semester Scheme.
- b. The programmes comprise of about 50% Discipline Specific Core Courses as Major subjects, 20% Discipline Specific Core Courses / Multi-Discipline Specific Courses as Minor courses, and remaining 30% Ability Enhancement Compulsory Courses, Skill Enhancement Courses along with Open Elective Courses.
- c. The relative importance of Courses of the study is measured in terms of credits.
- d. The programme permits horizontal mobility in course selections and vertical growth in the core courses.
- e. The students shall take part in value-based activities.
- f. The declaration of result is based on Aggregate Percentage of marks obtained and Cumulative Grade Point Average (CGPA) earned.
- g. The candidate has an option to exit after Second semester and Fourth semesters of the programme and shall be awarded Certificate, and Diploma, respectively with a provision to reenter and complete the degree.
- h. The programme permits the consideration of credits earned from Massive Open Online Course (MOOC).

3. Definitions:

In these Regulations, unless the context otherwise requires:

- i. "University" means Karnatak University, Dharwad
- ii. "College" means the Higher Education Institution affiliated to the University.
- iii. "Programme" or "Programme of study" means a higher education programme pursued for a degree specified by the Commission under sub-section (3) of section 22 of the University Grants Commission Act, 1956 (3 of 1956).
- iv. "Discipline" means faculty viz. Arts, Social Science, Science, Commerce, Management, etc.
- v. "Course" means subject or papers having specified units which comprise a specified programme of study.
- vi. "Credit" means the standard methodology of calculating teaching hours of the course per week in the semester system.
- vii. "Candidate" means, a person seeking admission or appearing for examination to the Under Graduate Programme.

viii. “Student” means a person admitted to, and pursuing, a specified credit-based course/programme of study in a higher education institution.

ix. “BoS” means Board of Studies in the various courses.

4. Programme Structure:

The Semester system, Duration and other programme requirements are :

4.1: BBA-Logistics programme shall have six semesters duration Programme Content

- 32 Courses in Semesters I, II, III, and IV
- 4 Allied Courses in the MOOC format in Semesters V and VI
- 2 Spells of Apprenticeship Training for six months each in Semesters V and VI

4.2: Each academic year shall have two semesters; odd and even semesters.

4.3: Each semester shall have 16 weeks (06 days per week system) with 90 working days (excluding Sundays and other holidays).

4.4: The candidate has an option to exit after Second semester and Fourth semesters of the programme and shall be awarded Certificate and Diploma, respectively with a provision to reenter and complete the degree.

4.5: The candidate availing exit option shall re-enter the programme at the beginning of any academic year to complete the degree with the prevailing syllabi.

4.6: All candidates shall be awarded Bachelor’s degree on successful completion of SIX semesters (THREE academic years) undergraduate programme.

4.7: BBA-Logistics programme shall have three components,

a) Discipline Specific Core Courses (DSCC): DSCC are Compulsory Core Courses of the programme.

b) Elective Courses (EC) : Elective Courses shall have three categories, viz., Discipline Specific Core Elective (DSE) Courses, Open Elective Course (OEC) and Apprenticeship .

i. **Discipline Specific Core Elective (DSE):** Elective courses offered under the core discipline of the study are Discipline Specific Core Elective (DSE).

ii. **Open Elective Course (OEC):** An elective course chosen from any other discipline/subject, with an intention to seek exposure beyond core discipline is called Open Elective Course in all the programmes.

The student shall select any one OEC in the given semester, other than his / her DSCC across the disciplines.

A student can opt to study the OEC from the same subject in all the 04 semesters or can choose different OECs in every semester.

iii. **Apprenticeship:** Semesters V and VI are Apprenticeship Semesters. Allied Courses: The Allied Courses are offered by LSC on the pattern of MOOC. LSC delivers the course online through Logistics Learning Management System (LLMS). The student shall be guided and work under manager/supervisor during Apprenticeship.

c) Ability Enhancement Courses (AEC): The Ability Enhancement Courses (AEC) shall be of two kinds: i) Ability Enhancement Compulsory Courses (AECC) and ii) Skill Enhancement Courses (SEC).

i. **Ability Enhancement Compulsory Courses (AECC):** Environmental Study, Indian Constitution, English and Modern Indian languages (MIL) / Modern European Language Communications (MEL) are AECCs. (**Annexure3**).

Environmental Study and Indian Constitution are mandatory.

A Student shall study Kannada as a First Language and any one of MIL/MEL as second language.

Those who have not studied Kannada up to PUC / 10+2 Level shall study Functional Kannada (simple Kannada) in I semester and choose any 02 languages in the remaining 03 semesters.

P.S.: 1) A deaf/spastic/mentally retarded/visually impaired/learning deficiency student shall be exempted from learning any one of the languages like English or MIL.

2) MIL means the languages mentioned in VIII Schedule of the Constitution of India.

ii. **Skill Enhancement Courses (SEC):** These courses shall be chosen from a pool of courses designed to provide value-based and skill-based knowledge and should contain lab/hands-on training/ fieldwork.

4.8: Credit system of the programme: Each 03-year programme shall have a minimum of **152 credits**. Credit means the unit by which a course is measured.

a) 1 hour lecture or 1 hour tutorial per week is equal to 1 credit and that of 2 hours practical is equal to 1 credit. Tutorial is not mandatory for all the courses. However, the concerned BoS shall decide the necessity for any Course.

b) Courses with 3 to 6 credits shall be evaluated for 100 marks and courses with less than 3 credits, including practical, shall be evaluated for 50 marks.

c) Online courses (MOOC) 30 hours teaching/classes is equivalent to one credit

4.9. Workload for Teachers:

Each theory session may have up to a maximum of 60 students. To determine a teacher's work load one hour theory/tutorial/two hours practical class shall be considered equal to one hour work load.

5. Admission Procedure

5.1: Invitation of Applications:

- a) The University shall issue a notification for admission to various UG Programmes for all odd semesters soon after the announcement of PUC II year / 10+2 results.
- b) Admissions shall be purely based on merit cum roster as per the norms of Government of Karnataka issued from time to time.
- c) Academic year normally commences in the month of June every year. The exact date for commencement of academic year shall be decided by the University.
- d) Affiliated colleges shall admit students for each programme not exceeding the approved intake. Prior approval from the University is mandatory in case the admissions exceed approved limit.

5.2: ELIGIBILITY: A candidate who has passed two-year Pre-University Course (PUC) Examination conducted by Pre-University Education Board, Government of Karnataka, or 10+2 Examination conducted by CBSE or equivalent examinations by any Other State or any other recognized Board / Department or 3-year Diploma Course with any subject or **2-year JOC / ITI of any subject shall be eligible for** admission to First Semester BBA logistics Programme. A candidate with PUC / 10+2 of any stream shall be eligible.

5.3: Admission Eligibility for Second and Subsequent Semesters:

- a) BBA-Logistics Programmes shall have carryover system up to 6th semester. The admission conditions are:
 - i. 75% attendance shall be mandatory for each semester and for each course to appear for semester-end examination. Further, 20% attendance shall be condoned for the students participating/involved in Co-curricular/Extra-Curricular activities like NCC/NSS/Sports/ Cultural Activities/ Study Tours/ Field Work/Seminars, etc., with prior permission of the Principal of the College in writing.

- ii. Candidates with 75% attendance but failing to appear for semester-end examination shall also be eligible to seek the admission for immediate higher semester.
- iii. Mere submission of application by the candidate to appear for examination without 75% attendance shall not be eligible for higher semester.
- iv. Candidates not submitting examination application forms but maintaining 75% attendance shall not be eligible for admission to higher semester.
- v. If the candidate appears for II semester end examination and discontinued for III semester and wishes to take admission for IV semester in future, such candidates shall not be allowed for IV semester. Such candidate shall again seek admission to III semester as per University schedule. This is also applicable to other odd semesters.
- vi. A candidate who does not satisfy the requirement of 75% attendance even in one Course (subject/paper) shall not be permitted to take the University examination of that semester and he/she shall seek re-admission to that Semester in a subsequent year as per University schedule.

5.4: Medium of instruction:

The medium of instruction shall be English. The candidate has to write the examination only in English except language papers.

5.5: Change of Programme:

BBA-Logistics Programme is specific in nature and hence, there shall not be any provision to change the programme.

5.6: Change of subject / DSCC

The MIL/MEL subject studied by the Students in I semester shall be the same for II semesters as per programme structure. However, the students who have studied Functional Kannada in I semester can opt the same subject or other MIL/MEL for II semester.

5.7: Change of College/Transfer

- a) Candidate shall be permitted for change of college only for the odd semesters by seeking admission within the stipulated period mentioned in the admission notification with the due consent from both the colleges. There shall not be any provision for transfer/change of college for even semesters. Further, lower semester examination failure/MPC candidates are not eligible for transfer/change of college within the Karnatak University's affiliated colleges.

- b) The same shall be applicable for the candidate seeking transfer from the colleges of other University within or outside the state or country by producing the eligibility certificate issued by Karnatak University with the confirmation of similarity of the programmes with each other.
- c) Such transfer of admission shall be within the intake capacity of the respective class/ subject of the respective College.
- d) The Degree of 3 years shall be awarded from the University where the candidate has earned a minimum 50% of the credits prescribed for the programme.

6: Examination

6.1: The prescribed courses of 3 to 6 credits shall be evaluated for 100 marks and that of less than 3 credits, including practical, shall be evaluated for 50 marks.

6.2: There shall be a continuous assessment of the student. For this purpose, semester examination is divided into two components:

a. Theory papers / SEC as theory:

- i. **Formative (Internal) Assessment** - examinations conducted by the College for 40% of maximum marks allotted for each Course; and
- ii. **Summative (Semester-end) written** examination conducted by University after 16th week of the commencement of semester for 60% of the maximum marks allotted for each Course.

b. Practical / SEC as Practical:

- i. **Formative (Internal) Assessment** - examinations conducted by the College for 50% of maximum marks allotted for each course in 14th week of the commencement of semester; and
- ii. **Summative (Semester-end) written** examination conducted by University after 16th week of the commencement of semester for 50% of the maximum marks allotted for each Course

6.3: Formative(Internal Assessment (IA)) examinations:

Theory Papers / SEC as Theory: The College shall conduct IA examination for theory subjects in the 8th week for 10%, 12th week for another 10% of maximum marks allotted for each Course. Duration of examination shall be 1 hour each, 10% shall be allotted for Case study / Assignment / Field work / Project work/ Activity etc and the remaining 10% shall be for seminar on the course.

- i. **Practical :** The College shall conduct IA examination for practical paper in the 14th week for 50% of maximum marks allotted for each Course. Duration of examination shall be 3 hours.
- ii. **SEC as Practical:** The College shall conduct IA examination for SEC paper in the 14th week for 50% of maximum marks allotted for each Course. Duration of examination shall be 2 hours.
- iii. The Course teacher shall display the marks on notice board within 4 days after IA examination and allow the student for verification of IA Booklet if he/she wishes. Grievances shall be solved by the Course teacher and in complicated cases by the Principal/ representative of Principal as per internal mechanism of the College.
- iv. There shall not be any provision for improvement of IA marks or for remaining absent. However, IA exam shall be conducted for students who remained absent due to participation in the events related to **co curricular / curricular activities** conducted by recognized organizations.
- v. The College shall submit the IA marks to the University if student satisfies 75% attendance in the semester and shall be eligible to appear for semester-end examination.
- vi. The mode of conducting semester end examination for discipline specific SEC shall be decided by the respective BoS.

6.4: Summative (Semester-end) examination:

The semester-end examination, for 60% of maximum marks allotted for each theory paper, shall be conducted by the University after 16th week of the commencement of the semester. The University shall conduct the semester-end examination for either odd or even semesters but not both simultaneously, unless otherwise specified.

- i. Duration of theory examination shall be 02 hours for 100 marks per Course (including IA marks) having 3 to 6 credits.
- ii. Duration of theory examination shall be 1 hour for 50 marks Course (including IA marks) having the credits of less than 3.
- iii. Duration of practical examination shall be 3 hours for 50 marks Course (including IA marks) having the credits of less than 3.
- iv. SEC as practical, the duration of practical examination shall be 2 hours for 50 marks Course (including IA marks) having the credits of less than 3.
- v. Each Faculty in consultation with the concerned BoS, shall decide the pattern of question paper for uniformity for all the core courses and elective courses.

- vi. Question papers shall be prepared by a team of members of respective Board of Examiners (BoE).
- vii. Concerned BoE shall decide the scheme of valuation of both theory and practical courses.
- viii. There shall be a single valuation for theory papers from the members of concerned BoE under the supervision of moderator who is in turn under the supervision of Chairman of BoE.
- ix. The SEC offered from NSQF shall be evaluated by them. However, the SEC offered by the University shall be evaluated for 50 marks as per the guidelines / methodology issued by the University from time to time.
- x. Allied Courses LSC makes online assessment of students. Three online tests are conducted for 25 marks each for the CIA Component. The total of the best performed two tests would be assigned as CIA Mark. One online End Semester Examination is conducted for a maximum mark of 50. The marks scored by students in both CIA and ESE for a total of 100 marks would be communicated to the Karnatak University by LSC. The Karnatak University may modify the proportion of marks between CIA and ESE as per its norms, standards, and practices.
- xi. Apprenticeship: The CIA Component of Apprenticeship is assessed by the Manager/Supervisor under whom the students work during Apprenticeship Semesters, and LSC for a maximum mark of 250. The Manager/Supervisor makes the assessment for 150 marks based on skill & attitudinal development of students. LSC assess the practical knowledge of students for 100 marks by conducting a Test on conceptual knowledge relevant to the process undergone during Apprenticeship, and Viva.
- xii. The Karnatak University will evaluate the Apprenticeship Report (comprising Work Diary) submitted by students, and conduct Viva for a mark of 150, which is considered as ESE. The Evaluation & Viva shall be conducted by a Panel comprising of the HoD (or Programme Coordinator), Student's Mentor, and one Executive from Logistics Sector. The Karnatak University may modify the proportion of marks between CIA and ESE as per its norms, standards, and practices.

6.5: Passing criteria

- a) A candidate has to score 40% in each course including the IA marks for passing the course, subject to the condition that:

- i. There shall be no minimum or separate passing marks for the IA examination. The candidate has to score minimum 40% in the semester-end examination (Ex. for 100 marks paper; 40 IA + 60 semester-end exam and hence, minimum 24 marks for semester-end exam required). If candidate scores 40% by cumulating marks from IA and semester-end examination but fails to score 40% from the semester-end examination, such candidate shall be declared as fail.
 - ii. If the course is having both theory and practical, candidate has to pass both theory and practical independently. If the candidate fails in practical and passes in theory examination, such candidate shall reappear for practical examination only and vice versa.
 - iii. In all cases of failure in particular course, IA marks shall be protected and carried forward; and the candidate need not reappear for IA examinations in such cases.
- b) On successful scoring of minimum 40% in all courses, the candidate shall be declared pass in the programme in that semester.
- c) On successful scoring of minimum 40% in all courses and all the semesters, the candidate shall be declared pass in the entire programme.

6.6: Percentage and Grading

- a) If P is the percentage of marks secured (IA + semester end score) by the candidate in a course which is rounded off to the nearest integer, the grade point (GP) earned by the candidate in that course will be given as below:

Percentage (%)	Grade(GP)	Percentage (%)	Grade(GP)
40	4.0	71-75	7.5
41-45	4.5	76-80	8.0
46-50	5.0	81-85	8.5
51-55	5.5	86-90	9.0
56-60	6.0	91-95	9.5
61-65	6.5	96-100	10.0
66-70	7.0		

Grade point of less than 4 shall be considered as fail in the course, hence, GP=0 and for the absent candidate also GP=0.

- b) A student's level of competence shall be categorized by grade point (GP), Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) of the programme.

c) **Semester Grade Point Average (SGPA):** The SGPA is a ratio of sum of the number of Credit Grade Points scored from all the courses (subject) of given semester to the total credits of such semester in which the candidate studied.

(Credit Grade Points of each course = Credits x GP)

d) **Cumulative Grade Point Average (CGPA):** It is calculated as below for 6 semester programme:.

$$\text{CGPA} = \frac{\{(\text{Credit}_1 \times \text{SGPA}_1 \} + (\text{Credit}_2 \times \text{SGPA}_2) + (\text{Credit}_3 \times \text{SGPA}_3) + (\text{Credit}_4 \times \text{SGPA}_4) + (\text{Credit}_5 \times \text{SGPA}_5) + (\text{Credit}_6 \times \text{SGPA}_6) \}}{\text{Total credits of programme (sum of credits of all semesters)}}$$

Or
$$\text{CGPA} = \frac{\text{Total credit grade points of all the courses(subjects) in the programme}}{\text{Total credits of programme}}$$

e) After studying and passing, all the credits prescribed for the programme the degree shall be awarded with CGPA score after rounding off to second decimal and class distinguishing as second class, first class, and distinction along with grade letter as under.

CGPA of the programme (Degree)	Class obtained	Grade Letter
9.5 to 10.00	Outstanding	A ⁺⁺
7.00 to 9.49	Distinction	A ⁺
6.00 to 6.99	First Class	A
5.50 to 5.99	Second class	B ⁺
5.00 to 5.49		B
4.00 to 4.99	Pass	C
Less than 4.0	Fail/ Reappear	D

6.7. CRITERIA FOR AWARD OF DEGREE

On successful scoring of minimum 4 grade points in all courses of the programme, the Certificate/Diploma/Degree shall be awarded for the candidates.

CLASSIFICATION OF SUCCESSFUL CANDIDATES: CLASSES AND GRADES

The results of successful candidates at the end of II, IV and VI semesters shall be classified on the basis of aggregate percentage of marks obtained in all the two, four or six semesters and the Aggregate or Cumulative Grade Point Average (CGPA) for award of:

- a) Certificate course for completion of first two semesters if the candidate wishes to exit.
- b) Diploma course for completion of first four semesters in the programme if the candidate wishes to exit.
- c) Bachelors Degree on completion of all six semesters in the programme.
- d) Nomenclature of the certificate, diploma, and degrees in different programmes is mentioned in Annexure-4

The University shall issue the final grade card (Marks card) consisting of grade points along with marks of all courses successfully completed by the candidate at each stage the candidate wishes to exit with SGPA for all the semesters, CGPA with Grade Letter of the entire programme and Class obtained.

The Degree shall be awarded in the Annual / Special convocation. The Degree certificate shall consist of CGPA of the programme and Class obtained.

6.8: Recounting, revaluation, challenge valuation, photo copying of answer papers

There shall be provision for recounting of marks, revaluation, challenge valuation, and photo copying of answer papers. The University shall invite applications for such purpose immediately after announcing the results for every semester by giving 10 days time to apply for the same online as per the existing ordinance and regulations and process the same accordingly.

6.9: Rank and Gold medals.

The University Ranks and Gold-Medals shall be awarded to the students of 3-year Degree. The Students who complete a 3-year Degree without break in the examination including lateral entry from other college shall be considered for the award of medals and ranks. However, this is not applicable for the award of classes like, second/first class/distinction to the students.

Further, there shall not be any provision for Rank and gold medal for the certificate and diploma candidates in the exit option.

6.10: Makeup Examination.

- a) There shall be no immediate makeup examination for all semesters to the courses where candidate failed to score minimum 40% for semester end examination unless specified otherwise as in (c).
- b) However, such candidate shall appear for examination during the regular schedule of examination conducted by the University.
- c) There shall be a makeup examination for the V and VI semesters (6 semesters Programme) immediately after declaring the final semester results of the programme.

7. Provision for improvement of the marks (Grade Point)

Improvement of the marks (Grade Point): There shall be a provision for candidates to reappear for the examination for the concerned course of theory papers only (subject) in which candidate wishes for improvement of his/ her grade point of SGPA in general and CGPA in total of the programme subject to the condition that:

- i. The candidate shall be eligible to reappear for improvement of grade points only after successfully passing the programme.
- ii. The candidate may opt for the examination for any number of courses (subject / paper) of the programme for improvement of grade point but not more than three times for each course (subject / paper) as per the prevailing syllabus of the examination conducted in the regular schedule of University examinations.
- iii. All such provisions are there within 03 years from successful completion of the programme, but not exceeding the period of 04 years of the duration of completion of the programme.
- iv. In all such cases grade points are considered if there is a progress in such improvements, otherwise original grade points shall be retained.
- v. No such candidates shall be eligible for the award of Rank, Gold Medal, Cash Prize, etc.

8. Duration for completion of the BBA-Logistics Programme

There is no minimum duration for completion of the Programme. However, the candidate has to write the examination based on existing syllabi at the time of appearing for examination.

9. Miscellaneous

- i) Each student shall possess Aadhaar Card, PAN, and Bank Account, which are necessary for on boarding for Apprenticeship.
- ii) Students shall be willing to move out of their present place of residence to get on boarded in companies that might be located in different cities.
- iii) Students shall take care of Boarding and Lodging arrangements in cities where the Apprenticeship providing company is located.
- iv) Students need to possess the prescribed textbooks for all Courses of the Programme.

10. REPEAL AND SAVINGS FOR UG PROGRAMMES

All the existing Regulations governing three years Bachelor degree programmes in the disciplines of Arts, Social Sciences, Science, Commerce and Management under semester and non semester schemes or any ordinances or regulations or guidelines issued or adopted earlier by the University in this matter for constituent and affiliated colleges of Karnatak University are hereby repealed. However, the above Regulations shall continue to be in force for the students who have been admitted to the degree programmes concerned before the enforcement of these new regulations.

Provided that the said repeal shall not affect the previous operation of the said regulations / ordinances or anything duly done or suffered there under or affect any right, liability or obligation acquired, accrued, or incurred under the said regulations.

11. Removal of Difficulties:

If any difficulty arises in giving effect to the provisions of these regulations, the Vice-Chancellor may, by order, make such provisions not inconsistent with the Act, Statutes, Ordinances, or other Regulations, as appears to be necessary or expedient to remove the difficulty. Every order made under this rule shall be subject to ratification by the Appropriate University Authorities.

Apprenticeship based Degree Programme :-**BBA Logistics****Programme Structure**

Semester I								
Course Code	Title of the Course	Category of course	Type	Teaching Hours	Credit	SEE	CIE	Total Marks
L21C01	Language-I	AECC	General	45	3	60	40	100
L21C02	Language-2	AECC	General	45	3	60	40	100
L21C03	Fundamentals of Logistics	DSCC	Domain	45	3	60	40	100
L21C04	Principles of Management	DSCC	General	45	3	60	40	100
L21C05	Materials Management	DSCC	Domain	60	4	60	40	100
L21C06	Business Statistics	OEC	General	60	4	60	40	100
L21C07	Warehousing & Distribution Operations	SEC	Domain	45	3	60	40	100
L21C08	Health & Wellness+ yoga	SEC-VB	General	30	2	30	20	50
Total				375	25	450	300	750

Semester II								
Course Code	Title of the Course	Category of course	Type	Teaching Hours	Credit	SEE	CIE	Total Marks
L21C09	Language-I	AECC	General	45	3	60	40	100
L21C10	Language-2	AECC	General	45	3	60	40	100
L21C11	Freight forwarding (ocean and air cargo)	DSCC	Domain	45	3	60	40	100
L21C12	Forecasting and inventory management	DSCC	Domain	60	4	60	40	100
L21C13	Surface transportation	DSCC	Domain	45	3	60	40	100
L21C14	Environmental studies	AECC	General	45	3	60	40	100
L21C15	Management and cost accounting	OEC	General	60	4	60	40	100
L21C16	NCC/NSS/R &R(S&G)/Cultural Sports	SEC-VB	General	30	2	30	20	50
Total				375	25	450	300	750

Semester III								
Course Code	Title of the Course	Category of course	Type	Teaching Hours	Credit	SEE	CIE	Total Marks
L21C17	MIS for logistics	DSCC	Domain	60	4	60	40	100
L21C18	International logistics management	DSCC	Domain	45	3	60	40	100
L21C19	Marketing management	DSCC	General	45	3	60	40	100
L21C20	Retail logistics and E-commerce	DSCC	Domain	45	3	60	40	100
L21C21	Liner logistics	DSCC	Domain	45	3	60	40	100
L21C22	Human resource management	DSCC	General	45	3	60	40	100
L21C23	Life skills developmental- practical	OEC	General	45	3	60	40	100
L21C24	Word and presentation tools- practical	SEC	General	45	3	30	20	100
Total				375	25	450	300	750

Semester IV								
Course Code	Title of the Course	Category of course	Type	Teaching Hours	Credit	SEE	CIE	Total Marks
L21C25	Port terminal logistics	DSCC	Domain	60	4	60	40	100
L21C26	Commercial geography	DSCC	General	45	3	60	40	100
L21C27	Logistics network design	DSCC	Domain	45	3	60	40	100
L21C28	Logistics 4.0	DSCC	Domain	45	3	60	40	100
L21C29	Specialization module – Course 1	DSCC	General	45	3	60	40	100
L21C30	Specialization module – Course 2	DSCC	General	45	3	60	40	100
L21C31	Data analysis using spreadsheet	SEC	General	45	3	60	40	100
L21C32	India and Indian constitution	AECC	General	45	3	30	20	50
Total				375	25	420	280	700

Semester V								
Course Code	Title of the Course	Category of course	Type	Teaching Hours	Credit	SEE	CIE	Total Marks
L21A01A/1B/1C	Allied course- MOOC		Domain	60	2	50	50	100
	Allied course- MOOC		Domain	60	2	50	50	100
L21C33	Apprenticeship I		Domain	1008	22	150	250	400
Total				1128	26	250	350	600

Semester VI								
Course Code	Title of the Course	Category of course	Type	Teaching Hours	Credit	SEE	CIE	Total Marks
L21A02A/2B/2C	Allied course- MOOC		Domain	60	2	50	50	100
	Allied course- MOOC		Domain	60	2	50	50	100
L21C34	Apprenticeship II		Domain	1008	22	150	250	400
Total				1128	26			

Allied course- MOOC

Sem	No	Type	Course	Code	Hours	Credit	Marks		
							CIA	Exam	Total
V	1	Domain	Warehouse automation	L21A01A	60	2	50	50	100
V	2	Domain	Best practices in transportation	L21A01B	60	2	50	50	100
V	3	Domain	Inland waterways & costal shipping	L21A01C	60	2	50	50	100
VI	1	Domain	Courier, express & parcel services	L21A02A	60	2	50	50	100
VI	2	Domain	In plant logistics	L21A02B	60	2	50	50	100
VI	3	Domain	Export & import documentation	L21A02C	60	2	50	50	100

Specialization Modules

Course	Group A Aviation	Group B Ecommerce	Group C land transportation
1	Introduction to aviation industry & airport operations	First mile operations	Multimodal transportation
2	Introduction to air cargo industry	Last mile operations	Commercial aspects of transportation

Student shall choose one of the three modules and pursue both courses listed in the chosen module.

Course-Credit distribution

Sem	General		Domain		Total	
	Course	Credits	Course	Credits	Course	Credits
I	5	15	3	10	8	25
II	5	15	3	10	8	25
III	4	12	4	13	8	25
IV	5	15	3	10	8	25
V	-	-	3	26	3	26
VI	-	-	3	26	3	26
Total	19	57	19	95	38	152
% to Total	50%	37.5%	50%	62.5%	100%	100%

Awards criteria

Year	General		Domain		QP	Sems	Award
	Course	Credits	Course	Credits			
1	10	30	6	20	1	2	Diploma
2	9	27	7	26	1	4	Advanced Diploma
3	-	-	6	52	1	6	Degree
Total	19	57	19	95	3		

LANGUAGE I

Semester I	Course Type General	Code L21C01	Hours 45	Credits 3	Version 2023-24
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LANGUAGE II

Semester I	Course Type General	Code L21C02	Hours 45	Credits 3	Version 2023-24
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FUNDAMENTALS OF LOGISTICS

Semester
I

Course Type
Domain

Code
L21C03

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become logistics professionals
- To orient students in the field of Logistics
- To help Students to understand Fundamentals of Logistics

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of Logistics in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics

Unit	Topics
I	Introduction to Logistics: History of Logistics Need for logistics- Cost and Productivity, cost saving & Productivity improvement. Logistics Cost, reduction in logistics cost, benefits of efficient Logistics, Principles of Logistics, Technology & Logistics -Informatics, Logistics optimization. Listing of Sub-sectors of Logistics
II	Logistics and Customer Service - Definition of Customer Service Elements of Customer Service-Phases in Customer Service-Customer Retention - Procurement and Outsourcing - Definition of Procurement/Outsourcing - Benefits of Logistics Outsourcing - Critical Issues in Logistics Outsourcing
III	Global Logistics - Global Supply Chain - Organizing for Global Logistics-Strategic Issues in Global Logistics - Forces driving Globalization - Modes of Transportation in Global Logistics Barriers to Global Logistics - Markets and Competition - Financial Issues in Logistics Performance - Integrated Logistics - Need for Integration - Activity Centres in Integrated Logistics. Role of 3PL&4PL.
IV	Warehouse: Warehouse-Meaning, Types of Warehouses Benefits of Warehousing. Transportation- Meaning; Types of Transportations, efficient transportation system and Benefits of efficient transportation systems. Courier/Express - Courier/Express-Meaning, Categorization of Shipments, Courier Guidelines, Pricing in Courier - Express Sector for international and domestic shipping. E-Commerce - Meaning, Brief on Fulfillment Centers, Reverse logistics in e-commerce sector, Marketing in e-commerce and future trends in e-commerce.
V	EXIM: Brief on EXIM/FF & CC, Multi-modal transportation, brief on customs clearance, bulk load handling and brief on trans-shipment. Supply chain. Cold chain. Liquid Logistics. Rail Logistics.

Text & Reference Books:

1. Course Material Prepared by LSC
2. Fundamentals of Logistics Management (The Irwin/Mcgraw-Hill Series in Marketing), Douglas Lambert, James R Stock, Lisa M. Ellram, McGraw-hill/Irwin, First Edition, 1998.
3. Vinod V. Sople (2009) Logistic Management (2nd Edn.) Pearson Limited.
4. Logistics Management for International Business: Text and Cases, Sudalaimuthu & Anthony Raj, PHI Learning, First Edition, 2009.
5. Fundamentals of Logistics Management, David Grant, Douglas M. Lambert, James R. Stock, Lisa M. Ellram, McGraw Hill Higher Education, 1997.
6. Logistics Management, Ismail Reji, Excel Book, First Edition, 2008.

PRINCIPLES OF MANAGEMENT

Semester
I

Course Type
General

Code
L21C04

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become effective professionals
- To orient students on recent changes and development in the field of management
- To help Students to understand basic Principles and concepts of Management

LEARNING OUTCOMES:

- To apply the knowledge about management in the real-life business situation
- To enhance their managerial ability and professional skills

Unit	Topics
I	Management: Nature, Definition, Characteristics and Scope of Management - Management as a Science or Art or Profession- Contemporary Issues and - Levels of Management-Skills of a manager- Roles of a manager-Manger Vs Entrepreneur-Challenges in Management of 21st Century
II	Planning: The Process of Planning, Objectives, Policy and Procedures, Forecasting and Decision Making-Strategic Planning – meaning and process MBO – meaning, process and requirements for implementation;
III	Organisation Design and Structure Organisation – Meaning; Process; Principles; Organisation structure – Determinants and forms: Line and staff, project, matrix and committees; Formal and Informal Organisation; Departmentation –Span of Control – Authority, Responsibility and Accountability; Delegation –Process; Principles; Centralisation and Decentralisation –Degree of decentralisation-Delegation and decentralisation
IV	Staffing and Directing: Staffing - Manpower Planning-Recruitment and Selection - Training and Development- Performance Appraisal Directing-Principles-Theory X & Y- Motivation and Behaviour- Theories of Motivation- Maslow's theory and Herzberg theory, Leadership: Styles and Theories
V	Controlling & Decision making Ethics in the contemporary management and corporate social responsibility; Macro and Micro environmental factors of business-Controllable and uncontrollable factors, SWOT analysis and 7s model of analysis- Decision Making –Types of decisions; Process; Significance; Limitations; –Models-Programmed and non-programmed decisions

Text & Reference Books:

1. L M Prasad, Principles and Practices of Management, Himalaya Publishing House
2. Rao, P.S. Principles of Management, Himalaya Publishing House.
3. Rao, V.S.P. & Krishna, V. H. Management: Text and Cases, Excel Books
4. Sharma, R.K & Gupta, S.K. Business Management (3rd edition), New Delhi: Kalyani Publishers.

MATERIALS MANAGEMENT

Semester
I

Course Type
Domain

Code
L21C05

Hours
60

Credits
4

Version
2023-24

COURSE OBJECTIVES:

- To help Students to understand basic Principles and concept of material Management
- To orient students on contemporary development in the field of material management
- To develop competencies and knowledge of students to become effective professionals

LEARNING OUTCOMES:

- To apply the knowledge about material management in the real-life business situation
- Understand the contemporary practices followed in the field of Materials Management
- To enhance their managerial ability and professional skills

Unit	Topics
I	Introduction: Materials Management - Evolution, Importance, Scope and Objectives- Interface with other functions. -Supply Chain Management -Objectives- Components , Trade off Customer Service & Cost. Supply Chain Analytics.
II	Purchasing: purchasing and procurement activities under Materials management- Purchasing Methods- Purchasing and quality Assurance- Purchase Cycle – governmental purchasing practices and procedures - Negotiation & Bargaining – Vendor relations
III	Inventory - Need of Inventory -Types of Inventory - Basic EOQ Model - EOQ with discounts – Different types of Analysis . Forecasting –methods of forecasting-Material Requirement Planning (MRP) -Input and output of MRP system -BOM Explosion -MRP II.
IV	Quality control of material: Incoming material quality control- statistical quality control(Various control charts)- Inventory control & Cost Reduction techniques. Value Analysis & Value Engineering. Standardization – need and importance. Codification - concept, benefits.
V	Stores - Functions- Stores layout -documentation- Materials handling and storage systems, - Principles of Materials Handling system – Safety issues

Text & Reference Books:

- Course Material Prepared by LSC
- Materials management: procedures, text and cases - A.K. Datta
- Materials management: An integrated approach - P. Gopalakrishnan
- Introduction to Materials management - J.R. Tony Arnold & Stephen N. Chapman
- Purchasing and Materials Management - K S Menon
- Handbook of Materials Management – Gopalakrishnan

BUSINESS STATISTICS

Semester
I

Course Type
General

Code
L21C06

Hours
60

Credits
4

Version
2023-24

COURSE OBJECTIVES:

- This course aims at aiding the students in reaching a level of increased competence in business statistics and expands understanding of the applications of statistical concepts in business.
- Emphasis is placed upon learning statistical concepts through common business problems.

LEARNING OUTCOMES:

- Gain conceptual and working knowledge of Business Statistics and use it in the applications of business.
- Learn the methods of solving problems on basic concepts and analytical business statistical model.
- Enable the student to use introductory level of Transportation and queuing theory.

Unit	Topics
I	<p>Data collection and Measures of Central Tendency :</p> <p>Collection and Presentation of Data - Statistical data – Primary and Secondary; Methods of collection of Primary data; Presentation of Data – Textual, Tabular and Diagrammatic form (Line chart, Bar chart, Pie chart, Histogram, Frequency polygon and Ogive); Frequency distribution.</p> <p>Measures of Central Tendency – Mean (A.M., G.M., H.M.), Median, Mode – different properties; Partition values – Quartiles, Deciles, Percentiles; Partition values from Ogives.</p> <p>Measures of Dispersion – Range, Q.D., M.D., S.D. – their coefficients; Comparing consistency; Different properties.</p> <p>Moments, Skewness and Kurtosis – Moments about an arbitrary number; Central Moments; Relation between central and non-central moments up to 4th order 2 3 and – coefficients.</p>
II	<p>Correlation Analysis: Methods of Studying Correlation for Grouped and Ungrouped Frequency Distribution.</p> <p>Regression Analysis: Equation of Regression Lines for Grouped and Ungrouped Frequency Distribution, Standard Error Estimate.</p>
III	<p>Index Number – Construction, Price and Quantity index numbers, Laspeyres', Paasche's, Edgeworth-Marshall's, Fisher's method, Relative methods, Tests of index number formulae: Time and Factor reversal tests, General index number, Chain base index number, Cost of living index number (CLI), Uses of CLI and its applications, Uses and limitations of index numbers</p> <p>Analysis of Time Series - Components of a time series, Adjustment in time series, Measurement of trend by moving average and least squares methods (linear and quadratic trends), Measurement of seasonal variation by simple average method, Forecasting, De-seasonalisation.</p>
IV	<p>Transportation and Assignment Problems Nature and scope of transportation and allocation models, different methods for finding initial solution - N-W Corner Rule, Least Cost Method and VAM. Unbalanced TP, Test for optimality – MODI method, AP a variant of Transportation model, Hungarian method, Restricted Assignment problems.</p> <p>Queuing Theory – Models – Simple Problem – Introduction to simulation</p>
V	<p>Probability and Sampling: Probability theory – concept and approaches; Probability rules – addition and multiplication theorem, Binomial, Poisson and Normal Distribution and their applications. Sampling – Purpose and Methods of Sampling, Merits and limitations of Sampling.</p>

Text & Reference Books:

- Gupta and Gupta, Business Statistics. (Sultan Chand & Sons: New Delhi).
- Chandan, J. Statistics for Business Economics. (Vikas: New Delhi)
- Sharma, Shenoy and Srivastava, Quantitative Analysis for Managerial Decision Making,

WAREHOUSING & DISTRIBUTION OPERATIONS

Semester
I

Course Type
Domain

Code
L21C07

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Warehouse professionals
- To help Students to understand Warehousing and distribution centre operations
- To orient students about contemporary practices followed in Warehousing & Logistics

LEARNING OUTCOMES:

- To apply the Basic knowledge of Warehousing and distribution centre operations in the real-life situation
- To enhance their ability and professional skills
- To Understand the contemporary Practices in the Industry

Unit	Topics
I	Introduction to Warehouse– Significance of Warehouses - Types of Warehouses - Broad functions in a warehouse - warehouse layouts - equipment requirement in ware house. Strategic Aspects of Warehousing.
II	Receiving of Goods – Advanced shipment notice (ASN)- Goods Receipt Note(GRN) -Stages involved receipt of goods- Visual inspection of goods unloaded - Formats for recording of goods unloaded from carriers-Procedure for Arranging of goods on dock -Put away of Goods- Put away list and its need - storage location codes and its application.
III	Procedure to Prepare Warehouse dispatches -Procedure to develop Packing list / Dispatch note- Packing- Importance of proper packing-Packing materials -Packing machines -Reading labels- quality parameters in packing-Significance of Quality parameters in packing- Cross docking method - Situations suited for application of cross docking
IV	Distribution – Definition – Significance of Physical Distribution(Need & Importance)– Channels of distribution -Factors affecting distribution. -Study on emerging trends in warehousing sector.
V	Warehouse Safety Rules and Procedures: The safety rules and 'Procedures to be observed in a Warehouse - Hazardous cargo – Procedure for Identification of Hazardous Cargo - Instructions to handle hazardous cargo . - safety data sheet - Health, Safety & Environment - safety Equipment's and their uses - 5S Concept on shop floor.

Text & Reference Books:

- Course Material Prepared by LSC
- Definitive Guide to Warehousing, The: Managing the Storage and Handling of Materials and Products in the Supply Chain (Council of Supply Chain Management Professionals) 1st Edition
- Warehouse Management: A Complete Guide to Improving Efficiency and Minimizing Costs in the Modern Warehouse- III Edition-Gwynne Richards

LANGUAGE I

<i>Semester</i> II	<i>Course Type</i> General	<i>Code</i> L21C09	<i>Hours</i> 45	<i>Credits</i> 3	<i>Version</i> 2023-24
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LANGUAGE I

<i>Semester</i> II	<i>Course Type</i> General	<i>Code</i> L21C10	<i>Hours</i> 45	<i>Credits</i> 3	<i>Version</i> 2023-24
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FREIGHT FORWARDING (OCEAN & AIR CARGO)

Semester II	Course Type Domain	Code L21C11	Hours 45	Credits 3	Version 2021-22
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COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become freight forwarding professionals
- To develop competencies on documentation procedures
- To help Students to understand freight forwarding.

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of freight forwarding including ocean and air cargo in the real-life situation
- Students will be able to demonstrate their skill on documentation in their profession.
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
I	Introduction to EXIM, Freight forwarding and custom clearance – types of custom clearances – Importance of custom clearance – certificate of origin, ICEGATE and insurance – custom Act – Regulations pertaining to custom clearance – different modes of freight forwarding – process of freight forwarding.
II	Multimodal transportation - Vendor management - bulk load handling - brief on transshipment - DG handling - customer acquisition and management - Customs clearance procedure - Documents and its importance - Stages of Documentations process and procedures - DO's and DON'T's while handling different documents during Custom Clearance
III	Operation Procedures of Freight Forwarding - The procedures for Pre-Operating Checks and Operational checks to be performed for every shipment /consignment - List of basic handling of errors and the Operational errors that occur in common - Procedure for checking of shipping bill, Airway bill based on invoice and packing list received from department for Freight Forwarding.
IV	Cargo handling, INCO terms and terminologies used in Cargoes - Different Types of Cargoes for transportation– Importer and exporter Code (IEC), The registered PAN based Business Identification Number received from the Directorate General of Foreign Trade - Packaging requirement for the cargo during shipment from the shipper - Inspection procedure for the cargo while unloading - DO's and DON'T's while handling different cargo.
V	Documentation of Freight Forwarding process as per customer timelines and requirements - Carting, unloading, Stacking, Loading; and Stuffing - Procedure for dealing with loss or damage to goods - Different P.G.A and their roles. -Containers; Pallets; Palletization; Fumigation - Letters of Credit and payment Terms. Etc. - computer and its application in internal systems of documentation.

Text & Reference Books:

1. Course Material Prepared by LSC
2. J P Saxena, Warehouse Management and Inventory Control- Vikas Publication House Pvt Ltd, First Edition, 2003.
3. Warehouse Management: Automation and Organisation of Warehouse and Order Picking Systems [With CDROM], Michael Ten Hompel, Thorsten Schmidt, Springer verlag, First Edition, 2006.
4. Management Guide to Efficient Money Saving Warehousing, Stephen Frey, Gower, 1982.
5. Swapna Pillai, Export Import Procedures & Documentation, Sahitya Bhawan Publication, 2020.

FORECASTING AND INVENTORY MANAGEMENT

Semester
II

Course Type
Domain

Code
L21C112

Hours
60

Credits
4

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Forecasting and inventory management professionals
- To orient students in the field of Forecasting and inventory management
- To help Students to understand forecasting and inventory skills in inventory management

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of forecasting and inventory management in the real life situation
- It will enable them to enhance their ability and professional

Unit	Topics
I	Forecasting: Meaning –Need -Types of forecasts –Demand Forecasting- Types of Demand Forecasting-Importance - Demand planning v/s Forecasting-Sources of demand-Supply chain dynamics
II	Sales and Operations Planning- Goals and objectives of S&OP -Collaborative Planning-Types -Collaborative planning, forecasting and replenishment- Cyclic decomposition techniques. Short- term forecasting techniques- Technology Forecasting and Methodologies: Role of Technology Information Forecasting and Assessment Council (TIFAC).
III	Inventory: Purpose of Inventory- -Types of Goods -General Management of Inventory- Multi-Echelon Inventory Systems -Use of Computers in Inventory Management- Evaluation of Performance of Materials Function–Latest trends in Inventory Management
IV	Codification – Classification – Methodology–Requirement of codes – Coding Structure and Design –Advantages - International Codification – Right Quantity – Economic Ordering Quantity -Costs associated with Inventories- Models in logistics
V	Influence of production policy on inventory levels – inventories and customer service level – steps to improve inventory management – optimum inventory –Inventory management uncertainty (fixed order quantity model) - Calculation of safety stocks

Text & Reference Books:

- Course Material Prepared by LSC
- Sunil Chopra and Peter Meindl, Supply Chain Management Pearson Education Asia, 3rd edition, 2007
- Chaman L Jain, "Fundamentals of Demand Planning & Forecasting", Graceway Publishing Company 3rd edition.
- Operations Research – Concepts, Problems & Solutions- Kapoor V.K.-Sultan Chand & Sons/2017- 978-81-8054-854-3 (TC-532)
- Vijay Kumar Khurana, 2007, Management of Technology and Innovation, Ane books India, Chennai Further Reading Source 5. Simchi-Levi, David, "Designing and Managing Supply Chain", Tata McGraw Hill, 3rd Edition, 2007. 6. David E Mulcahy, "Warehouse Distribution and Operations Handbook, McGraw Hill, 6th Edition, 1993.

SURFACE TRANSPORTATION

Semester
II

Course Type
Domain

Code
L21C13

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To help Students to understand basics of surface transportation including road and rail transport
- To develop competencies and knowledge of students to become transportation professionals

LEARNING OUTCOMES:

- Students will be able to apply the knowledge of surface transportation in the real-life situation
- Enhancement of professional skills with regard to the field.

Unit	Topics
I	Introduction to surface transportation -Need - functions of transportations in logistics -Types of transportations metrics -various land transport carriers and their Load capacities - types of temperature-controlled carriers- inter modal transport -verification of carriers and drivers -transit rules
II	Transportation Optimisation -Documentation for transportation – GST – E Waybill Filing - Importance of consignment number -Transportation Telematics -Vehicle tracking system - GPS systems -Procedure for downloading and reading tracking data from devices -Probable reasons for delay or any issues during transit -Solutions - re-routing
III	Organisation structure in a Transport organization- Incident management systems & Processes - hazmat goods rules -Importance of safety data sheet and labels -Procedure for Consolidation of consignments for optimal loads -Reporting discrepancies such as pilferages, loss or damage of goods in transit -Checking insurance and claims -steps to close deliveries.
IV	Benefits of efficient transportation systems-emerging trends in transportation sector-pricing in transportation sector-govt regulations on transportation in India. Safety procedures during transit and emergency response steps - List of good practices in driving.
V	Customer Management-Vendor coordination for return truck loads-DG Handling – features and facilities offered by railways – innovative schemes-facilities to popularize rail logistics in India

Text & Reference Books:

- Course Material Prepared by LSC
- J P Saxena, Warehouse Management and Inventory Control-Vikas Publication House Pvt Ltd, First Edition, 2003.
- A Practical Guide to Logistics: An Introduction to Transport, Warehousing, Trade and Distribution -Jerry Rudd-Kogan Page publications
- Management Guide to Efficient Money Saving Warehousing, Stephen Frey, Gower, 1982.
- Kapoor Satish K., and KansalPurva, 'Basics of Distribution Management: A Logistical Approach', Prentice HALL of India

ENVIRONMENTAL STUDIES

Semester
II

Course Type
General

Code
L21C14

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- It is concerned with the exploration, investigation and development of an understanding of the natural, human and social dimensions of local and wider environments.
- It provides opportunities to engage in active learning, to use a wide range of skills, and to acquire open, critical and responsible attitudes.

LEARNING OUTCOMES:

- Master core concepts and methods from economic, political, and social analysis as they pertain to the design and evaluation of environmental policies and institutions.
- Appreciate the ethical, cross-cultural, and historical context of environmental issues and the links between human and natural systems.
- Understand the transnational character of environmental problems and ways of addressing them, including interactions across local to global scales.

Unit	Topics
I	Ecology Ecosystem – Introduction- Abiotic and Biotic components. Structure and functions of Ecosystem – Food Chain, Food web, Ecological pyramids, Energy flow and biogeochemical cycles. Biodiversity – Values, Type and levels of Biodiversity. Causes of depletion. Conservation of biodiversity
II	Pollution Water Pollution - Sources of water, water quality standards, type of pollutants - its sources and effects. Air Pollution - composition of atmosphere, Air quality standards, Sources and adverse effects of air pollution, Greenhouse effect, global warming, acid rain, ozone depletion, Noise Pollution - Introduction, Level of noise, Sources and adverse effects of noise, Control of noise pollution.
III	Solid Waste Management Municipal waste – Introduction, classification of solid waste, composition and characteristics of solid waste, collection conveyance and disposal of solid waste, recovery of resources. Sanitary land filling, Vermi composting, incineration. Biomedical waste – Generation, collection and disposal.
IV	Non-Conventional energy sources Introduction, renewable sources of energy: solar energy, wind energy, Energy from ocean, energy from biomass, geothermal energy and nuclear energy. Potential of renewable energy resources in India.
V	Social Issues and EIA Sustainable Development-Rainwater harvesting. Public awareness and environmental education. Environmental Legislations in India – Environmental Protection act-1986, Air (Prevention and control of Pollution) act, water (Prevention and control of Pollution) act, wildlife protection act, Forest conservation act.

Text & Reference Books:

1. Agarwal Shikha, Suresh Sahu, Environmental Engineering and Disaster Management, Dhanpat Rai & Co., 2010
2. Brunner R.C., Hazardous Waste Incineration, McGraw Hill Inc. 1989. Textbooks & Suggested Readings:
3. Clark R.S., Marine Pollution, Clanderson Press Oxford (TB)
4. Cunningham, W.P, Cooper, T.H. Gorhani, E & Hepworth, M.T., Environmental Encyclopaedia, Jaico Publishing House, Mumbai, 2001.

MANAGEMENT AND COST ACCOUNTING

Semester
II

Course Type
General

Code
L21C15

Hours
60

Credits
4

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Management and cost accounting professionals
- To orient students in the field of Logistics
- To help Students to understand Management and cost accounting

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of Management and cost accounting in the real-life situation
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
I	Cost Accounting - Concept of Cost Centres - Cost Units - Classification of Cost – Overheads- Simple Cost Sheet – historical and estimated cost sheets. - Tenders and quotations - Contract costing- Activity based costing (ABC). Management Accounting: Meaning and Definition - Nature and Scope - Objectives of Management Accounting - Importance and Limitations - Management Accounting vs Cost Accounting.
II	Marginal Costing and Break even analysis: Marginal Costing and Cost-Volume-Profit (CVP) analysis: meaning, concept - assumptions and practical applications of Break-even analysis – decisions regarding sales mix - make or buy - limiting factor - export decision - plant merger - shut down of a product line- Du Pont Analysis.
III	Budgeting and Budgetary control: Budget and Budgetary Control: Meaning, - establishing a system of Budgetary Control - Preparation of Sales - Production - Cash Budget - Fixed and Flexible budgets, Master budget - Zero based budgeting (ZBB)-Performance budgeting
IV	Analysis of Financial Statements: Analysis and Interpretation of Financial Statements: Objects-importance-Types of financial analysis - Comparative statements - Common size statements, Ratio analysis - Preparation of Balance sheet using ratios Fund flow analysis: Fund flow statement-Preparation-Cash flow statement-cash flow analysis - Analysis of income statements of ports/shipping companies.
V	Standard Costing and Variance Analysis: Standard Costing and Variance Analysis: Meaning of Standard Cost- Relevance of Standard Cost for Variance Analysis – Significance of Variance Analysis – Computation of Standard Costs for Materials, Labour and Overhead Variances- Comparison between Budgeting and Standard Costing – Variance reporting- Responsibility Accounting – Meaning and Objects – types of Responsibility Centres- Management Reporting.

Text & Reference Books:

- MAHESHWARI, S. N., (2013) Cost and Management Accounting. 14th edition
- JAIN, S. P. & NARANG, K. L. (2014) Cost and Management Accounting. 14th Edition, Kalyani publishers: New Delhi.
- TULSIAN, P.C. (2000) Practical Costing. Vikas Publications: New Delhi.
- SAXENA, V.L. & VASHISHT (2014) Advanced Cost & Management Accounting- Problems & Solutions. Prentice Hall of India.
- MAHESHWARI, S. N. (2014) Principles of Management Accounting. Sultan Chand & Sons.
- MURTHY & GURUSAMY (2009) Management Accounting. Tata McGraw Hill: New Delhi.
- REDDY T. S & HARI PRASAD REDDY (2014) Cost & Management Accounting. Margham Publications.

MIS FOR LOGISTICS

Semester
III

Course Type
Domain

Code
L21C17

Hours
60

Credits
4

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become MIS for logistics professionals
- To orient students in the field of Logistics
- To help Students to understand MIS for Logistics

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of MIS for Logistics in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics

Unit	Topics
I	Introduction- IT and management opportunities and challenges-Strategic planning and models - Information management & IT Architecture – IT Architecture & infrastructure, cloud computing and services, Virtualization and Virtual Machines.
II	Database Technology- Data warehouse- Data Mart Technologies- Data and Text mining- Business Intelligence & Analytics, Digital and physical document management. Networks, collaboration & sustainability: Business IT networks & components, communication technologies – Sustainability and Ethical issues - Internal control-Business Control and Auditing.
III	Dissemination of technology information- and strategic planning – Technology choice and evaluation methods – Analysis of alternative technologies – Implementing technology programmes - Intellectual Capital - An introduction to Intellectual Property Right - Patent -Copyrights - Trademarks and other issues.
IV	Functional Area & Compliance systems: Management levels and functional systems Enterprise Systems and applications: Enterprise systems, Enterprise Resource Planning (ERP), Supply Chain Management (SCM), Collaborative Planning, Forecasting, and Replenishment system (CPFR), Customer Relationship Management (CRM). Performance Management: Data visualization, Mashups, and Mobile intelligence, Fleet Management Information System.
V	Business Process and Project Management: - Architecture & IT design, System development, Software & Applications for management (Business software tools), Support system. ERP modules -sales and Marketing, Accounting, Finance, Materials and Production management etc.

Text & Reference Books:

1. Course Material Prepared by LSC
2. KENNETH C. L., JANE P. L., & RAJANISH DASS (2001) Management Information System - Managing the Digital Firm. Pearson Education: New Delhi.
3. RAVI, K., & ANDREW, B. W. Frontiers of Electronic Commerce. Pearson Education: New Delhi.
4. KENNETH, C. L., & JANEP, L. (2001) Essentials of MIS. Prentice Hall India: New Delhi.
5. SADAGOPAN, S. (2003) Management Information System. Prentice Hall India: New Delhi.
6. EFF, O.Z. (2003) Management Information Systems. Vikas Publishing House Pvt. Ltd.: New Delhi.

INTERNATIONAL LOGISTICS MANAGEMENT

Semester
III

Course Type
Domain

Code
L21C18

Hours
45

Credits
3

Version
2021-22

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become International logistics management professionals
- To orient students in the field of Logistics
- To help Students to understand international Logistics management

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of International Logistics management in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics

Unit	Topics
I	International Logistics: Definition, Evolution, Concept, Components, Importance, Objectives; Logistic Subsectors; The work of Logistics; Integrated Logistics; Barrier to Internal Integration.
II	Customer Focused Marketing; International Marketing: Introduction, Definition, Basis for International Trade, Process, Importance; International Marketing Channel: Role of Clearing Agent, Various Modes of Transport, Choice and Issues for Each Mode, Transport Cost etc.
III	Transportation Functionality and Principles; Multimodal Transport: Modal Characteristics; Modal Comparisons; Legal Classifications; International Air Transport; Air Cargo Tariff Structure; Freight: Definition, Rate; Freight Structure and Practice
IV	Containerization: Genesis, Concept, Classification, Benefits and Constraints; Inland Container Depot (ICD): Roles and Functions, CFS, Export Clearance at ICD; CONCOR; ICDs under CONCOR; Chartering: Kinds of Charter, Charter Party, and Arbitration.
V	International commercial documents - International contracts, terms of payments, international insurance, packaging for export, custom clearance and infrastructure: transportation, communication and utilities - Brokerage

Text & Reference Books:

1. Course Material Prepared by LSC
2. International Marketing by Gupta and Varshing, Publisher: Sultan Chand and Sons
3. International logistics by Pierre David, Publisher: Biztantra
4. Logistic Management and World Sea Borne Trade by Multiah Krishnaveni, Publisher: Himalaya Publication
5. Logistic and Supply Chain Management by Donald J. Bowerson, Publisher: Prentice Hall of India

MARKETING MANAGEMENT

Semester
III

Course Type
General

Code
L21C19

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To emphasize the importance of the marketing function in an organization.
- To understand the core concepts right from deciding the development segment till customer satisfaction
- To impart knowledge with respect to latest trends in Marketing, Marketing Mix, Social responsibility and ethical issues in Marketing

LEARNING OUTCOMES:

- Differentiate the consumer and institutional buyer behavior.
- Justify the importance of products, branding and new product
- Understand the importance of Channel of distribution.

Unit	Topics
I	Meaning and concepts of Marketing, Sales Concept, Marketing concept, Social Marketing concepts, Societal Marketing concept, Marketing Mix, 4 Ps of Marketing, Marketing Environment in India.
II	Consumer Behaviour – Factors influencing buying behaviour – consumer buying decision process – Buying motives – influences-Market segmentation – criteria - Bases of segmentation – benefits. Introduction to Marketing research:
III	Product Planning & Development -Definition, Classification of Product, Stages of Product Life Cycle (PLC) and Factors affecting PLC.-Product Development: Meaning, Principle of Product Development, Stages of New Product Development - Pricing-Meaning, Objectives, Price Policies and Strategies and Methods of fixing prices.
IV	Distribution Channel- meaning, Types of Distribution channel- Direct & Indirect. Role of intermediaries and distribution channel management. Channel Management Decisions, Promotion- elements of promotion mix- Advertising, sales promotion, personal selling and sales management. Public and customer relations, direct and online marketing,
V	An overview. Advertising, sales promotion, personal selling and sales management. Public and customer relations, direct and online marketing, multilevel marketing -Marketing and society-Social responsibility and ethical issues in marketing.

Text & Reference Books:

- C.B.Gupta and N. Rajan Nair , Marketing Management, 19th Edition,2020,Sultan Chand & Sons.
- Ramasamy V.S. and Namakumary S, Marketing Management-Global Perspective, Indian context,4th Edition,2009, Macmillan.
- Rajagopal, Marketing Management-Text & Cases,2000,1st Edition, Vikas Publishing House Pvt., Ltd.,
- S. Jayachandran, Marketing Management, 2004Excel Books India.
- Rajan Saxena, Marketing Management, 4th Edition,2009 McGraw Hill Education.

RETAIL LOGISTICS AND E-COMMERCE

Semester III	Course Type Domain	Code L21C120	Hours 45	Credits 3	Version 2023-24
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COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Retail logistics and E-commerce professionals
- To orient students in the field of Logistics
- To help Students to understand Retail logistics and E-commerce

LEARNING OUTCOMES:

- Students will be able to apply the basic knowledge of Retail logistics and E-commerce in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics and E-commerce

Unit	Topics
I	Concept and Scope: Concepts of Retail Logistics and supply chain- Importance of Logistics in these days global Sourcing, Dimension of Logistics: Macro and Micro aspects-Supply chain contours: Backward and forward linkages
II	Logistics and Retail Marketing: Logistics as a Support function of Order Fulfilment, Assembling & Labelling from Multi-storage points and Delivery- Logistics as an interface of Market forecasting, Stock level management and other relevant activities till transportation, preparation for dispatch and outbound documentation and customer facilitation tracking out-bound shipments.
III	Reverse Logistics: Basic of reverse logistics - concept, key activities , coordinating with carriers, route map optimization, collecting pickup and feedback - Types of reverse logistics –Roles and responsibilities -Best practices in reverse logistics
IV	E-Commerce: Introduction to E-commerce logistics including delivery and pickup models and the overall logistic setup – Order Processing – Activities in order processing - Types of order processing - - Procedures for generating plans and schedules through MIS
V	Types of Ecommerce- B2B-B2C and intra business. Retail Ecommerce – Retailing through internet, Direct Online Sales model and its types- Business Models for ecommerce. Electronic Payment system, Electronic CRM Applications. E-Security

Text & Reference Books:

- John Fernie & Leigh Sparks , "Logistics and Retail Management: Emerging Issues and New Challenges in the Retail Supply Chain ", Kogan Page 3rd Edition, 2009
- James B. Ayers & Mary Ann Odegaard , "Retail Supply Chain Management " Taylor & Francis, 2nd edition
- Mr. Gibson G, "Retail Management: Functional Principles & Practices", Jaico Publishing house, 6th Edition, 2003.
- Ray, Supply Chain Management For Retailing, TMH, 2010.
- James B. Ayers, Retail Supply Chain Management, Auerbach Publications, 2007.

LINER LOGISTICS

Semester
III

Course Type
General

Code
L21C21

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to Liner logistics professionals
- To orient students in the field of Logistics
- To help Students to understand Liner logistics

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of LinerLogistics in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics.

Unit	Topics
I	Definitions of liner trades; tramp trades; containerization- Unitization - containerization, liner operations, port organization – Vessel loading and discharging , liner trade routes, The major ports, liner service options - Liner trade – ship types – Tonnages; basic ship layout, types of container ships, Ro-Ro barge carrying vessels, The refrigerated cargo ship conventional (Break bulk) vessels future vessel developments, economy of scale, shipboard handling equipment.
II	Cargoes & cargo equipment – Dangerous goods IMO special goods, cargo handlings other methods of lifting cargo port handling equipment, port terminals; port and terminal management; the role of ships officers - agent. Liner Shipping operations - Management and policy, ship management and operations, independent ship management, insurance, trade of commercial department, accounting, budgeting, freight collection and port disbursements agency duties.
III	Containerization unitization and inter-modalism - Growth in world trade unitization; container dimensions, types of container other container expressions container inventory, owning, leasing meeting the demand for containers tracking the container fleet, container control, FCLs LCLs & ICDS , legal & insurance implications in the container trade.
IV	The Bill of Lading and other Documentation - The Bill of Lading UK bill of lading Act 1855 and UK carriage of goods by sea Act 1992, The use of Bill of Lading in liner trades, Bill of Lading documentary credits, Bill of Lading clauses The printed clauses – The evidence of the contract, other forms of Bill of Lading other liner documents, Intl conventions relating to Bill of Lading, paperless trading
V	The Exchange of goods transfer - Transfer of funds from country to country, methods of payments in International trade who are the merchants, International contracts of sale INCO terms; Legal aspects of the liner trades - The carrier insurance the carrier's liability for the cargo the liabilities of the agent, legal aspects of the Bill of Lading, cargo claims general average (GA), security, ISPS code.

Text & Reference Books:

1. Course Material Prepared by LSC
2. Ship Operation Management, Fujita, N.H. Publisher, 1974.
3. Ship Operation Management, Bertrams Publication, 2010.
4. Handbook of Ship Calculations, Construction and Operation, Charles H. Hughes, Wexford College Press, 2008.
5. Ocean Shipping - Elements of Practical Steamship Operation, Robert Edwards Annin, Thompson Press, 2010.

HUMAN RESOURCES MANAGEMENT

Semester
III

Course Type
General

Code
L21C22

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Human resource management professionals
- To enable the students to know on Contemporary practices in HRM
- To orient students on Human resource management in the field of Logistics

LEARNING OUTCOMES:

- Will be able to apply the basic knowledge of Human resource management in the real life situation
- Will get to know about the contemporary practices of the Industry
- It will enable them to enhance their ability and professional skills with regard to Logistics Industry

Unit	Topics
I	Introduction to HRM -Functions - of HR Manager-Qualities for a HR Professional-Roles & Responsibilities of HR Professionals. Human Resource Planning-Objectives -HR Planning Levels-Process
II	Job Analysis - Introduction-Uses -Methods of collecting Job Analysis Data-Job Description and specification. Job Design-Meaning-Methods. Recruitment and Selection-Meaning-Objectives of Recruitment- Sources of Recruitment-Selection- Steps & Procedure in selection.
III	Employee Training and Development-Meaning-Steps in Training Process -Training Methods -Areas of Training- Training Evaluation Performance Appraisal-Meaning-Uses- Performance Appraisal Process-Performance Appraisal Methods-Pitfalls.
IV	Compensation and Benefits- Meaning– Objectives of Compensation and Employee Benefits Job Evaluation-Meaning- Process of Job Evaluation-Techniques of Job Evaluation - Types of Incentive Plans. Career Planning & Career Development-Meaning-Need for Career Planning & Career Development
V	Occupational Safety and Health-Causes of Safety and Health problems at the work Place- Provisions to prevent Accidents in the work place. Stress and Consequences on Employee Performance. Grievance Handling- Causes of Grievance-Effective Grievance Redressal and - Grievance Redressal Procedures. Disciplinary Action- Objectives - Forms -Disciplinary Procedure-Types of Disciplinary Actions.

Text & Reference Books:

1. Gupta, S. K. (2011). Human Resource Management. First Edition, Kalyani Publishers, New Delhi,
2. Prasad, L. M. (2014). Human Resource Management. Third Edition, Sultan Chand & Sons, New Delhi,
3. Rao, P. S. (2019). Personnel and Human Resource Management. Fifth Edition, Himalaya Publishing House, New Delhi, India.
4. Tripathi, P. C. (2013). Human Resource Development. Fourth Edition, Sultan Chand & Sons, New Delhi,

LIFE SKILL DEVELOPMENT - PRACTICAL

Semester
III

Course Type
General

Code
L21C23

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Aviation & Air Cargo Professionals
- To Introduce Students with key Skills that are required to be Employable in the Corporate World in general and Aviation and Air Cargo Industry in specific

LEARNING OUTCOMES:

- Students will be able to apply these skills while transition from Campus to Corporate and acquire the much-needed employability skills

Unit	Topics
I II	Soft Skills- What are Soft Skills, The Importance of Soft Skills during transition from Campus to Corporate Soft Skills- Time Management, Stress Management, Grooming Skills, Listening Skills, Creative Thinking, Telephone Etiquette, Social Media Etiquette
III	Communication Skills- Non-Verbal- Types of Non-Verbal Communication, Essentials, Barriers Verbal- Types of Non-Verbal Communication, Essentials, Barriers
IV	Interview Handling & Preparation Types of Interviews- Face to Face, Videoconferencing, Skype, Telephonic Identifying job openings Applying for a job Preparing Cover letters Preparing a CV/Resume and Effective Profiling Group Discussions Behavioural Event Interviews
V	Leadership Skills Leadership Styles Decision Making Intrapersonal & Interpersonal Skills Problem Solving Skills Negotiation Skills Critical Thinking

Text & Reference Books:

- Sizzling Soft Skills for Spectacular Success- P Ameer Ali- Publisher: Notion Press; First edition (2017)
- Soft Skills: An Integrated Approach to Maximise Personality-Gajendra Singh Chauhan, Sangeeta Sharma- Wiley (2015)
- Master of Business Etiquette: The Ultimate Guide to Corporate Etiquette And Soft Skills- Cyrus M Gonda- Embassy Books; First edition (2016)
- How to Get That Job (A Guide for the Journey beyond Academics)- Jogesh Jain- Notion Press; First edition (2017)
- The 21 Irrefutable Law of Leadership-John C. Maxwell- Maanu Graphics Publishers (2013)

WORD & PRESENTATION TOOLS - PRACTICAL

Semester
III

Course Type
General

Code
L21C24

Hour
45

Credits
3

Version
2031-24

COURSE OBJECTIVES:

- To introduce the student to the Word & Presentation tools and its applications and thereby empowering him to utilize e-resources for upgrading their knowledge base.
- To introduce the students with some basic tools and applications which will enable them in e-communicating effectively and analyse data for decision making using data of different kinds.

LEARNING OUTCOMES:

- Students will be able to apply the Word & Presentation tools in real-life application.
- Enable students to enhance their ability and professional skills in the Computer Application in MS-Word & Presentation

Unit	Topics
I	Windows 2000- working with windows – moving formation within windows arranging Icons Saving Window settings. MS Office Basics – Creating document – entering text-Selecting text giving instructions- Using tool bars- Menu commands- Keyboards shortcuts- Saving files Opening documents – Manipulating Windows – simple Editing- Printing Files.
II	Word Basics – Using Auto text – Using Auto Correct Word editing technique finding and replacing text – Checking spelling – using templates- formatting – Formatting with styles creating tables.
III	Power Point basics- Working in outline view- using a design template- Merging presentations in Slider sorter view applying templates – Adding graphs- adding organization Charts.
IV	MS-Word-Practical Type the text, check spelling and grammar bullets and numbering list items, align the text to left, right justify and centre. -Prepare a job application letter enclosing your Bio-Data-Perform Mail Merger Operation and Preparing labels. -Prepare the document in newspaper column layout.
V	MS POWER POINT-Practical Prepare a PowerPoint presentation with at least three slides for department Inaugural Function-Draw an organization chart with minimum three hierarchical levels-Design an advertisement campaign with minimum three slides-Insert an excel chart into a power point slide.

Text & Reference Books:

2. Office 2000 Complete Reference by Stepher L. Nelson.
3. PC Software for window made simplex by R.K Taxali – Tata McGraw Hill Publishers Pvt. Ltd.,

PORT TERMINAL LOGISTICS

Semester
IV

Course Type
General

Code
L21C25

Hours
60

Credits
4

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to Port terminals logistics professionals
- To orient students in the field of Logistics
- To help Students to understand Port terminals logistics

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of Port terminals Logistics in the real-life situation
- This subject will enable them to enhance their ability and professional skills in Logistics

Unit	Topics
I	Difference between Major and Minor Ports - Ports in India - Natural Harbours - New Ports to be developed in India - Major Ports of the World - Largest Port in the world - Port Officials and their roles - Role of Ports - Who are Port users
II	Container Terminals - Privatisation of Terminals - Reason for Privatisation - Major Terminal Operators in India - Terminal Operators of the world - Privatisation the need of the hour - Agreement between and existing Port Terminal and the new operator
III	Import Cycle - Export Cycle - Positions and Places in a Terminal - Facilities in a Terminal - Container Monitoring and stacking - CFS inside a Terminal - Reasons for Congestion of a terminal - de-congesting the terminal - Window system in a terminal.
IV	Major Port Trust Act - Port as a custodian of the cargo - Transit sheds - Cargo receivers - Wharfs and Berths - Various berths in a Port - Meaning of Berth Restrictions - Port equipment's and damage - Extra services - Berth reservation schemes
V	Port Tariff - Pilots and their duties - Tugs and its usage - Night navigations - Light Dues - Tariff Authorities of Major Port - Revision of rates - Port Trustees - Safety Procedures - Introduction of ISPS - Damage to Port property by ships - Compensation and confiscation of cargo to adjust dues

Text & Reference Books:

1. Course Material Prepared by LSC
2. Major Port Trust Act – Government of India
3. Port Industry Statistics, American Association of Port Authorities
4. AP MOLLOR Guide book on Terminal
5. DUBAI PORT AUTHORITIES Manual

COMMERCIAL GEOGRAPHY

Semester
IV

Course Type
General

Code
L21C26

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To acquaint the students about dynamic aspects of Commercial Geography.
- To acquaint the students about dynamic nature of Industrial field in India.
- To make the students of commerce aware about the relationship between the geographical factors and economic activities

LEARNING OUTCOMES:

- Acquiring Knowledge of Physical Geography
- Ability of Problem Analysis:
- Knowing the bases of commercial and marketing activities related to the earth.

Unit	Topics
I	<p>Introduction to Geography</p> <p>Definition, nature and scope, relation with other branches. -Meaning of environment, physical or natural environment and cultural or manmade environment, -Commercial activities: Primary, secondary, tertiary, and quaternary activities, -Factors affecting commercial activities of man, Physical or natural factors: Location, climate, physiography.</p>
II	<p>Physical Factors</p> <p>Location of India in the World map, longitudes, latitudes and equator, Size of country including land mass, List of States their capitals, important cities and towns / Union Territories, -India's population size & distribution-India and the world, its neighbours-Exercise: Oxford school atlas Maps – India Political Map, Population Map, Locating states / cities on maps.</p>
III	<p>Transportation systems in India</p> <p>Inland & Overseas. Roadways -National Highway including Golden Quadrilateral, E-W corridor, N-S corridor, NH numbers. Railway junctions & connections. Airports international & domestic airport locations. Seaports- Industrial belts in India, Industrial Estates, SEZS, Export Processing zones, Textile zones, Leather zones, chemical zones, etc. {Oxford School Atlas provides for following maps with detailing: India – Road & inland waterways (pg. 51) / India – Railways (pg. 52) / India – Air and sea routes (pg. 53) -Exercise: Locating NHs, Junctions, Airports, Seaports on Maps}</p>
IV	<p>Introduction to World Time Zone</p> <p>Time Zones – Greenwich Mean Time-Calculation of time zone – by using longitude-Local Time-Standard Time-International Date Line -Exercise: Various exercises can be prepared around time zones including calculation / use of maps, Local time of Flight in origin country to Local time of flight in destination country etc. {Oxford School Atlas provides for following map: World Time Zone (pg. 122)}.</p>
V	<p>IATA Airport Codes & World Geography</p> <p>Introduction to IATA Airport Codes, its history importance and use in the air transportation business.- Continents of the world and the counties in these continents and regions-Capital of the countries, important and commercial cities in the world, -Currencies of the countries-Important commercial Airports, Travel time for shipments/ cargo to various countries from India and vice versa. -Trade lines to the world from India-Types of trade between the countries- {Oxford Atlas – World Political & Physical Map}</p>

Text Books:

- Course material from LSC
- NCERT Class 6 / 9 / 10 Geography
- Oxford School Atlas – Latest Edition should be used.

LOGISTICS NETWORK DESIGN

Semester
IV

Course Type
Domain

Code
L21C27

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Logistics network design professionals
- To orient students in the field of design and configuration of the logistics network.
- To help Students to understand Logistics network design

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of design and configuration of the logistics network. in the real-life situation
- This subject will enable them to enhance their ability and professional skills in design and configuration of the logistics network.

Unit	Topics
I	Introduction - Components of Logistics network: Facilities - Plants/Vendors - Ports - - Warehouse Retailers/ Distribution Centres - Customers - Raw materials and finished products that flow between the facilities. The three models of Network Design: 1. Logistics network design with differentiated delivery lead time 2. Logistics network design with price discount 3. Consolidated logistics network design using consolidation hubs
II	Key issues of Network design: Pick the optimal number, location, and size of warehouses and/or plants - Determining optimal sourcing strategy - Which plant/vendor should produce which product? - Determining best distribution channels - Which warehouses should service which customers?
III	Data required for Network Design: A listing of all products - Location of customers, stocking points and sources - Demand for each product by customer location - Transportation rates -Warehousing costs - Shipment sizes by product - Order patterns by frequency, size, and season, content - Order processing costs - Customer service goals
IV	Determining best distribution channels - Which warehouses should service which retailers - The objective is to design or reconfigure the logistics network so as to minimize annual system-wide costs, including Production/ purchasing costs Inventory carrying costs, and facility costs (handling and fixed costs) Transportation costs. Find a minimal-annual-cost configuration of the distribution network that satisfies product demands at specified customer service levels.
V	Data Collection -information on :a) Location of customers, stocking points and sources—location theory- b) A listing of all products - c) Demand for each product by customer location—forecast technique – d)Transportation Cost - Transportation rates by mode—information system, like rating engine - e)Mileage estimation— f) Warehousing costs (handling and fixed)—inventory management g) Service level requirement—probabilistic technique h) Shipment sizes by product 2. Data Aggregation - The impact of aggregate demand - a heuristic to aggregate data. 3. Data Validation and Model 4. Optimization.

Text & Reference Books:

- Course Material Prepared by LSC
- 2 Supply Chain Management: Logistics Network Design by Donglei Du, Faculty of Business Administration, University of New Brunswick, NB Canada Fredericton.
- Joseph D. Patton, Logistics Technology and Management, Soloman, 1986.
- Philip T. Frohne, Quantitative Measurements for Logistics, McGraw Hill, 2007

LOGISTICS 4.0

Semester
IV

Course Type
Domain

Code
L21C28

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to understand the revolution in Logistics Industry
- To orient students in the field of Logistics
- To help students to learn the recent technology changes and challenges in Logistics Industry

LEARNING OUTCOMES:

- Students will be able to apply the basic knowledge of technology and ITC development
- This subject will enable them to enhance their ability and professional skills in Logistic

Unit	Topics
I	<p>First Three Industrial Revolutions: Industry 1.0–3.0</p> <p>Introduction to Industry 4.0</p> <p>Digitalisation and the Connected Economy</p> <p>Drivers, Enablers, Compelling Forces and Challenges for Industry 4.0</p> <p>The Journey so far: Developments in USA, Europe, China, and other countries</p> <p>Comparison of Industry 4.0 Factory and Today's SMART Factory</p> <p>Trends of Big Data (Evolution) along with the Maturity framework and Predictive Analytics for Smart Business Transformation</p>
II	<p>Evolution of Logistics</p> <p>Introduction to Logistics 4.0</p> <p>Digital Transformation of Supply Chain Management, Advanced robots, Augmented Reality, Digital Twins</p> <p>Simulation — Network simulation and optimization, The Industrial Internet of Things, Cloud Computing</p> <p>Cyber Security, Big data and analytics – Data Warehouse v/s Data Mart, Digitalization of Logistics and Challenges in Logistics 4.0</p>
III	<p>Inventory Control Systems (ICS)-MRP-1-MRP-2-ERP-1 3.3 The Internet of Things</p> <p>Challenges of The Internet of Things, Changes in Business Models and Production Processes, Telematics</p> <p>Technology – Application in Logistics, Technology in Procurement 4.0 (Consignor Inventory Model)</p> <p>Technology in Inventory Management 4.0 (Impact of Digital Technologies on the Inventory Management Techniques)</p>
IV	<p>Technology in Logistics and Warehousing 4.0</p> <p>Logistics and Supply Chain Analytics, Business issues in Logistics 4.0, Opportunities and Challenges</p>
V	<p>Future of Works and Skills for Workers in the Logistics 4.0 Era</p> <p>Advantages and disadvantages of Logistics 4.0, Strategies for competing in a Logistics 4.0 world</p>

INTRODUCTION TO AVIATION INDUSTRY & AIRPORT OPERATIONS

Semester
IV

Course Type
General

Code
L21C29A

Hours
45

Credits
3

Version
2023-24

Specialisation Module – Group A - Course I

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Aviation Professionals
- To help Students to understand Fundamentals of Aviation Industry & Airport Operations

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of Aviation and Airport Operations in the real-life situation
- This subject will enable them to enhance their ability and professional skills in the Aviation Industry & Airport Operations

Unit	Topics
I	History of Aviation & Key Organizations in the Aviation Industry History of Aviation through the ages-Origins in Greek Mythology- The Wright Brothers- Aviation in the era of World War 1 & 2- Commercial Aircraft Era- Modern Jetliners Key Organizations in the Aviation Industry- ICAO- International Civil Aviation Organization, 2. IATA - International Air Transport Association MoCA - Ministry of Civil Aviation, 4. DGCA - Directorate General of Civil Aviation AAI- Airports Authority of India, 6.AAICLAS- Airports Authority of India Cargo Logistics Allied Services AERA- Airport Economic Regulatory Authority 8. BCAS- Bureau of Civil Aviation Security Freedoms of the Air & the Airline Business
II	Freedoms of the Air- Overview- Nine Freedoms of the Air Airline Business- Business Models- Legacy, Low Cost, Charter, Regional, Cargo & Hybrid Airplane Manufacturers- Primary Manufacturers- Boeing, Airbus and others Narrow Body v/s Wide Body- Definition & Features The Airline Industry as a Business- Key Functions in the Airline Business Airline Codeshares & Alliances- a. Concept, b. Key Benefits, c. Major Airline Alliances vi Airline Cabin Classes- First, Business, Premium Economy & Economy World Geography & Airline Communication Protocol Traffic Conference Areas, Time Zones, Codes- Country, City, Carrier, Currency, Aircraft Registration, Airline Phonetics Airport Operations
III	Key Stakeholders, Airport Types, Airport Revenue Sources, Airport Functional Layout - Landside, Governmental
IV	Agencies at Airport, Baggage Handling, Airside Operations Airport as an Operational System- Infrastructure & Facilities, Airport Operations Control Centre (AOCC), Airport Collaborative Decision Making (ACDM), Key Information Technology Systems at Airports Concessionaire Activities at Airports (terminology restricted to Indian scenario)
V	Non-Aero Activities- Retail, Food & Beverage, Real Estate, Car Rentals Car Parking, Currency & Banking, Advertising

	Maintenance Repair & Overhaul (MRO)- Types of MRO Models
	Ground Handling
i	Concept, ii Self-Handling V/s Outsourced Handling
iii	IATA Standard Ground Handling Agreement

Text & Reference Books:

1 Course Material Prepared by LSC

2. Airport Operations- Norman Ashford, Pierre Coutu, John Beasley- McGraw-Hill Education; 3rd edition (16 December 2012)
3. Principles of Airport Economics- P.S. Sengupta- Excel Books (1 December 2007)
4. Managing Airports- An International Perspective- Anne Graham- Routledge; 5 edition (June 9, 2018)
5. IATA Airport Handling Manual- 40th edition- Year of Publication- 2020
6. IATA Ground Operations Manual- 9th edition- Year of Publication- 2020

FIRST MILE OPERATIONS



Specialisation Module – Group B - Course I

COURSE OBJECTIVES:

- To understand the First Mile operational processes in-commerce logistics.

LEARNING OUTCOMES:

THE STUDENTS WILL LEARN:

- Basics of First Mile operations.
- Shipment pickup operations.
- Different types of shipment processing operations at Processing Centers.
- Layout of a Processing Centre.
- Key challenges in First Mile operations and First Mile metrics.

Unit	Topics
I	Role of First Mile in E-Commerce Logistics Difference between First Mile, Line Haul and Last Mile operations. -First Mile Operations - Overview. -Why isFirst Mile operations important in e-commerce logistics-First Mile process flow.
II	Shipment Pickup Operations Shipment pickup process. -Pickup operations staff - roles and responsibilities. -Pickup coordination. -Safety and security of shipments during pickup-Pickup documentation.
III	Shipment Processing Operations Primary and secondary processing. -Bagging operations. -Manual processing operations-Automated processing operations
IV	Layout of A Processing Centre Inbound operations-Processing Operations-Outbound Operations-Safety and security-Processing Centre staff - roles and responsibilities
V	First Mile Analytics and Metrics Productivity-Pickup operations metrics-Processing operations metrics-First Mile dashboard. Tools and Applications Pickup tools and applications-Processing tools and applications-Exceptions in First Mile and impact on operations-Tools and communication to resolve exceptions.

Text & Reference Books:

1. Course Material Prepared by LSC

MULTI-MODAL TRANSPORTATION



Specialisation Module – Group C - Course I

COURSE OBJECTIVES:

- Introduce Multi-modal and Intermodal Transport concepts.
- Explain Regulatory framework and policies for Multi-modal transportation.
- Describe Indian Railways’ initiatives to promote Multimodal Logistics in India.
- Overview evolution of infrastructure facilitating Multi-modal Logistics in India.

LEARNING OUTCOMES:

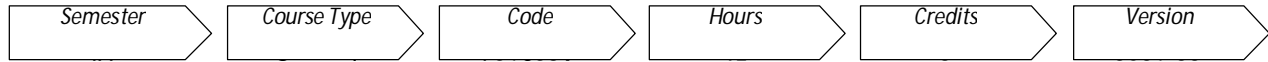
- After completing this Course, the student will have the following learnings:
- The importance and role played by Multi-modal transport in the efficient and cost-effective movement of cargo
 - Types of multi-modal movement and the role of containerisation for security and speed
 - The provisions and procedures for Exim trade and INCOTERMS
 - Indian Government’s policies and vision R for development of seamless multi-modal transport.

Unit	Topics
I	Transportation Systems & Multi modal Transport –Concept of Multi modal & Intermodal Transport – introduction to Multi modal transport, the difference between Multi modal and Intermodal transport-Type of transport Modes – detail and characteristics of air, road, rail, water, pipelines, package carriers-Need, Aim and Key Issues of Multi modal transport.
II	How to organise Multi modal transport-Role of Containerisation in MMT- history, utility, types, ease of handling, cost saving-Types of Multi modal transport – combined container transport, rolling Road & forwarding of trailers, RORO & LASH transportation-National Multi modal Transport Committee (NMTC) and Logistics Policy of India – key features and importance
III	Multi modal Transportation Act & Procedures-MMTG Act of 1993-Custom procedures for Export & Import - Bill Of Lading – Hague Rules, Visby Rules, Hamburg Rules, Voyage by Sea-INCOTERMS – meaning, explanation, list, and types
IV	MMT and Indian Railways-PFT Policy – maintenance of rolling stock, cargo handling, customs, etc-Warehousing Policy – stuffing, de-stuffing, stacking, use of MHE, etc-Layout and design of Multi modal Logistics parks
V	Multi modal transport & Practice Today-India’s growing conflict between Trade & transport – issues, policy, problems & pricing-Integrated Transport – Bharatmala, Sagarmala, IWT, DFC, the concept of ICP (International Check Posts-Scenario in India and neighbouring countries with a case study

TEXT BOOKS

1 Course Material Prepared by LSC

INTRODUCTION TO AIR CARGO INDUSTRY



Specialisation Module – Group A - Course II

COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Air Cargo Professionals
- To help Students to understand Fundamentals of Air Cargo Industry

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of Air Cargo Industry in the real-life situation
- This subject will enable them to enhance their ability and professional skills in the Air Cargo Industry

Unit	Topics
I	History of Air Cargo & Multi Modal forms of Transport a. History of Air Cargo & Mail, Air Freight, Air Express, Overnight Air Express & Air Mail b. Other Multi Modal forms of Transport- Rail, Sea & Surface Transport- Key Concepts Key Organizations Facilitating Air Cargo
II	International Air Transport Association (IATA), International Civil Aviation Organization (ICAO), International Federation of Freight Forwarders Association (FIATA), The International Air Cargo Association (TIACA) Air Cargo Business Models Freighters, Charters, Integrators, Combination Carriers, Systems), Couriers, E-commerce, Postal mail
III	a. Key Concepts- Brief Introduction to the Business Models b. Impact of various Business Models in relation to geography, size and scope Key Stakeholders & Key Terminologies Key Stakeholders- Airports, Airlines (Direct), Airlines through General Sales Agents (GSA) or General Sales & Service Agents (GSSA), Shippers, Freight Forwarders, Custom Brokers, Consolidators, Trucking
IV	b. Key Terminologies & Abbreviations Training & Development in Air Cargo Industry a. Importance of Training in the Aviation & Cargo Industry b. Areas of Training in the Air Cargo Industry
V	c. Key Organizations facilitating Training & Development in the Aviation & Air Cargo Industry.

Text & Reference Books:

1. Course Material Prepared by LSC
2. Air Cargo Management- Air Freight and The Global Supply Chain- Michael Sales- Routledge (2016)
3. Air Cargo and Logistics - Classics and Contemporary practice by Rico Merket and Jackie Walters- Academic Publishers (01 June, 2019)
4. Moving Boxes by Air - The Economics of International Air Cargo by Peter S. Morrell and Thomas Klein - Routledge; edition (19 October 2018)

LAST MILE OPERATIONS



Specialisation Module – Group B - Course II

COURSE OBJECTIVES:

- To understand Last Mile Operations in E-Commerce

COURSE OUTCOME:

The students will be able to:

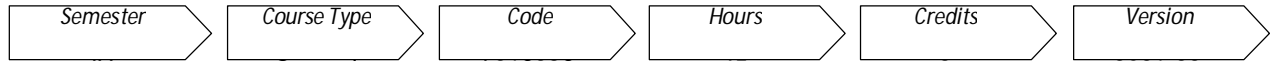
- Understand the basics concept of Last mile logistics in E-Commerce
- Understand the processes involved in Last mile logistics
- Understand various metrics and customer services processes to be followed in last mile logistics
- Explain the prospects of last mile logistics.

Unit	Topics
I	Introduction What is Last Mile in Ecommerce? Importance of Last Mile in the supply chain Last Mile Delivery challenges for ecommerce Trends in Last Mile delivery Route optimization in Last Mile operations
II	Last Mile Processes Delivery Process & its challenges Reverse pickup process in Last mile operations Challenges in Reverse Pickup process Tools and applications in Last Mile operations Considerations for effective last mile logistics strategy
III	Metrics 3.1 Metrics to measure in last file 3.2 Automation and technology driving metrics.
IV	Customer service Customer service and its importance Good and bad customer service (Dos and Don'ts of customer service) 4.3 Relationship between metrics and customer service. Prospects of Last Mile Logistics- 5Hrs
V	Innovations in Last Mile Logistics Technology Trends in Last Mile Delivery Last Mile Delivery Market Future Prospects

Text & Reference Books:

1. Course Material Prepared by LSC

COMMERCIAL ASPECTS OF TRANSPORTATION



Specialisation Module – Group C - Course II

COURSE OBJECTIVES:

- To highlight vital part of commercial considerations in providing transport services for Freight and Passengers movement.
- To Understand the importance and need for marketing and strategies involved.
- To Describe the principles in fixing Railway Freight and Rates.
- To evaluate Competition in rates of Road and Rail mode of transportation.

LEARNING OUTCOMES:

- Develop a clear perspective of various commercial aspects in transportation
- Distinguish between the Operational feasibility of a work and its commercial viability
- Know the issues involved in booking and reservation of passengers,
- Know the various types of costs involved and understand the concept of cost-of-service vs value of service

Unit	Topics
I	Commercial Aspects in Transportation – A Perspective-Role and importance of Commercial Aspects, relative strengths of rail vs road-Concept of commercial viability vis a vis operational feasibility-Issues/ functions included in the commercial aspects, organisational set up to handle these
II	Commercial Aspects involving Passenger transportation –Passenger Services on Indian Railways; Booking and Reservation of passengers, Various class of services, types of tickets, concessions etc-Passengers Services in Road Sector, A state subject- differences from State to state-Supplementary and related services such luggage, parcel, refunds, catering etc.
III	Commercial Aspects involving Goods / Freight transportation–Different components of freight traffic, Booking and delivery of freight traffic on Railways, Demurrage and Wharfage, sidings-Booking and delivery of goods in roadways, agencies involved and their role-Claims and liabilities, Organisational set-up and procedure for Claims' compensation,
IV	Pricing of Transport-Basic consideration in pricing; Different type of costs involved in computing price, Relativity index of passenger fares in Indian Railways; surcharges and discounts-Principles of classification and Rate fixation and routing of traffic-Cost of service vs value of service, Cross subsidisation etc
V	Marketing Strategies for Commercial growth –Need for marketing, Rail vs Road: Complementary and not competitive role, High profit yielding commodities-Incentive schemes, IT-enabled user-friendly solutions for Booking, payment, tracking consignments and trains, Passenger movement – PRS, etc-Future trends: technology-induced improvements in various aspects of commercial working

Textbooks

1. Course Material Prepared by LSC

DATA ANALYSIS USING SPREAD SHEET

Semester
IV

Course Type
General

Code
L21C23

Hours
45

Credits
3

Version
2023-24

COURSE OBJECTIVES:

- This course is designed with the view of making the students skillful at
- Performing data analysis using spreadsheet (MS Excel)
- Creating pivot tables from a range with rows and columns in Excel.

LEARNING OUTCOMES:

- Support the E communication effectively with help of SpreadSheet
- Summarize data with data analysis, Pivot Tables, and PivotCharts.
- Work with charts and the drawing tools.

Unit	Topics
I	Introduction to Excel, About Excel & Microsoft, Uses of Excel, Excel software, Spreadsheet windowpane, Title Bar, Menu Bar, Standard Toolbar, Formatting Toolbar, the Ribbon, File Tab and Backstage View, Formula Bar, Workbook Window, Status Bar, Task Pane, Workbook & sheets Columns & Rows
II	Selecting Columns & Rows, Changing Column Width & Row Height, Auto fitting Columns & Rows, Hiding /Unhiding Columns & Rows, Inserting & Deleting Columns & Rows, Cell, Address of a cell, Components of a cell – Format, value, formula, Use of paste and paste special Functionality Using Ranges. Using Ranges, Selecting Ranges, Entering Information into a Range, Using AutoFill
III	Creating Formulas, Using Formulas, Formula Functions – Sum, Average, if, Count, max, min, Proper, Upper, Lower, Using AutoSum, Advance Formulas Concatenate, Lookup, Lookup, Match, Count if, Text, moving between Spreadsheets, Selecting Multiple Spreadsheets, Inserting and Deleting Spreadsheets Renaming Spreadsheets, Splitting the Screen, Freezing Panes, Copying and Pasting Data between Spreadsheets, Hiding, Protecting worksheets
IV	Creating Charts, Different types of chart, Formatting Chart Objects, Changing the Chart Type, Showing and Hiding the Legend, Showing and Hiding the Data Table Data Analysis Sorting, Filter, Text to Column, Data Validation
V	PivotTables, Creating PivotTables, manipulating a PivotTable, Using the PivotTable Toolbar, Changing Data Field, Properties, Displaying a PivotChart, Setting PivotTable Options, Adding Subtotals to PivotTables Spreadsheet Tools, Making Macros, Recording Macros, Running Macros, Deleting Macros

Text & Reference Books:

- Microsoft Excel 2016: Comprehensive, Freund, Starks, and Schmieder, Cengage Learning, 2017, ISBN: 9781305870727.

WAREHOUSE AUTOMATION



COURSE OBJECTIVES:

- To familiarize the student with the basic concept of the most common automations from light to heavy
- To familiarize the student with the basic concept of the supply chain including Logistics, warehousing, IT as well as distribution and planning.

LEARNING OUTCOMES:

- The students will be able to:
- Recognize the Knowledge of the common and latest automation solutions for ware-housing
 - Understand and Recognize the costs and pre-requisites for each automation solution and the expected benefits of the different solutions
 - Able to complete the analysis and to select the most appropriate solution for ware- house automation

Unit	Topics
I	Overview of the Traditional Warehouse Operations - Warehouse Automation Systems: Over- view, Applications, Costs, Benefits, ROI – Receiving Automation: PalletInverter - Palletizers
II	Storage and Retrieval Automation : Vertical and Horizontal Carrousel - Vertical Lift Module - Orbital Shuttle Systems - AS/RS Mini Load - AS/RS Unit Load - Garments on Hangers
III	Material Flow Automation - Conveyors - Lifts - Automated Guided Vehicles - Monorail
IV	Picking/Outbound Automation : Pick / Put To Light - A Frame - Automated Order Selection – Pick-N-Go - Outbound Sorters - Automatic Truck Loading .
V	Automating Data Collection : RFID - Automated Measurements Systems - Unique Solution Providers: Kiva Robot - Auto Store - Additional Automation Around the Warehouse Building Management System: Weight scales - Delivery Drones - Delivery Robots.

Text & Reference Books:

1. Course Material Prepared by LSC
2. Industrial Automation and Robotics: A.K.Gupta and S K Arora
3. Advanced Industrial Automation and its Application: Ravindra Sharma

Industrial Control Electronics Devices, Systems, & Applications 3D Edition Author: Terry Bartler

Publisher: Delmar

BEST PRACTICES FOR TRANSPORTATION



COURSE OBJECTIVES:

- To familiarize the student with the information about transportation considerations for the import, export and domestic trade processes.

LEARNING OUTCOMES:

The students will be able to assess transportation operations towards increased logistics efficiency while discovering opportunities for saving time, expense and hassle.

Unit	Topics
I	Transportation Strategy Considerations: An Overview of the Import Process - An Overview of the Export Process - Bonding Issues for Exporters - Negotiating Rates - Insurance and Liability - E-Logistics and the Internet - UN Module regulation - introduction to carriage of dangerous goods.
II	Import And Export Documentation Requirements: An overview of commercial documents - Commercial Invoice - Consular Invoice - Packing List - Certificates of Origin - Permits of Export and Import of Goods - Cargo Control Documents - Other Commercial Documents - Distribution of Commercial Documents
III	Airfreight: Introduction - Documents - The Air Waybill (AWB) - Moving Goods by Air - Export Packaging - Air Cargo Handling, Delivery - The Role of IATA - Shipping Dangerous Goods by Air - Glossary of Airfreight Terminology. Oceanfreight: Documents - Containers - FCL/LCL - Handling the LCL - Handling the Ocean Freight Shipment - Shipping Dangerous Goods by Ocean
IV	Road Transportation: Introduction to Road Transportation - Trucking/Highway Regulations – Documents - The Truck Bill of Lading - Standard Trucks - Specialized Trucks - Lorry haul trucks - Heavy load haulage multi axle multi truck - Service Options for Truck Transport - Shipping Dangerous Goods by Truck - LTL/FTL Shipments - Trucking Rates and Tariffs A Checklist of Trucking Considerations - Border Security Issues. Rail Transportation: Introduction - Shipping Goods by Rail The Railway Bill of Lading - Rail Equipment - Moving Dangerous Goods by Rail - Over Dimensional and Heavy Lift Cargo by Rail.
V	Intermodal Transport: Introduction - Shipping goods intermodally - Documentary Considerations - Other Considerations - Telematics - Routing – GPRS - Monitoring fuel economy - Driver practice – Indicators - Future prospectus growth of road - .Automation - INCOTERMS 2000 - Transfer of Liability - Incorporating INCOTERMS into the Contract of Sale - INCOTERMS Structures - Mode of Transport Relate to INCOTERMS. Advantages of multi module transport document.

Text & Reference Books:

- Course Material Prepared by LSC
- "Self-Compliance Strategies and the Administrative Monetary Penalty System", a Manual for Importers and Exporters : PF Collins Customs Broker Ltd., November 2002
- OAG® Air Cargo Guide TM May 1997, published by OAG, a division of Reed Elsevier Inc., OAG, 2000 Clearwater Drive, Oak Brook Illinois.
- International Air Transport Association (IATA) Dangerous Goods Regulations

INLAND WATERWAYS & COASTAL SHIPPING



COURSE OBJECTIVES:

- To familiarize the student with the basic concept of Inland water ways and coastal shipping, their importance and future shipping development of Indian water ways

LEARNING OUTCOMES:

- Recognize the impact of Inland water ways and coastal shipping
- Recognize the importance and future development of Indian water ways.

Unit	Topics
I	Basics of shipping- Introduction for shipping - Types of ship- sizes of ship – Basic terminology of ships- Sea transport and its importance- Roll of ports in sea transport - Coastal shipping and its importance.
II	Inland waterways: Introduction –Scope –Sources (lakes, Rivers, Canals, Back water, creeks, water courses inlets and bays)-Working principles -Impact - Inland waterways in India: locations
III	Roll and importance of inland waterways: Infrastructure facility required - Roll and importance of inland water ways in transportation- Transportation through creeks
IV	Inland waterways : Road connectivity – Availability of cargo (scarcity)-Navigation (night navigation)- Draft restriction
V	Inland waterways in other countries: Bangladesh – China - Vietnam - Europe Inland waterways in India : Network in India –upcoming inland waterways – Inland waterways authority – Government policies on inland waterways – National waterways Act

Text & Reference Books:

1. Course Material Prepared by LSC
2. Inland Waterway Transport: Challenges and prospects (Routledge Studies in Transport Analysis) Hardcover – Import, 12 Jul 2016 by Bart Wiegman (Editor), Rob Konings (Editor)
3. Inland waterways Transportation (IWT) in India – Machiraju presentation Pvt Ltd

APPRENTICESHIP – I

<i>Semester</i>	<i>Course Type</i>	<i>Code</i>	<i>Hours</i>	<i>Credits</i>	<i>Version</i>
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The students would be onboarded in Logistics Processes of companies by the Logistics Sector Skill Council for Apprenticeship Training. The duration of Apprenticeship Training is 6 months. During Apprenticeship Training students would be assigned on-the-job-training by companies. Being a legal engagement, students would receive a monthly stipend during Apprenticeship Training as per the existing norms.

On completion of the Apprenticeship Training, students shall submit Apprenticeship Report in the form of Work Diary to the Collaborating Institutions. The Report would be evaluated and Viva conducted by the Collaborating Institution.

COURIER, EXPRESS & PARCEL SERVICES



COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become Courier and Express Professionals
- To orient students in the field of Courier and Express
- To help Students to understand Courier and Express

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of Courier and Express in the real-life situation
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
I	Types of consignments for shipment - Information on labels and handling instructions - consignee locations- consignments and destinations- consignment shipment operations – (loading, handling, scheduling and documentation) - Special instructions for safe handling of fragile consignments
II	Customer declarations – verification of customer declarations and consignment package - Clarification procedure in case of discrepancies noticed - Generation of bill of lading / shipping bill for export consignments – Coordination for import/export consignments clearance
III	Hub-Spoke Operations & Inbound and Outbound activities: Introduction – Hub spoke activities inbound and outbound activities. Types of consignments coming in the hub-spoke - layout of the hub-spoke - Areas to receive, sort and inspect - Documentation activities in hub-spoke - Inspection process of inbound sorted and outbound consignments
IV	Tracking and tracing; AWB –essential time of arrival delivery - Last mile delivery – LMD -First mile delivery
V	Customer satisfaction- quality, delivery time, costs (shortest cost, loss prevention) - Weighment rate, cube scan –diversions/LBW/Volumetric density of cargo

Text & Reference Books:

1. Course Material Prepared by LSC
2. Logistics and Supply chain management – Martin Christopher
3. Basics of Distribution Management; A Logistical Approach Prentice HALL of India - Kapoor Sathish
4. Ware house management and Inventory control - Vikas Publication House

INPLANT LOGISTICS



COURSE OBJECTIVES:

- To develop competencies and knowledge of students to become In-plant logistics professionals
- To orient students in the field of Logistics
- To help Students to understand In-plant logistics operations

LEARNING OUTCOMES:

- Students will be able to apply the Basic knowledge of In-plant operations in the real life situation
- This subject will enable them to enhance their ability and professional skills

Unit	Topics
I	Introduction to Logistics in a manufacturing setup - Manufacturing process - physical flow - Assembly line – OTIF (on time in full) - Basic activities of in-plant logistics : Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities - process of coordination with assembly line
II	Job shop- work allocation - Production scheduling – selection of products/ models/parts/ Team table/Time table - Material flow – production line –feeding just in time inventory, Vendor management -
III	Inbound logistics- inventory management, importance, Value addition, stock counts, audits
IV	Out bound logistics – Finished goods (FG)- tooling, binding ,creating, input process, output - packaging, Kitting, far goods(FH), Spare parts, , After markets process, schedule of transport, vendor coordination
V	Timely supply – scheduling, vendor co ordination quality control, pre delivery Inspection, Quality assurance, on time in full (OTIF)

Text & Reference Books:

1. Course Material Prepared by LSC

EXPORT AND IMPORT DOCUMENTATION



COURSE OBJECTIVES:

- To familiarize the student with the basic concept of formalities for export trade, and the documentation process required for technologies, especially of the internet in business operations. import and export.

LEARNING OUTCOMES:

- Recognize the impact of information and communication technologies, especially of the internet in business operations.
- Recognize the fundamental principles of eBusiness and eCommerce.
- Explain the security protocols and the issues in internet security.

Unit	Topics
I	Introduction to Export and Import 12 Hrs Basics of Exports - Classification of goods - Preparation for Exports - Methods of Exporting - Export Marketing Organizations - Functions - Registration formalities IEC Number - Procedure of obtaining IEC Number - RCMC (Registration Cum Membership Certificate) –Export Credit Guarantee Council (ECGC) - Application for import and export of restricted items.
II	Documentation Framework and Contracts 15 Hrs Aligned Documentation System: Commercial Documents - Auxiliary Commercial Documents - Regulatory Documents - Documents related to goods - Documents related to Shipment - Documents related to Payments - Documents related to Inspection - Documents related to Excisable Goods - Types of Contracts - Export Contracts.
III	Payments and Finance 15 Hrs Factors - Methods of receiving Payment - Instruments of Payments-Letter of Credit Pre-shipment Finance - Post-shipment Finance - Post-shipment Credit in Foreign Currency - Negotiation of documents with bank - CENVAT - Duty Draw back
IV	Quality Control and Clearance of Cargo 15Hrs Objective of Quality Control - Methods - Procedure for Pre-shipment Inspection - Role of Clearing and Forwarding Agents – Role of Inspection Agents-Clearance of Cargo Central Excise Clearance Procedure - Central Excise Clearance Option - Shipment of Export Cargo.
V	Customs Clearance, Risk and Insurance Policy 15 Hrs Customs Clearance of Export Cargo - Customs Clearance of Import Cargo - Risk: Types - Types of cover issued by ECGC - Cargo Insurance. Processing of an export order - Major laws governing export contract.

Text & Reference Books:

- RAMA, GOPAL C. (2008) Export Import Procedures Documentation and Logistics. New Age International Publishers: New Delhi.
- KHUSHPAT, S. J. (2013) Export Import Procedures and Documentation. Himalaya Publishing House: New Delhi.
- PAWAN, KUMAR (2001) Export of India's Major Products Problems and Prospects. New Century Publications: New Delhi.
- KAPOOR, D. C. (2002) Export Management. Vikas Publications: New Delhi.
- CHERUNILAM, F. (2004) International Trade and Export Management. Himalaya Publications: New Delhi.

Websites:

1. www.cbec.gov.in/customs/cs-act/cs-act-idx.htm (Central Board of Excise and Customs - Customs Act, 1962, Customs Tariff Act – 1975, Other Acts)
2. www.epckkenya.org/(Export Promotion Council)
3. commerce.nic.in/MOC/index.asp (Ministry of Commerce and Industry)
4. www.dgft.gov.in/ (Directorate General of Foreign Trade)

APPRENTICESHIP II

<i>Semester</i>	<i>Course Type</i>	<i>Code</i>	<i>Hours</i>	<i>Credits</i>	<i>Version</i>
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The students would be onboarded in Logistics Processes of companies by the Logistics Sector Skill Council for Apprenticeship Training. The duration of Apprenticeship Training is 6 months. During Apprenticeship Training students would be assigned on-the-job-training by companies. Being a legal engagement, students would receive a monthly stipend during Apprenticeship Training as per the existing norms.

On completion of the Apprenticeship Training, students shall submit Apprenticeship Report in the form of Work Diary to the Collaborating Institutions. The Report would be evaluated and Viva conducted by the Collaborating Institution.

Annexure: 1: B.B.A. in Logistics

Semester	Discipline Specific Core Courses (DSCC)			Elective Courses			Ability Enhancement Course									Total Credits
				Discipline Specific Elective (DSE) / Open Elective Course(OEC)			Skill Enhancement Course						Ability Enhancement Compulsory Course (AECC)			
	Course	L+T+P	Credit				Skill Based			Value Based						
Core Course	L+T+P	Credit	Course	L+T+P	Credit	Course	L+T+P	Credit	Course	L+T+P	Credit	Course	Instruction Hrs	Credit		
I	DSCC- 1	3+0+0	3	OEC-1	3+1+0	4	SEC-1:	1+0+2	3	Health and Wellness + Yoga/Sports	0+0+2 + 0+0+2	2	Language-1	3	3	25
	DSCC- 2	3+0+0	3										Language -2 (MIL)	3	3	
	DSCC- 3	3+1+0	4													
II	DSCC- 4	3+0+0	3	OEC-2	3+1+0	4				NCC/NSS/R &R(S&G) / Cultural + Sports /Yoga	0+0+2 + 0+0+2	2	Language-1	3	3	25
	DSCC- 5	3+1+0	4										Language -2 (MIL)	3	3	
	DSCC- 6	3+0+0	3										Environmental study	3	3	
Exit option with Certificate (50 credits)																
III	DSCC- 7	3+1+0	4	OEC-3	3+0+0	3	SEC-2:	1+0+2	3							25
	DSCC- 8	3+0+0	3													
	DSCC- 9	3+0+0	3													
	DSCC- 10	3+0+0	3													
	DSCC- 11	3+0+0	3													
	DSCC- 12	3+0+0	3													
IV	DSCC- 13	3+1+0	4	OEC-4	3+0+0	3										25
	DSCC- 14	3+0+0	3													
	DSCC- 15	3+0+0	3													
	DSCC- 16	3+0+0	3													
	DSCC- 17	3+0+0	3													
	DSCC- 18	3+0+0	3													
Exit option with Diploma (100 credits)																
V	DSCC- 19	2+0+0	2													26
	DSCC- 20	2+0+0	2													

	DSCC- 21	0+0+22	22											
VI	DSCC- 22	2+0+0	2											26
	DSCC- 23	2+0+0	2											
	DSCC- 24	0+0+22	22											
	Exit option with Bachelor of Business Management, Computer Applications Degree, etc (146 credits)													
Award of Bachelor of Business Management. in a discipline (188 credits)													188	
**In lieu of the research Project, two additional elective papers/ Internship may be offered.														

L+T+P= Lecturing in Theory + Tutorial + Practical Hours per Week (no tutorial for practical course). **For Voc., refer annexure -6**

* Each DSE shall have at least two papers and student shall choose any one paper from each DSE.

*Core Courses as DSCC may have Practicals also and under such condition, No. of DSCC may be altered without changing the total credits in the given semesters

Note: 1. Each DSCC/ DSE /OEC shall have 42-56 hrs syllabus / semester for 100 marks in theory (**60 Sem. End exam +40 IA Exam**) and 52 hrs practical/semester for 50 marks(**25 Sem. End exam +25 IA Exam**).

2. Kannada and MEL /MIL shall have 42 hrs syllabus / semester for 100 marks in theory (**60 Sem. End exam. +40 IA Exam**).

3. Environmental Study /Constitution of India shall have 25-30 hrs syllabus / semester for 50 marks in theory (**30 Sem. End exams +20 IA Exam**).

4. SEC shall have 25-30 hrs syllabus / semester for 50 marks in Practical + Theory.

*** in lieu of internship, 01 additional SEC/ Course based Activities may be offered**

Annexure-2.

List of MIL and MEL for all Programmes

1. Hindi - MIL
2. Sanskrit - MIL
3. Marathi - MIL
4. Prakrit - MIL
5. Urdu - MIL
6. Persian - MIL
7. Arabic - MIL
8. English - MEL
9. German - MEL
10. Russian - MEL
11. French - MEL
12. Any other MIL/MEL as decided by the BOS from time to time.

Annexure-3. SKILL ENHANCEMENT COURSES FOR ALL THE PROGRAMMES

Value Based Course and Evaluation: (1+1) x 6 = 12Credits in the Programme

A student shall opt for one of the following activities offered in the college in each of the second and fourth semesters of the undergraduate programmes. The activity carries two credits each per semester and will be internally assessed for 50 marks by the staff like NCC Officer/ NSS Officer / Physical Education Teacher / Librarian / Teacher shouldering the responsibility of activities. The concerned staff shall submit the marks to the University during submission of internal assessment marks.

Activity based for semesters 1 to 6 for all programmes

- a. N.S.S. / N.C.C
- b. Indoor/ Outdoor Sports and Games
- c. Physical Education Activities Cum Class Room Learning
- d. Activities related to Yoga
- e. Field studies
- f. Computer assisted/web-based learning and e-library skills
- g. Leadership Qualities and Organisational Skills

Health and Wellness of the Society for I semester of all the programmes

- a. Innovative compositions and creations in Music, Performing Arts, Fine arts, and visual arts etc.
- b. Involvement in popularization programmes such as scientific temper
- c. Publication of articles in news papers, magazines or other publications
- d. Activity exploring different aspects of Indian civilizations
- e. Community work such as promotion of values of National Integration, Environment, Human rights and duties, Peace, Civic Sense, Social responsibility, etc
- f. Evolution of study groups/seminar circles on Indian thoughts and ideas
- g. Involvement in campus publication
- h. A Small project work concerning the achievements of India in different fields
- i. Other Activities such as Cultural Activities as prescribed by the University.

Evaluation of Value Based Activities shall be as per the procedure evolved by the university from time to time.

Annexure- 4:

Nomenclature of the BBA Degree Programme in Logistics.

<i>*Certificate(1Year)</i>	<i>*Diploma(2-Year)</i>	<i>3 -Year Degree</i>
<i>BBA Certificate course in Logistics</i>	<i>BBA Diploma in Logistics</i>	<i>B.B.A. Degree in Logistics</i>

** Specified subject shall be mentioned as per the content introduced in the course for certificate and diploma.*
