

#### **UNIVERSITY OF CALICUT**

#### **Abstract**

General and Academic - Faculty of Commerce and Management Studies- Scheme and Syllabus of B.Voc- Logistic Management Programme - Corrected Syllabus -Implemented - Orders issued.

#### G & A - IV - E

U.O.No. 15608/2019/Admn

Dated, Calicut University.P.O, 05.11.2019

Read:-1.U.O No.5515/2019/Admn dated 25.04.2019.

2.Letter No.nil dated 05.07.2019 from the Principal, M.E.S KEVEEYAM College, Valanchery.

3.Item No.3 of the minutes of meeting of the Board of Studies in Commerce(UG) held on 11.07.2019.

4. Minutes of the meeting of the Faculty of Commerce and Management Studies held on 18.07.2019.

5.Item No.II.H of minutes of meeting of Academic Council held on 05.10.2019.

#### **ORDER**

As per the U.O read as (1), the Scheme and syllabi of B.Voc-Logistic Management/ B.Voc-Banking Financial Service and Insurance / B.Voc Accounting Taxation/ B.Voc-Retail Management Programme were implemented with effect from 2018 admission onwards.

The Principal, M.E.S Asmabi College, P.Vemballur, vide paper read as (2) informed that a correction is required in the implemented scheme and syllabus of B.Voc (Logistic Management) Programme that, instead of internship in the whole sixth semester of B.Voc (Logistic Management) programme, certain courses were added in the sixth semester by mistake. Therefore, the Principal requested to make the corrections in the implemented scheme and syllabus of B.Voc (Logistic Management).

The Board of Studies in Commerce (UG) in its meeting held on 11.07.2019 resolved vide paper read as (3) to approve the corrected syllabus of B.Voc (Logistic Management) programme. As per paper read as (4), the Faculty of Commerce and Management Studies has approved the minutes of the meeting of the Board of Studies in Commerce (UG) held on 11.07.2019.

The Academic Council, vide paper read as (5), approved the Minutes of the meeting of the Faculty of Commerce and Management Studies and the Minutes of the meeting of the Board of Studies in Commerce (UG) read as (4) and (3) respectively and the Vice Chancellor has accorded sanction to implement the resolution of the Academic Council.

The corrected Scheme & Syllabus of B.Voc (Logistic Management) Programme is therefore implemented w.e.f 2018 admission onwards.

(Scheme & Syllabus appended).

Biju George K

Assistant Registrar

To

The Principals of Colleges concerned. Copy to: PS to VC/PA to PVC/PA to Registrar/ PA to CE/ JCE I/JCE VII/GA IF/Library/SF/DF/FC.

Forwarded / By Order

Section Officer

# **BACHELOR OF VOCATION**

# **LOGISTICS MANAGEMENT**

(UGC Sponsored Programme)
Duration: 3years (Six Semesters)

Submitted by
MES ASMABI COLLEGE, P.VEMBALLUR

# Rules and Regulations for the Degree of Bachelor of Vocation

# **Logistics Management**

# Effective from the academic year 2018-19

- 01. Title of the Programme
- 02. Scope
- 03. Objectives
- 04. Terms and Definition
- 05. Programme Structure
- 06. Levels of Awards
- 07. Duration of the Course
- 08. Sector/Specialization
- 09. Board of Studies
- 10. Conditions of Admissions
  - a) Eligibility
  - b) Reservation/Quota
  - c) Fees and Scholarships
- 11. Course Calendar
- 12. Assessment of Students
  - a) Theory (Internal/External)
  - b) Practical(Internal/External)
  - c) Project and Internship
- 13. Pattern of Questions for Semester End Examinations
  - a) Theory
  - b) Practical
- 14. Credit System
- 15. Grading- Indirect Grading System
- 16. Grade Cards
- 17. Attendance
- 18. Registration/Re-registration
- 19. Examination Monitoring Cell
  - a) College Level
  - b) University Level
- 20. Electives
- 21. Grievance Cell
- 22. Anti-Ragging Cell
- 23. Class Committee
- 24. College Transfer
- 25. B.Voc Degree to Other Degrees
- 26. Transitory Provision
- 27. Annexure

# **01.** Title of the Programme.

This Degree shall be called B.VOC LOGISTICS MANAGEMENT (B.Voc LMT).

# 02. Scope

The regulations stated in this document shall apply to all B.Voc Programmes conducted by colleges affiliated to the University of Calicut, sanctioned by the University Grants Commission. These regulations strictly adhere to B.Voc Programmes and may not apply to other graduate level programmes conducted by any College/University.

# 03. Objectives

The B.Voc courses are designed with the following objectives,

- a) To provide judicious mix of all skills relating to a profession and appropriate content of General Education.
- b) To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.
- c) To provide flexibility to the students by means of pre-defined entry and multiple exit points.
- d) To integrate NSFQ within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements. Such graduates to be equipped to become part of the global workforce.
- e) To provide vertical mobility to students coming out of 10+2 with vocational subjects.

# 04. Terms and Definition

- a) B.Voc: Bachelor of Vocation- A scheme introduced by UGC for skills development based higher education as part of college/university education
- b) NSFQ: National Skills Qualifications Framework.
- c) Programme: A Programme refers to the entire course of study and examinations for the award of the B.Voc Degree.
- d) Semester: A term consisting of 90 working days including examination days distributed over a minimum of 18 weeks of 5 working days consisting of six hours.
  - Total Credits in a Semester: 30(equivalent to 450 hours) For final semester Internship, the total duration is 900 hours.
- e) Course: Refers to the conventional paper, which is portion of the subject matter to be covered in a semester. A semester shall contain many such courses from general and skill development areas.
- f) Exit Level: B.Voc has multiple exit points at each year and successfully completing a year (2 semesters) the candidate will be awarded Diploma. Higher Diploma and /or B.Voc Degree will be awarded accordingly mentioned.
- g) Sector: Sector refers to conventional branch

- h) Credit: B. Voc programme follows a credit semester system and each course has an associated credit
  - i) Grade: Uses seven point grading system suggested by Hrudayakumari Commission to assess the students.
  - j) B.Voc Steering Committee: A University level committee consisting Convenor of Steering Committee on CUBCSS UG, Director, College Development Councils (DCDC), Controller of Examinations and principals/ representatives of respective colleges.
  - k) B.Voc Governing Council: A college level committee constituted by the principal of the college. Member includes principal, representatives from industrial partner, head of the department and other faculty members nominated by the principal and university representatives.

# **05. Programme Structure**

The B.Voc Programme is designed to bridge the potential skill gap identified. The curriculum in each of the years of the programme would be a suitable mix of general education and skill development components.

# **General Education Components:**

- a) The General Education Component provides emphasis to communication skill, presentation skill, Health and safety, Industrial psychology, Environmental awareness, Entrepreneurship development and other relevant subjects in the field.
- b) An option for additional language should be provided which enhances the employability outside the state.
- c) General Education Components should not exceed 40% of the curriculum.
- d) All B.Voc Programmes should follow the General Education Component pattern listed in the LRP Programmes of the University of Calicut. The courses are distributed as per the following table. Changes made in the syllabus of the General Education Component by the respective boards will be applicable to B.Voc Courses also.

No:	Semester	Course Number	Course Code	Paper
01.	Ι	1.1	GEC1EG01	A01
02.		1.2	GEC1ML02 GEC1AR02 GEC1HD02	MAL1A01(2 ) ARB1A07(1) (A09)
03.	П	2.1	GEC2EG04	A02
04.	П	2.2	GEC1ML05 GEC1AR05 GEC1HD05	MAL2A02(2 ) ARB1A08(1)

				A09 (3)
05.	Ш	3.1	GEC3EG07	A03
06.	IV	4.1	GEC4EG10	A04

# **Skill Development Components:**

- a) This component should match the skill gap identified
- b) At least 50% of Skill Development Component should be allotted to practical and can grow up to 60% based on the nature of the course. The practical component can be carried out in the college and/ or the industry partner premises.

#### **Course Code:**

Each Course shall have a unique alphanumeric code number, Which includes the abbreviation of subject component (GEC for General Education Component and SDC for Skill Development Component), the semester number 1 to 6 in which the course is offered, abbreviation for subject and serial number of the courses. For example GEC1EG01 represent General Education Component in English of serial number 01 offered in the semester I and SDC1IT18 represent the Skill Development Component in the sector Information Technology of serial number 18 offered in semester I.

# 06. Levels of Awards

B.Voc is a programme with multiple exits. Following table shows the various certificates and their duration

Awards	Duration
Diploma	II Semester
Advance Diploma	IV Semester
B.Voc Degree	VI Semester

- a) Students are free to exit at any point in the duration of the programme.
- b) Only the students who successfully complete the courses and clear the examination are eligible for the certificate.
- c) Separate certificate will be awarded for each year for successful candidates.
- d) Students who fail in any course may be allowed to move the higher level but won't be eligible for any certificates until he/she clears previous courses.
- e) B.Voc Degree will be conferring to those whose successfully complete the diploma, higher diploma and internship.

#### 07. Duration of the course

Duration of the B.Voc programme shall be six semesters distributed over a period of Three (3) academic years. Each semester shall have 90 working days inclusive of all examinations.

# 08. Sector and Specialisation

Following sectors and specialisations were considered while preparing this document

- a) Automobiles
- b) Digital Film Production
- c) Medical Laboratory Technology
- d) Software Development
- e) Software Technology
- f) Jewellery Designing
- g) Gemmology
- h) Broadcasting and Journalism
- i) Multimedia
- j) Pharmaceutical Chemistry
- k) Tourism and Hospitality Management

# 09. Board of Studies

The B.Voc Programme in each sector is attached to the UG Board of studies of the parent subjects. The BoS is responsible for reviewing and approving the syllabus and provide suggestions in the curriculum. BoS will decide the fee structure and also formulate the index marks for ranking. B.Voc programmes and its associated BoS are attached in the annexure I.

Each B.Voc Programme has the option to select any course of the existing programme approved by BoS in the Calicut University

# 10. Conditions for Admissions

# Eligibility

- a) The admission to B.Voc Programme will be as per the rules and regulations of the University for UG admissions
- b) Basic eligibility for B.Voc is 10+2 and above in any stream( no age limit)
- c) The eligibility criteria for admission shall be as announced by the University from time to time.
- d) Separate rank lists shall be drawn up for reserved seats as per the existing rules.

- e) Grace Marks may be awarded to a student for meritorious achievements in co curricular activities such as Sports/Arts/NSS/NCC/Student Entrepreneurship.
- f) Preferred subjects and index mark calculations will be decided by the respective Board of Studies.

# **Diploma Holders**

Diploma holders( after 10+2) in the parent courses, approved by the University, who satisfies eligibility criteria can be admitted to the higher diploma( III semester) based on the availability of the seats and is under the sole discretion of the principal of the college/B.Voc Consortium.

# Reservation/Quota

A maximum of 50 students can be admitted to one B.Voc programme. The students can be admitted only to the first semester (except for diploma holders). No students are admitted directly to the Third and Fifth semester in any circumstances except for diploma holders. Diploma holders may be permitted to third semester directly as mentioned above.

The reservation rules for Government/Aided colleges are as that of the regular UG programmes conducted in colleges affiliated to this university.

#### **Fees Structure**

- a) The course fee and examination fee for the first three years will be decided by the University. The details of the fee structure for various courses are attached in the annexure 2.
- b) The college can collect caution deposit, PTA fund, Special fees, University fees, Sports fees etc according to the norms provided by the University at the time of admission.
- c) After third year with the consent of University/UGC, the college can conduct the same programme in self-financing mode (provided UGC not granting further funds).
- d) The course fee and examination fee (Regular/Improvement/Supplementary) structure in self- financing mode will be decided by the University.

# 11. Course Calendar

The B.Voc Programme conducted by the affiliated institutions follows a separate calendar from the conventional degree/ PG programme. The programme is distributed over six semesters and each semester constitute 90 working days inclusive of examination.

**Note**: Within a week after the commencement of the class of each semester, Head of the each institution should forward the list of the students, details of the faculty members allotted from the college and from industry partners along with their qualifications and year of experience, to the University. Also, head of each institution shall ensure the availability of sufficient number of faculty members having experience and qualifications in the institution.

#### 12. Assessment of Students

Assessment of students for each subject will be done by internal continuous assessment and semester-end examinations. This dual mode assessment will be applicable to both theory and practical courses except for internship and project. Total marks in theory course reflect 80 marks external and 20 marks internal assessment. The mark division for practical courses are 20 marks internal and 80 marks external. For internship and project, there is no internal assessment. (Except for Broadcasting and Journalism, Software Technology, Software Development and Digital Film Production)

Sl No:	Courses	Internal	External
01	Theory	20	80
02.	Practical	20	80
03.	Internship/ Project	0	100

# **Internal**

Internal assessment shall be conducted throughout the semester. It shall be based on internal examinations, assignments as decided by the faculty handling the course, and regularity in the class. Assignments of every semester shall preferably be submitted in Assignment Book, which is a bound book similar to laboratory record.

The mark distribution to award internal continuous assessment marks for theory subject should be as follows:

Assessment	Mark
Test papers( minimum 2 out of 3 is preferred	10
Assignments( minimum 2)	5
Attendance	5

The mark distribution to award internal continuous assessment marks for practical subjects should be as follows:

Assessment	Mark
Evaluation in the Lab and Rough Record	10
End-semester Test	4
Viva	1
Regularity	5

# Note:

- a) No candidate will be permitted to attach the end-semester practical examination unless he/she produces certified record of the laboratory
- b) Full credit for regularity in the class can be given only if the candidate has secured minimum 90% attendance in the subject. Attendance evaluation for each course is as follows:

Attendance	Marks
90% and Above	5
85 to 89.9%	4
80 to 84.9%	3
76 to 79.9%	2
75 to 75.9%	1

# External

a) Semester-end examinations for theory and practical courses will be conducted by the University. There shall be University examinations at the end of each semester for both theory and practical. Failed or improvement candidates will have to appear for the Semester-end examinations along with regular students.

- b) At the starting of each semester, Colleges should prepare question bank for the external theory/practical examinations for all courses during that semester and answer keys for each course and will sent back to the college for conducting the examination.
  - c) University will appoint a chairman for each B.Voc Programme. Chairman will monitor the University practical examinations and evaluation of theory and practical papers.
  - d) For the evaluation of theory papers, chairman should form a team consisting of chief and required additional examiners for each course.
  - e) At the starting of each semester, colleges should prepare a panel of external examiners for conducting practical examinations. Chairman/University will appoint examiners from the panel proposed by colleges.
  - f) Practical examination can be conducted and evaluated from the college or the industry partner's premises. The team for conducting and evaluating practical exams should include an examiner appointed from the approved panel of faculties, and an internal examiner.
  - g) Head of the institution/Chief of Examination of the college should take necessary steps to prevent any malpractices in the semester-end examinations. If any such instances are detected, they should be reported to the University without any delay.
  - h) University will be issuing mark list, provisional/original certificates to the candidates.

# **Internship and Project**

Internship and the major project should be carried out in the industry, not necessarily with industry partner. The major idea for internship is to implement the things learned and get a real life experience. The evaluation process follows 100% external assessment (Except for Broadcasting and Journalism)

- a) There will be project/industrial visits/case studies in each semesters and an internship for the whole sixth semester.
- b) Every student will be assigned an internal guide, allotted from the parent department concerned or an expert available in the college appointed by the principal or the head of the department
- c) The student has to make regular discussions with the guide while choosing the subject/areas and throughout the life time of the project.
- d) At least three reviews should be conducted to evaluate the progress of work.
- e) An evaluation team is constituted for conducting the evaluation. The team consist of external examiner, allotted by the university from the approved examination panel, representatives from the industry and a faculty.
- f) Students should submit a report of their work. A valid certificate from the organisation should be produced as a proof that the work is carried out in the respective organisation.

- g) Students are required to demonstrate the working model of their work (if possible) to the panel of examiners. A viva will be conducted based on the report and students are supposed to clarify the queries regarding their work.
  - h) Mark distribution for internship/project assessment( Except Broadcasting and Journalism)

Distribution	Marks
Content and relevance or dissertation	60
Viva	20
Presentation	20

# **Minimum for Pass**

The successful completion of all the courses prescribed for the diploma/degree programme with E grade (40%) shall be the minimum requirement for the award of diploma/degree.

#### **Notes:**

- a) For project/internship, the minimum for a pass shall be 50% of the total marks assigned to the respective examination.
- b) A student who does not secure this pass marks in a subject will have to repeat the respective subject.
- c) If a candidate has passed all the examinations of B.Voc Course (at the time of publication of results of last semester) except project/internship in the last semester, a re-examination for the same should be conducted within one month after the publication of results. Each candidate should apply for this Save A Year examination within one week after the publication of last semester's results.

#### Moderation

- a) Moderation shall be awarded subject to a maximum of 5% of external total marks to be awarded in semester.
- b) For a course concerned, the maximum of moderation awarded shall be limited to 10% of total marks to be awarded for the external course concerned.
- c) If a student fails for a single course, this limit can be enhanced to 15% of external in the course
- d) However Board of Examiners /B.Voc consortium concerned shall have the liberty to fix low percentage of marks for moderation subjected to the conditions mentioned above.

# 13. Pattern of Questions for Semester-end examinations of theory/practical subjects

The question papers of semester-end question examinations of theory subjects shall be able to perform achievement testing of the students in an effective manner. The question paper shall be prepared:

- a) Covering all sections of the course syllabus and total marks from each module should be approximately same.
- b) Unambiguous and free from any defects/errors.
- c) Emphasizing knowledge testing, problem solving and quantitative methods.
- d) Containing adequate data/other information on the problems assigned.
- e) Having clear and complete instructions to the candidate.

Duration of semester-end examinations will be 3 hours. The pattern of questions for theory subjects shall be as follows:

Section	Total number of questions	Questions to be answered	Marks for each question	Total marks
A -Very short /objective type	10	10	1	10
B-Short answers	12	8	2	16
C- Short essays	9	6	4	24
D - Essays	4	2	15	30
Total				80

# And for practical

Marks Distribution	Total Marks
Theory/algorithm/flow diagram	20
Implementation	30
Result/output	10
Record	10
Viva	10
Total	80

# 14. Credit system

Each subject shall have a certain number of credits assigned to it, depending upon the academic load and the nature and importance of the subject. The credit associated with each

subject will be shown in the prescribed scheme and syllabi. Each course shall have an integer number of credits, which reflects its weightage.

- a) One credit would mean equialavent of 15 periods of 60 minutes each, for theory, workshops/IT and tutorials.
- b) For internship/field visits, the credit weightage for equivalent hours shall be 50% of that for lectures/workshops.
- c) For self learning, based on e-content or otherwise, the credit weightage for equivalent hours of study should be 50% or less of that for lectures/workshops.

# 15. Grading-Indirect Grading System

- a) Indirect grading system based on a seven point scale is used to evaluate the performance of students.
- b) Each course is evaluated by assigning marks with a letter grade (A+,A, B,C, D, E or F) to that course by the method of indirect grading.
- c) An aggregate of E grade with 40% of marks (after external and internal put together) is required in each course for a pass and also for awarding a degree/diploma.
- d) Appearance for internal assessment and end semester evaluation are compulsory and no grade shall be awarded to a candidate if/he/she is absent for internal/end-semester evaluation or both.
- e) For a pass in each course 40% marks or E grade is necessary( Except for Project).
- f) A student who fails to secure a minimum grade for a pass in a course is permitted to write the examination along with the next batch.
- g) After the successful completion of a semester, Semester Grade Point Average (SGPA) of a student in that semester is calculated using the formula given below.
- h) For the successful completion of a semester, a student should pass all courses. However, a student is permitted to move to the next semester irrespective of SGPA obtained.
- i) SGPA of the student in that semester is calculated using the formula

# SGPA = <u>Sum of the credit points of all courses in a semester</u> Total credits in that semester

j) The Cumulative Grade Point Average (CGPA) of the student is calculated at the end of a programme. The CGPA of a student determines the overall academic level of the student in a programme and is the criterion for ranking the students. CGPA can be calculated by the following:

# CGPA = <u>Total credit points</u> <u>obtained in six semesters</u> Total credits acquired (180)

- k) SGPA and CGPA shall be rounded off to two decimal places. CGPA determines the broad academic level of the student in a programme and is the index for ranking students (in terms of grade points).
- An overall letter grade (Cumulative Grade) for the entire programme shall be awarded to a student depending on her/his CGPA.( See Annexure 4)

Marks scored	Grade	Remarks
90 and Above	A+	Outstanding
80 to 89	A	Excellent
70 to 79	В	Very Good
60 to 69	С	Good
50 to 59	D	Satisfactory
40 to 49	Е	Adequate
Below 40	F	Failure

# 16. Grade Cards

The University shall issue to the students grade/marks card (by online) on completion of each semester, which shall contain the following information:

- a) Name of University
- b) Title of B.Voc Programme
- c) Semester concerned
- d) Name and Register Number of student
- e) Code number, Title and Credits of each course opted in the semester
- f) Internal marks, External marks, total marks, Grade point (G) and Letter grade in each course in the semester
- g) The total credits, total credit points and SGPA in the semester (corrected to two decimal places)
- h) Percentage of total marks

The final Grade/mark Card issued at the end of the final semester shall contain the details of all courses taken during the entire programme including those taken over and above the prescribed minimum credits for obtaining the degree. However, as already mentioned, for the computation of CGPA only the best performed courses with maximum grade points alone shall be taken subject to the minimum credits requirements (180) for passing a specific degree. The final grade card shall show the percentage of marks, CGPA (corrected to two decimal places) and the overall letter grade of a student for the entire programme. The final grade/mark card shall also include the grade points and letter grade of general course and skill developmental courses separately. This is to be done in a seven point indirect scale.

#### 17. Attendance

A candidate shall be permitted to appear for the Semester End examinations only if he/she satisfies the following requirements:

- a) He/she must secure not less than 75% attendance in the total number of working hours in each semester.
- b) He/she must earn a progress certificate from the head of the institution stating that he/she has satisfactorily completed the course of study prescribed in the semester as required by these regulations.
- c) His/her conduct must be satisfactory

It shall be open to the Vice Chancellor to grant condonation of shortage of attendance on the recommendation of the head of the institution in accordance with the following norms:

- a) The shortage shall not be more than 10%
- b) Shortage up to 20% shall be condoned once during the entire course provided such shortage is caused by continuous absence on genuine medical grounds.
- c) Shortage shall not be condoned more than twice during the entire course.
- d) Candidate who is not eligible for condonation of shortage of attendance shall repeat the semester as per university norms.

# **Registration / Re-registration**

Every candidate should register for all subjects of the Semester End examinations of each semester. A candidate who does not register will not be permitted to attend the Semester End examinations; he/she shall not be permitted to attend the next semester. A candidate shall be eligible to register for any higher semester, if he/she has satisfactorily completed the course of study and registered for the examination. He/she should register for the semester at the start of the semester before the stipulated date. University will notify the starting and closing dates for each semester.

# Re-joining the Course

- a) Rejoining the course will be allowed to only if the candidate has secured a minimum CGPA of 2.52
- b) The candidate should remit the fees prevailing that time.
- c) B. Voc governing council will take the decision regarding the rejoining.

# 18. Examination Monitoring Cell

Head of the each institution should formulate an Examination Monitoring Cell at the institution for conducting and supervising all examinations including the internal examinations. The structure and their collective responsibilities will be as per the university norms.

#### 19. Electives

Students are permitted to take elective subjects provided along with the syllabus of the programme.

# 20. Grievance Cell

Each college should setup a Grievance Cell with at least four faculty members to look into grievances of the students, if any.

# 21. Anti Ragging Cell

Head of the institution shall take necessary steps to constitute anti-ragging committee and squad at the commencement of each academic year. The committee and the squad shall take effective steps as specified by the Honourable Supreme Court of India, to prevent ragging.

# 22. Class Committee

Head of the institution shall take necessary steps to form a class committee for each class at the start of classes of each semester. This class committee shall be in existence for the semester concerned. The class committee shall consist of the Head of the Department, Staff Advisor of the class, a senior faculty member of the department, a faculty member from another department, and three student representatives (one of them should be a girl).

There should be at least two meetings of the class committee every semester; it shall be the responsibility of the Head of the Department to convene these meetings. The decisions of the Class Committee shall be recorded in a register for further reference. Each committee will communicate its recommendations to the Head of the Institution

The responsibilities of the class committee are:

- a) To review periodically the progress and conduct of students in the class.
- b) To discuss any problems concerning any subjects in the semester concerned.
- c) To identify weaker students of the class and suggest remedial measures.
- d) To review teaching effectiveness and coverage of syllabus.
- e) Discuss any other issues related to the students of the class.

# 23. College Transfer

College transfer is not allowed in any circumstances.

# 24. B.Voc Degree to other Degrees

B.Voc Degree is recognised at par with other U G Programmes approved by University of Calicut.

# 25. Transitory Provision

Notwithstanding anything contained in these regulations, the Vice-Chancellor has the power to provide by order that these regulations shall be applied to any programme with such necessary modification.

# 26. Annexure

# 1. Board of Studies

No.	B.Voc Programme	Affiliated Board of Studies
01.	Auto Electricals and Electronics	Electronics( Single Board)

02.	Medical Laboratory Technology	Medical Laboratory Technology( Single Board)
03.	Software Development	Computer Science and Application(UG)
04.	Software Technology	Computer Science and Application(UG)
05.	Jewellery Designing	Gemmology and Jewellery Designing
06.	Gemmology	Gemmology and Jewellery Designing
07.	Digital Film Production	Audio Visual Communication( Single Board)
08.	Multimedia	Multimedia( Single Board)
09.	Broadcasting&journalism	Journalism (UG)
10.	Pharmaceutical Chemistry	Pharmaceutical Chemistry
11.	Tourism and Hospitality Management	Hotel Management

# 2. Fees Structure

No:	B.Voc Programme	Fees			
01.	Auto Electricals and Electronics				
02.	Medical Laboratory Technology				
03.	Software Development				
04.	Software Technology				
05.	Jewellery Designing	As per University regulations			
06.	Gemmology				
07.	Digital Film Production				
08.	Multimedia				
09.	Broadcasting&journalism				
10.	Pharmaceutical Chemistry				
11.	Tourism and Hospitality Management				

# 3. Grading and Credit distribution

Evaluation (both internal and external) is carried out using mark system. The grading on the basis of a total internal marks will be indicated for each course and for the entire programme, Indirect Grading System in Seven Point scale is as below: To find Semester Grade Point Average (SGPA)

# $SGPA = \underline{Sum\ of\ the\ credit\ points\ of\ all\ courses\ \underline{in}\ \underline{a}\ semester}$ Total credits in that semester

# SGPA= <u>C1G1+C2G2+C3G3+....</u> C1+ C2+......

Where G1,G2...are grade points snd C1,C2..are credits of different courses of the same semester

Credit point of a semester=SGPA X Credit load of the semester.

# B. Voc. PROGRAMME IN LOGISTICS MANAGEMENT SYLLABUS SUMMARY

	Cou	Course Code	Title	Credits	Hours per week	Marks		
	r se No.				W 6622	Inter n al	Extern a l	Total
	1.1	GEC1EG01	A01	4	4	20	80	100
	1.2	GEC1ML02 GEC1HD02 GEC1AR02	MAL1A01(2) (A07) ARB1A07(1)	4	4	20	. 80	100
	1.3	GEC1BM03	IT for business	4	4	20	80	100
Semester I	1.4	SDC1LM01	Business Mathematics	5	5	20	80	100
1	1.5	SDC1LM02	Fundamentals of Accounting	5	5	20	80	100
	1.6	SDC1LM03 Introduction to Logistics Management		5	5	20	80	100
	1.7	SDC1LM04	IT for Business – LAB I	3	3	20	80	100
		1	NCOL	LEVEL 4			1	<u> </u>
		QP Code: LSC	_		Title: Docu	ımentatio	on Assistan	ıt
	2.1	GEC2EG04	A02	4	4	20	80	100
	2.2	GEC2ML05 GEC2AR05 GEC2HD05	MAL2A02(2) ARB2A08(1) (A09)	4	4	20	80	100
	2.3	GEC2PM06	Principles of Management	4	4	20	80	100
Semester II	2.4	SDC2LM05	Domestic Logistics Management	5	5	20	80	100
	2.5	SDC2LM06	Warehouse Management	5	5	20	80	100
	2.6	SDC2LM07	Transportation and Distribution Management	5	5	20	80	100
	2.7	SDC2LM08	Internship / Project	3	3		100	100
	NSQF LEVEL 5  QP Code: LSC/Q2307  Job Title: Warehouse Supervisor							

	3.1	GEC3EG07	A03	4	4	20	80	100	
	3.2	GEC3BC08	Business Communication	4	4	20	80	100	
	3.3	GEC3BS09	Business Statistics	4	4	20	80	100	
Semester III	3.4	SDC3LM09	Principles of Logistics Information Systems	5	5	20	80	100	
	3.5	SDC3LM10	Inventory Management	5	5	20	80	100	
	3.6	SDC3LM11	Shipping and Ocean Freight Logistics Management	5	5	20	80	100	
	3.7	SDC3LM12	IT for business- LAB - II	3	3	20	80	100	
	Q	P Code: LSC/Q	_	T <b>LEVEI</b> Job	<b>6</b> Title: Inve	ntory, Mat	terials Ma	nager	
	4.1	GEC4EG10	A04	4	4	20	80	100	
	4.2	GEC4ED11	Entrepreneurship Development	4	4	20	80	100	
	4.3	GEC4ME12	Managerial Economics	4	4	20	80	100	
Semester IV	4.4	SDC4LM13	Supply Chain Management	5	5	20	80	100	
	4.5	SDC4LM14	International Logistics Management	5	5	20	80	100	
	4.6	SDC4LM15	Export and Import - Policies & Procedures	5	5	20	80	100	
	4.7	SDC4LM16	Internship / Project	3	3		100	100	
	NSQF LEVEL 6 QP Code: LSC/Q0105  Job Title: Warehouse, Inventory and Transport Management of the control of the								
	5.1	GEC5MM13	Marketing Management	4	4	20	80	100	
	5.2	GEC5HR14	Human Resource Management	4	4	20	80	100	

g .	5.3	GEC5BE15	Banking & Insurance Management	4	4	20	80	100
Semester V	5.4	SDC5LM17	Operations Management	5	5	20	80	100
	5.5	SDC5LM18	Retail management	5	5	20	80	100
	5.6	SDC5LM19	Air Cargo Logistics Management	5	5	20	80	100
	5.7	SDC5LM20	Project/Industrail visit	3	3		100	100
Semester VI	nester 6.1 SDC6LM21 Interns		Internship	30	30		100	100

. .

.

.

#### SEMESTER I

# GEC1BM03 - IT FOR BUSINESS

Number of Credit: 4 Hours per Week: 4

# **Objectives:**

 To familiarize the students with the office automation and communication technologies used in business

# Module - I

Introduction to Information Technology: Information and Communication Technology (ICT), Information systems E-World - Computer Architecture: Input Hardware - Processing & Memory Hardware, Storage Hardware, Output Hardware, Communication Hardware - Concept of operating system - Understanding your computer customization configuring screen, mouse, printer.

10 Hours

#### Module-II

Word Processing Package: Introduction - Features - Word User Interface Elements; Creating new Documents; Basic Editing, Saving a Document; Printing a Document; Print Preview, Page Orientation - Viewing Documents; Setting tabs - Page Margins; Indents; Ruler, Formatting Techniques; Font Formatting, Paragraph Formatting; Page Setup; Headers & Footers; Bullets and Numbered List; Borders and Shading; Find and Replace; Page Break & Page Numbers; Mail Merging-Spelling and Grammar Checking; Tables; Formatting Tables;

15 Hours

# Module-III

Spreadsheet Package: Introduction, Excel User Interface, Working with cell and cell addresses, Selecting a Range, Moving, Cutting, Copying with Paste, Inserting and Deleting cells, Freezing cells, Adding, Deleting and Copying Worksheet within a workbook, Renaming a Worksheet. Cell Formatting Options, Formatting fonts, Aligning, Wrapping and Rotating text, Using Borders, Boxes and Colors, Centering a heading, Changing row/column height/width, Formatting a Worksheet Automatically, Insert Comments, Clear contents in a cell. Using print Preview, Margin and Orientation, Centering a Worksheet, Using header and footer.

15 Hours

# Module-IV

Advanced Features of Spreadsheet Package: All Functions in Excel, Using Logical Functions, Statistical functions, Mathematical etc. Elements of Excel Charts, Categories, Create a Chart, Choosing chart type, Edit chart axis - Titles, Labels, Data series and legend, Adding a text box, Rotate text in a chart, Saving a chart.

# Module - V

Presentation Package: Ms-PowerPoint: Advantages of Presentation Screen layout creating presentation inserting slides adding sounds & videos-formatting slides -slide layout views in presentation -slide transition Custom animation Managing slide shows - using pen Setting slide intervals

10 Hours

- 1. Antony Thomas. Information Technology for Office. Pratibha Publications
- 2. Gini Courter & Annette Marquis. Ms-Office 2007: BPB Publicat

# SDC1LM01- BUSINESS MATHEMATICS

Number of Credit: 5 Hours per Week: 5

# **Objectives:**

 To enable the students to acquire knowledge of business mathematics and their applications in business.

# MODULE-I

Set theory: Modern theory in mathematics - Definition, elements and types of sets - Operations on set-Union of two sets-intersection of two sets-difference of two sets-Complement of two sets-Venn diagrams

20 Hours

#### MODULE-II

Algebra-1: Number system - Natural numbers, prime numbers, integers, rational and irrational numbers, Ratio, proportion and variation.

#### MODULE-III

Algebra-2: Permutations and combinations — Compound interest, depreciation and annuities.

15 Hours

# MODULE-IV

Matrices: Matrices, Matrix operations- Addition of matrices-Multiplication of matrix by a scalar- Multiplication of teo matrices

15 Hours

#### MODULE-V

System of Linear Equations: Inverse of square matrix (problems only), Solution of system of linear equations using matrices.

10 Hours

- 1. S.Saha. Business Mathematics
- 2. D.C. Sanchet & V.K Kapoor. Business Mathematics Sultan chand & sons

# SDC1LM02 - FUNDAMENTALS OF ACCOUNTING

Number of Credit: 5 Hours per Week: 5

# **Objectives:**

- To enable the students to acquire knowledge of accounting principles and practices.
- To equip the students with the skill of preparing accounts and financial statements.

# Module - I

Introduction of Accounting: Origin, Meaning, Definition, Need, Importance, Functions, Limitations, Accounting principles, Generally accepted accounting principles, Accounting equation, Double entry system.

15 Hours

#### Module-II

Recording Transactions: Journal, Ledger, Trial Balance, Cash Book (single column, double column and three column), Bank Reconciliation Statement.

15 Hours

# Module-III

Accounting for Depreciation: Meaning, Importance, Methods of providing depreciation (straight line, diminishing, annuity), Reserves and Provisions.

15 Hours

# Module-IV

Final accounts of Sole Traders: Manufacturing, Trading, and Profit and Loss Account and Balance Sheet.

15 Hours

# Module - V

Bill of Exchange: Meaning – Definition – Importance, Promissory Note – Recording bill transaction (honoring, dishonoring, discounting).

- 1. Business Accounting Jain and Narang
- 2. Advanced Accounting Jain and Narang

# SDC1LM03 - INTRODUCTION TO LOGISTICS MANAGEMENT

Number of Credit: 5 Hours per Week: 5

# **Objectives:**

- To enable the student to understand the basics of Logistics
- To understand the process of logistics in an organization

#### Module – I

Logistics: Definition - History and Evolution - Objectives - Elements - activities importance - The work of logistics - Logistics interface with marketing - Retails logistics.

15 Hours

#### Module – II

Logistics Management: Definition - Evolution of the concept - model - process - activities. Achievement of competitive advantage through logistics Framework - Role of Logistics management - Integrated Logistics Management.

15Hours

# Module – III

Logistics Strategy: Strategic role of logistics – Definition - Role of logistics managers in strategic decisions - Strategy options, Lean strategy, Agile Strategies & Other strategies - Designing & implementing logistical strategy - Emerging concept in logistics.

15 Hours

# Module-IV

Outsourcing Logistics: Reasons - Third party logistics provider - Fourth party Logistics providers (4PL) - Stages - Role of logistics providers.

15 Hours

#### Module - V

Quality Customer Service & Integrated Logistics: Customer service - importance elements - the order cycle system - distribution channels - Functions performed - Types designing.

15 Hours

- 1. David J. Bloomberg, Stephen LeMay & : Logistics, Prentice-Hall of India Pvt Joe B. Hanna Ltd., New Delhi, 2003.
- 2. Donald J. Bowersox & David J. Closs: Logistical Management, Tata McGraw Hill Publishing Co. Ltd, New Delhi, 2004
- 3. Satish C. Ailawadi & Rakesh Singh: Logistics Management, Prentice-Hall of India Pvt Ltd., New Delhi, 2005
- 4. Donald Waters: Logistics. Palgrave Macmillan, New York, 2004

5.	Krishnaveni Muthiah : Publishing House, Mum	Logistics bai, 1999	Management	&	World	Sea	borne	Trade,	Himalaya	

# SDC1LM04 - IT FOR BUSINESS - LAB I

Number of Credit: 3

Hours per Week: 3

Objec	tives:		
>	To far busine	niliarize the students with the application office automation technologess	jies used in
•	Funda	nmentals	
	0	Identification of various hardware components of a computer system	
	0	Familiarization of various Operating system	
			05 Hours
•	Word	Processing Software	
	0	Creation, all types of formatting of documents	
	0	Modification of existing documents	
	0	Printing of formatted documents	
			15 Hours
•	Spread	dsheet software	
	0	Creation of a worksheet	
	0	Using formula, equations, simple functions	
			15 Hours
•	Preser	ntation Software	
	0	Creation of a presentation	
	0	Inserting objects like pictures, charts, audio, video in a presentation	10 Hours
_			

# **GEC2PM06- PRINCIPLES OF MANAGEMENT**

Number of Credit: 4 Hours per Week: 4

# **Objectives:**

To understand the students about the process of business management and its functions

#### MODULE-I

Nature and scope of management-evolution of management-Schools of management thought; F.W. Taylor and Henry Fayol; principles of management; management as a science and an art; management process

10 Hours

#### MODULE-II

Planning: Objectives – Types of plans - single use plan and repeated plan –planning process-importance of planning-limitations of planning- MBO, MBE– strategic planning and formulation. Decision making – types and process of decision making – forecasting.

10 Hours

# MODULE-III

Organising: Types of organisation - formal and informal, line and staff, functional - organisation structure and design - span of control, delegation and decentralisation of authority and responsibility - organisational culture and group dynamics.

10 Hours

# MODULE-IV

Staffing: Importance of staffing-Elements of staffing-Scope of staffing- Factors affecting Staffing-Systems approach to HRM – Performance appraisal and career strategy – HRD – meaning and concept-HRD methods

15 Hours

# MODULE-V

Directing: Motivation – meaning – need for motivation. Theories of motivation – Herzberg and McGregor. Leadership- importance – styles of leadership, Managerial Grid by Blake and Mounton, Leadership as a Continuum by Tannenbaum and Schmidt, Path Goal Approach by Robert House (in brief) Controlling – Concept-Significance-Steps in control-objectives of control-limitations of controlling

15 Hours

- 2. Bhatia R.C. Business Organization and Management, Ane Books Pvt. Ltd., NewDelhi.
- 3. Richard Pettinger. Introduction to Management, Palgrave Macmillan, New York.
- 4. Koontz and O'Donnel. Principles of Management ,Tata McGraw-Hill Publishing Co.Ltd. New Delhi.
- 5. 5. Terry G.R. Principles of Management, D.B. Taraporevala Sons & Co.Pvt.Ltd., Mumbai.

#### SDC2LM05 - DOMESTIC LOGISTICS MANAGEMENT

Number of Credit: 5 Hours per Week: 5

# **Objectives:**

To familiarize the students with the concepts, tools and practices of domestic logistic management

#### Module - I

Planning and Resourcing: Need for Planning – Fleet management – Main types of road freight transport – Transport resource requirements – Vehicle routing and scheduling issues – Data requirements – Manual methods of vehicle routing and scheduling – Computer routing and scheduling – Information system applications – GPS – RFID.

15 Hours

#### Module-II

Vehicle Selection: Types of vehicles – Types of operations – Load types and characteristics – Main types of vehicle body - Implications of vehicle selection – Vehicle acquisition.

15 Hours

# Module-III

Vehicle Costing: Reasons for road freight transport vehicle costing – Main types of costing systems – Vehicle standing costs – Vehicle running costs – Overhead costs – Costing the total transport operation – Whole life costing – Vehicle cost comparisons – Zero-based budget.

15 Hours

# Module-IV

Documenting and Information Flow: Advices – Planning – FTL – LTL – Documentation – Road Receipts / Truck Receipts / Way Bills (RR / LR) - Consignment note CMR (EU & Canada) – Booking – Invoicing & Information Flow - Long Haul – Coordination with terminals – Exceptional Loads (Project Cargo).

15 Hours

# Module - V

Legislation: Operator licensing – Driver licensing – Driver's hours regulations – Road transport directive – Tachographs - Vehicle dimensions.

- 1. Logistics of facility location and allocation / Dileep R. Sule (Marcel Dekker)
- 2. Logistics & supply chain management / Martin Christopher (Prentice Hall Financial Times)
- 3. The management of business logistics / John J. Coyle, Edward J. Bardi, C. John Langley (West Publishing Company)
- 4. 4. Manufacturing operations and supply chain management : the LEAN approach / [edited by] David Taylor and David Brunt (Thomson Learning)
- 5. 5. Operations and process management : principles and practice for strategic impact/Nigel of 70

Slack (Financial Times Prentice Hall)

6. 6. Logistics and Distribution Management: Alan Rushton, Phil Croucher, Peter Baker (CILT)

# SDC2LM06 - WAREHOUSE MANAGEMENT

Number of Credit: 5 Hours per Week: 5

#### **Objectives:**

To familiarize the students with the concepts, tools and practices of warehouse management

#### Module - I

Introduction to Warehousing: Concepts – Decision making – Operations – Need for warehousing–Issues affecting warehousing –Various warehousing facilities –Different types of ware houses –Characteristics of ideal ware houses.

15 Hours

#### Module – II

Introduction to Inventory Management: Role in supply chain – Role in competitive strategy – Role of inventory – Functions of inventory – Types of inventory – WIP inventory – Finished goods inventory – MRO inventories – Cost of inventories – Need to hold inventory.

15 Hours

# Module-III

Warehouse Management Systems: Introduction – The necessity of WMS – Logics of determining locations and sequences – Independent demand systems – Uncertainties in material management systems – Dependent demand systems – Distribution resource planning.

15 Hours

# Module-IV

ABC Inventory Control: Managing inventories by ABC – Multi – echelon inventory systems - Managing inventory in multi echelon networks – Managing inventory in single echelon networks. Various approaches – Distribution approaches – The true multi echelon approach.

15 Hours

#### Module - V

The Principles and Performance Measures of Material Handling Systems: Introduction. Vehicle travel path(time) – Handling time – vehicle utilization – no of loads completed – congestion – Effective performance systems – Fundamentals of various types of material handling systems – automated storage and retrieval systems Bar coding technology and applications RFID technology.

15 Hours

- 1. Martin Christapher. Logistics and Supply Chain Management. Pearson
- 2. Raghuram G. Logistics and Supply Chain Management. Mac Millan

#### SDC2LM07 - TRANSPORTATION AND DISTRIBUTION MANAGEMENT

Number of Credit: 5 Hours per Week: 5

# **Objectives:**

- To familiarize the students with the concepts, tools and practices of transportation management
- To familiarize the students with the concepts, tools and practices of operation management

#### Module - I

Introduction: SCM-Role of distribution in supply chain –transportation management – warehousing concepts – designing distribution channels –understanding distribution costs, Advantages of distribution models – disadvantages of distribution models – pre-requisites of distribution – comparison of distribution networks.

15 Hours

# Module-II

Distribution Network Planning: Various factors in distribution – delivery lead time and local facilities – optimization approach and techniques – material management process – role of transportation – transportation principles and participants – contribution of various agencies in transportation.

15 Hours

# Module - III

Transportation Models: Various models of transportation (multimodal and intermodal) – merits of each all models of transportation – transportation performance costs and value measures – understanding – comparing – cost components of multimodal transportation.

15 Hours

#### Module - IV

Transportation Routing Decisions: Transportation administration – transportation operations management – consolidation of freight – various trends in transportation – application of information technology in transportation – E commerce – Types- intelligent transport management system.

15 Hours

#### Module-V

- 1. Sunil Chopra, Supply Chain Management
- 2. Agarwal, Logistics Supply Chain Management

#### **Number of Credit: 3**

All students are required to complete an Internship or project with the help of a supervising teacher. The project or Internship Viva evaluation will be conducted at the end of the semester and the evaluation process follows 100% external assessment. In Industrail training/Internship is to get a real life experience with the industry. In this programme all students will attach himself with a logistic organization approved by the Head of the Department of College. The duration of the training period must be 4 weeks. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the organization. All the above details should be submitted to the Department for evaluation.

### **SEMESTER III**

## **GEC3BC08 - BUSINESS COMMUNICATION**

Number of Credit: 4 Hours per Week: 4

## **Objectives:**

To enable the students with the concepts, tools and practices of business communication in an organisation

### Module - I

Basis of Communication: Meaning, Importance and process, Need and objectives of communication, 7c's of Communication, Barriers of communication, How to overcome communication Barrier.

15 Hours

### Module-II

Means/Media of Communication: - Verbal and non-verbal communication channel of communication formal & informal communication. Types of communication - Downward, upward, Horizontal or lateral, Diagonal or cross.

15 Hours

### Module – III

Listening as a Communication Tool: Importance types of listening, Barriers to effective listening – How to make listening effective. Speeches and Presentation - Speeches - Characteristics of a good speed, How to make speech effective - Presentation - Planning, preparation, organizing, rehearing and delivery.

10 Hours

### Module-IV

Groups: Importance of features, Advantages and Disadvantages techniques of Group decision making - Brain storming sessions, Nominal Group Technique, Delphian Technique, solving problems in Groups.

10 Hours

### Module - V

New Trends in Business Communication: E mail, Teleconferencing, video conferencing, SMS,

WebRTC, 5G Mobile internet, VoIP.

10 Hours

- 1. R.C. Bhatia. Business Communication.
- 2. R.K. Madhukar . Business Communication.
- 3. A. Shraf Ravi . Effective Technical Communication.

## **GEC3BS09 - BUSINESS STATISTICS**

Number of Credit: 4 Hours per Week: 4

## **Objectives:**

To enable students to describe data and make evidence based decisions using inferential statistics that are based on well-reasoned statistical arguments.

## Module-I

Introduction: Origin – Meaning - Scope and limitations of statistics - Relationship with business and industry.

10 Hours

## Module-II

Collection of Data: Collection - Classification and tabulation of statistical data - Pie diagrams - Graphic representation.

10 Hours

### Module-III

Measures of Central Tendency: Mean - Median and Mode - Meaning and Computation - Standard deviation - Coefficient of variation.

10 Hours

## Module-IV

Simple Correlation and Regression: Meaning - Karl Pearsion's Correlation - Rank correlation - Computations - Uses - Regression equations - Forecasting.

15 Hours

## Module - V

Time Series Analysis: Components of time series – Definition - Computation of Trend - Computation of seasonal variation (Simple average method only).

15 Hours

- 1. S.P. Gupta. Statistical methods. Sulthan Chand and sons. Revised Edition 1995.
- 2. D.N Elhance. Fundamental of Statistics. KITAB MAHAL Publishers.
- 3. B.L. Agarwal. Basic Statistics.
- 4. C.B. Gupta. An Introduction to Statistical Methods.

## SDC3LM09 - PRINCIPLES OF LOGISTICS INFORMATION SYSTEMS

Number of Credit: 5 Hours per Week: 5

## **Objectives**

To familiarize the students with the concepts, tools and practices of logistics information systems

## Module - I

Information Technology and Logistics: Electronic Data Interchange - Personal Computers Artificial Intelligence/Expert system - Communications Bar coding and Scanning - Electronic Data Interchange standards - Communication 15 Hours

### Module – II

Information Technology for Supply Chain Management: Bull whip effect - IT in supply chain - Business Process Reengineering - Enterprise Resource Planning - EDI Problems - Impact of Internet on SCM-Types of flows in SCM.

15 Hours

## Module-III

Logistics Information: Meaning— LIS — Definition — O b j e c t i v e s - Information functionality - activities involved in transaction system - Principles of designing or evaluating LIS applications.

15 Hours

### Module - IV

LIS Architecture: Importance - Two forms of activities - Planning and co-ordination flows and operating flows - Flow and use of integrated logistics information.

15 Hours

### Module - V

 $\label{lem:compound-methods-quantitative} Information Forecasting: Definition - Process - Component - Characteristic of forecast compound-methods - quantitative and qualitative-Forecast techniques - major areas-Forecast error - E-Commerce-Types-advantages and disadvantages.$ 

15 Hours

- 1. David J. Bloomberg, Stephen LeMay & Joe B. Hanna. Logistics. Prentice-Hall of India Pvt Ltd., New Delhi, 2003.
- 2. Donald J. Bowersox & David J. Closs. Logistical Management. Tata McGraw Hill Publishing Co. Ltd, New Delhi, 2004
- 3. Satish C. Ailawadi & Rakesh Singh. Logistics Management. Prentice-Hall of India Pvt Ltd., New Delhi, 2005
- 4. Donald Waters. Logistics. Palgrave Macmillan, New York, 2004
- 5. Krishnaveni Muthiah. Logistics Management & World Sea borne Trade. Himalaya Page 40 of 70 Publishing House, Mumbai, 1999

6. Sarika Kulkarni. Supply Chain Management, Tata Mc- Ashok Sharma Graw Hill Publishing Co Ltd., New Delhi,2004

## SDC3LM10 - INVENTORY MANAGEMENT

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

To enable the students with the concepts,tools and practices of inventory management

## Module - I

Inventory: Inventory Management – Inventory Control – Importance and Scope of Inventory Control – Types of Inventory – Costs Associated with Inventory – Organizational set up for Inventory Management.

15 Hours

### Module-II

Selective Inventory Control: Economic Order Quantity –Importance-Uses- Safety Stocks – Inventory Management Systems – Forecasting Techniques – Material Requirement Planning and Execution–Ratio Analysis on Inventory–Profit Margin.

15 Hours

## Module-III

Manufacturing Planning(MRP-II): Just in Time(JIT) – Work in Process Inventories – Make or Buy Decisions – Concept of Outsourcing – Factors Influencing Make or But Decisions – Trends in Make or Buy Decisions in context of core competency.

15 Hours

## Module-IV

Purpose of Inventory: Goods – Types of Goods – Finished Goods Inventories – General Management of Inventory – Stocks – Types of Stocks

15 Hours

## Module - V

Spare Parts Inventories: Use of Computers in Inventory Management – Evaluation of Performance of Materials Function – Criteria and methodology of evaluation.

15 Hours

- 1. Bose & D Chandra. Inventory Management. 1st Edition.
- 2. Sridhara Bhat. Inventory Management. 2nd Edition. 3. Bose & D Chandra. Inventory Management. 1st Edition

## SDC3LM11 - SHIPPING AND OCEAN FREIGHT LOGISTICS MANAGEMENT

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

- To familiarize the students with the concepts ,tools and practices of shipping and ocean freight logistics management
- To give a detailed idea about the documentation.

## Module - I

Shipping Industry and Business: Description of a ship – Uses of a ship or a floating vessel – Classification of ship(route point)(cargo carried) – Superstructure – Tonnages and Cubics – Drafts and Load lines – Flag Registration – Different Cargo (Packing, Utility or Value) – Trimming – Cleansing – Unitized Cargo.

15 Hours

### Module-II

Stevedoring, Lighterage Services and Security: Port Trusts – Operational unit – Services – Seaports – Vessel Operations – Pilotage – Stevedoring – Dock Labour Boards – charges – Automated Container Handling – Security at Ports and Harbours – Role of Security Agencies – Lighterage Services.

15 Hours

#### Module – III

Shipping Lines: Hub and Spoke – Advices – Containers – Container Nubering – Process Flow – Shipping Sales – Leads – Quotations – Customer Service.

15 Hours

## Module-IV

Operations: – Shipment Planning Basics – Preparing and Loading Containers – Types of container services – FCL – Consolidation – LCL – Advanced Scientific Shipment Panning – Container De-stuffing.

15 Hours

### Module - V

Documentation: Billing of Lading Basics – MBL – HBL – CY – CFS – Advanced Learning in Bills of Lading – Sea Way Bill – Combined Transport – MTO – Multimodal Trasport Document (MTD) – Invocing contents – Release of Cargo – Cross Trade and Documentation – Conditions of Contract – Trade Lane Development – Consortium.

15 Hours

- 1. John F. Wilson. Carriage of Goods by Sea. Harlow: Longman
- 2. J.R. Whittaker. Containerization. Hemisphere: Wiley
- 3. Cyril Frederick Hardy Cufley. Ocean Freights and Chartering. Adlard Coles Nautical

# SDC3LM12 - IT FOR BUSINESS LAB-II

Number of Credit: 3 Hours per Week: 3

# **Objectives:**

- To make them proficient in using computer for routine task like data analysis and data retrieval.
- Word Processing Software. -Creation master document and data. Mail Merge.
   Printing of merged document.
   10 Hours
- Spread Sheet Software. -Creation of a worksheet with advanced formatting techniques.
   -Using all types of functions, give due importance to financial functions. Creation of Charts and Diagrams.

20 Hours

• Internet. -Basic understanding for Internet connectivity. -E-Mail -Search Optimization Techniques 15 Hours

### **SEMESTER IV**

### GEC4ED11 - ENTREPRENEURSHIP DEVELOPMENT

Number of Credit: 4 Hours per Week: 4

## **Objectives**

- To familiarize the students with the concept of entrepreneurship
- To impart knowledge about the role of entrepreneurship institutions in India

### Module - I

Introduction to entrepreneurship-Definition and meaning-Distinction between entrepreneur and manager-Characteristics and traits of an entrepreneur-Skills-Barriers to entrepreneurship-Role and importance of Entrepreneurship in economic development-Factors affecting growth of entrepreneurship

10 Hours

### Module-II

Classification of Entrepreneurs-Dimensions of entrepreneurship-Intrapreneurship-Technopreneurship-Cultural entrepreneurship-International entrepreneurship-Social entrepreneurship-Women entrepreneurship-functions-problems-Solutions 15 Hours

# Module-III

Entrepreneurship in Agriculture sector- Entrepreneurship in Service sector-Entrepreneurship in MSME-MSME DEvolopment Act-Objectives-Features-Roles-Problems-Steps in setting up MSME

15 Hours

### Module-IV

Project identification- Features- Classification- Project management- Features-Steps-Advantages-Phases-Aspects of Project identification-Importance-Stages- Sources of project ideas- Constraints- 10 Hours

## Module - V

Project formulation — Significance-Stages-Project report-Importance-Contents-Problems-Entrepreneurial training-Contents of training programme-EDP-Objectives-methodology-Role-EDII-SIDBI-NIESBUD-DIC

10 Hours

- 1. Cliffton, Davis S. and Fylie, David E., Project Feasibility Analysis, John Wiley, New York, 1977.
- 2. Desai A. N., Entrepreneur and Environment, Ashish, New Delhi, 1990.
- 3. Drucker, Peter, Innovation and Entrepreileurship, Heinemann, London, 1985
- 4. Jain Rajiv, Planning a Small Scale Industry: A guide to Entrepreneurs, S.S. Books, Delhi, 1984
- 5. Kumar S. A., Entrepreneurship in Small Industry, Discovery, New Delhi, 1990

## **GEC4ME12 MANAGERIAL ECONOMICS**

Number of Credit: 4 Hours per Week: 4

## Objectives:

- To familiarize the students with the concepts, tools and practices of managerial economics in business management
- To help the students to understand the various pricing policies and practices in market.

#### Module I

Managerial Economics: Definition and characteristics – Nature and Scope - Economics Vs Managerial Economics - Decision making and forward planning – Relations hip of managerial economics with other disciplines-Role of managerial economist

10 Hours

### Module II

Basic concepts of Demand and Supply:- Demand function, Demand curve, Elasticity of Demand, Demand forecasting – Determinants of price elasticity of demand-elasticity of supply-Determinants of price elasticity of supply

10 Hours

### Module III

Theory of consumer behaviour and market structure —Utility- Cardinal Utility analysis — Law of diminishing marginal utility — consumer surplus; Ordinal Utility approach — indifference curve analysis — consumer equilibrium-Market structure:Definition and characteristics-Types of market structure-Perfect competition-features-necessary conditions-Monopoly-characteristics-Monopolistic competition-Oligopoly- characteristics

15 Hours

## Module IV

Pricing policies and practices: factors governing prices-objectives of pricing policy-Role of cost in pricing-demand factor in pricing-pricing methods-cost plus or full cost pricing-Target pricing-marginal cost pricing-going rate pricing-follow up pricing-Barometric pricing-customary prices-pricing of new products-penetrating pricing-price skimming

15 Hours

# Module V

Macro economics:Scope and importance-major concerns of macro economics- Indian economy – Basic characteristics of Indian economy – Issues in Indian economy: Problems of growth, unemployment, poverty, inequality in income

distribution, Inflation-Deflation

10 Hours

## Reference Books:

- 1. R.L. Varshney and K.L. Maheswari, Managerial Economics
- 2. Ahuja. HL; Business Economics, S. Chand & co.
- 3. D.N. Dwivedi, Managerial Economics
- 4. Dr. S. Sankaran, Managerial Economics
- 5. DM Mithani: Business Economics
- 6. Seth M L Text Book of Economic Theory

## SDC4LM13 - SUPPLY CHAIN MANAGEMENT

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

 To familiarize the students with the concepts, tools and practices of supply chain management.

### Module - I

Supply Chain Management and Logistics: An Introduction – Integrated Logistics Management – Concept – Evolution and Development – Difference – Necessity and objectives-Role – Scope – Functions and Importance – Local and International Supply Chains – Benefits and Issues – Types of Supply Chain management tool – SCM building blocks – Supply Chain Drivers and Obstacles – International Logistics and Supply Chain Management

20 Hours

### Module-II

Key Supply Chain Business Processes: Planning – Sourcing – Producing – Distributing and Paying – Managing material flow and distribution – Distribution and Planning Strategy – Warehousing and Operations Management – Transportation Management – Inventory Management.

15 Hours

### Module – III

Purchasing and Supplier Management: Sourcing and Supplier Management, Outsourcing – Global Sourcing – Vendor Identification – Selection – Evaluation – Development – Supplier Relationship Management – Supplier Quality Management – Supply Chain Performance.

15 Hours

### Module-IV

Forecasting Systems Design: Customer Service Management and Measurements – CRM – 5 views-SWOT analysis of CRM- Manufacturing Logistics – SCM Relationships – Third Party Logistics and Fourth Party Logistics – SCM Network Design and Facilities Development – SCM Planning and Development Strategies – Supply Chain Uncertainties – Supply Chain Vulnerabilities.

15 Hours

### Module - V

Supply Chain Coordination and Integration: Order fulfillment-Role of IT, Impact of Internet and E-Business – IT enabled SCM-Problems and Challenges of Supply chain

- 1. Martin Christopher. Logistics and Supply Chain Management
- 2. Sunil Chopra and Peter Meindal. Supply Chain Management
- 3. Donald J. Bowersox and David J. Closs. Integrated Logistics Management
- 4. N. Chandrasekharan, Supply Chain Management

## SDC4LM14 -INTERNATIONAL LOGISTICS MANAGEMENT

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

- To familiarize the students with the concepts, tools and practices of international logistics management.
- To give a detailed idea about the international warehousing and transportation system

## Module - I

Integrated Logistics Management: Concept, Evolution and Development, Importance of logistics management in international business, International Logistics: functions and intermediaries. Issues involved in movement of goods. Logistics information system - logistics information systems design- IT in logistics-Total cost approach to Logistics-Liabilities of carriers-Marine insurance for cargo.

15 Hours

#### Module - II

The General Structure of Shipping Industry: Cargo types, vessels and vessel characteristics, liner service-bulk service-tramp service-the ocean liner conference system-freight structure and practices- coordination, role of intermediaries — forwarding and clearing agents-freight brokers-stevedores and shippers agents.

10 Hours

# Module-III

Warehousing and Containerization: Warehousing -repacking and other value added service provided by logistics service providers- 3 PL and 4 PL logistics service-Containerization: types of containers and ICD-Port system and sub systems, port organization and management- Responsibilities of port trusts, growth and status of ports in India, Inland water transport, issues in sea transport- Regulatory authorities for sea transport and their roles in india.

15 Hours

### Module-IV

Introduction to Road Transport System: Classification of vehicles-types of roads in india, full truckload business(FTL) and less than truckload business(LTL)- Road parcel service business- Fleet management systems- Documents and permits required in road transport system- Problems in road transportation- Regulatory authorities involved with road transport system in india

20 Hours

Rail Transport Systems: Types of railway wagons, rakes, marshalling operations and yards-Railway Parcel service operations- Procedure for availing railway parcel or goods service and the documentations involved-Types of railway –Advantages and disadvantages railway in railway transport - Organization of Indian railways.

15 Hours

- 1. James F. Robbson & William C. Capaciono (editors), The Logistics Handbo
- 2. Donald F. Wood et.al., International Logistics
- 3. Douglas Lambert and James R. Stock, Strategic Logistics Management

## SDC4LM15 - EXPORT AND IMPORT - POLICIES & PROCEDURES

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

- To familiarize the students with the procedures of export and import between countries
- To familiarize the students with the policies of export and import between countries

## Module - I

International Trade: Meaning- Features, Advantages-Scope- Benefits-Problems-Domestic business v/s International business -Methods of entry into foreign market.

15 Hours

## Module-II

International Trade Agreements : Bilateral, Plurilateral and multilateral agreements-GATT and WTO-WTO agreements-TRIPS-TRIMS-GATS and AoA-Trade facilitation Issues\_
15 Hours

### Module – III

F.T.P.(Latest): Highlights. Export Incentives, Schemes, Assistance viz EPCG, FMS, FPS, MDA, DBK, Institutional Frame Work – Export Promotion Organization viz EPC, CBDGFT

15 Hours

### Module-IV

International Financial Institutions-IMF,world Bank IBRD-IDA-IFC-MIGA- ICSID ,EXIM Bank,ADB-functions and role in economic devolopment

15 Hours

### Module - V

Regional economic integrations : Meaning and rationale-Forms of integrations-EU-NAFTA-ASEAN-SAFTA-APEC and other groupings-

15 Hours

- 1. Government of India: Export Import Policy
- 2. Dr. Khushpat S, Jain. Export Procedures and Documentation. Himalaya Publishing House
- 3. T.A.S. Balagopal. Export Management. Himalaya Publishing House
- Dr. Francis Cherunilam. International Marketing (Text and Cases). Himalaya Publishing
  House

  Page 53 of 70
- 5. Paras Ram. Export-What, Where and How. Anupam Publishers

# SDC4LM16 - INTERNSHIP / PROJECT

**Number of Credit: 3** 

All students are required to complete an Internship or project with the help of a supervising teacher. The project or Internship Viva evaluation will be conducted at the end of the semester and the evaluation process follows 100% external assessment. In Industrail training/Internship is to get a real life experience with the industry. In this programme all students will attach himself with a logistic organization approved by the Head of the Department of College. The duration of the training period must be 4 weeks. The report and the specimens of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the organization. All the above details should be submitted to the Department for evaluation.

#### SEMESTER V

## **GEC5MM13 - MARKETING MANAGEMENT**

Number of Credit: 4 Hours per Week: 4

## **Objectives:**

- To acquaint the students with the marketing principles and practices
- To understand the process of marketing in a business firm

#### Module - I

Marketing- classification of market-Features-marketing and selling-Approaches-Scope-Marketing concepts-Traditional concepts-modern concepts-Modern marketing-features-Marketing mix-Elements-Importance- Factors affecting marketing mix-Marketing Environment-Internal marketing Environment-External marketing Environment-Micro Environment-Macro Environment

10 Hours

### Module-II

Product-product mix- - product life cycle - importance of branding -packaging and labeling-Place- market segmentation-importance-objectives-process-need-Target marketing-advantages-steps

10 Hours

## Module-III

Promotion-meaning and importance-promotion mix-advertising-personal selling-sales promotion-pubic relation-factors affecting promotion mix decisions 15 Hours

### Module-IV

Rural marketing- growing importance-unique features of rural markets-drawback-Difference between rural marketing and urban marketing--service marketing vs product marketing-green marketing-social marketing-relationship marketing-niche marketing

15 Hours

## Module-V

E-marketing-traditional marketing vs e-marketing-internet marketing-e advertising-new trends in internet marketing-e branding-e-payment systems and security features in internet

10 hours

- 1. Philip Kotler, Jha & Koshy, Marketing Management, Pearson Education, New Delhi.
- 2. SHH Kazmi, Marketing Management Text and Cases, Excel Books, New Delhi.
- 3. V. S Ramaswami & S. Namakumary, Marketing Management, MacMillan Publishers, New Delhi. Page 55 of 70
- 4. Cranfield, Marketing Management, Ane Books, New Delhi.

5. D. D Sharma, Marketing Research

### GEC5HR14 - HUMAN RESOURCE MANAGEMENT

Number of Credit: 4 Hours per Week: 4

# **Objectives:**

- To familiarize the students with the different aspects of managing Human resource in the organization
- To equip the students with appropriate knowledge and skills required for acquisition, development and retention of human resources

## Module - I

Introduction to Human Resource Management-features-Scope-Functions- human resource manager-Role-Powers and responsibilities-Limitations-Qualities

15 Hours

### Module-II

Human resource planning-need and importance-process--job analysis-process-significance-methods-Job description-contents-Job specification-content-Job design-Factors affecting-Methods of job design- Job evaluation-objectives-advantages-procedure-limitations-

15 Hours

## Module-III

Human resource devolopment-characteristics-training- need for training-objectives-

Approaches-methods of training-training evaluation-methods-advantages-Recruitment-methods-sources-Poaching/Raiding

10 Hours

## Module-IV

Perfomance appraisal and career planning-Need and importance-objectives-process- problems of perfomance appraisal-concept of career planning- features-process- -limitations-career devolopment -methods-objectives
10 Hours

# Absenteeism-causes-Rights of grievant-Essentials of a good grievance procedure

10 Hours

- 1. Human resource management-Text and cases  $-VSP\ Rao$
- 2. Human resource management-Snell,Bohlander
- 3. Personal management and human resources-Venkata ratnam .Srivasthava
- 4. Edwin Philipo, Personnel management

## GEC5BE15 - BANKING AND INSURANCE MANAGEMENT

Number of Credit: 4 Hours per Week: 4

## **Objectives**

- To familiarize students with the modern trends in banking
- To acquaint the students with the banking principles and practices

### Module-I

Introduction to banking:Meaning and definition- characteristicsorigin and devolopment of banking-Types of bank-Banks and Economic devolopment-Innovative functions in banking

10 Hours

Module-II

Structure of banking in india:IDBI-EXIM BANK -objectives and functions -Co-operative banks-NABARD objectives anf functions -NHB-objectives anf functions-Functions of commercial banks-Central Bank-RBI-Functions-Departments-

10 Hours

Module – III

Negotiable Instruments: Definition-Characteristics-Types-Parties to negotiable instruments-Cheques-crossing of cheques-Drafts- -Endorsement-Significance-kinds of endorsement General rules regarding endorsement-Regularity of endorsement-Electronic Payments-Types-Characteristics

15 Hours

Module-IV

E-Banking:need and importance- CORE- Virtual banking-ATM-Credit card-Debit card-Smart card-Internet banking-Mobile banking\_Telebanking-Online payment

10 Hours

 $Module\!-\!V$ 

Introduction to insurance: Concept-Need of insurance-Insurance as a security tool-Insurance and economic devolopment- Principles of insurance- Various kinds of insurance

(Fire,Marine cargo ,Medical.motor vehicle,frieght,property insurance)-General principle of Life insurance contract IRDA-Role-power-functions-duties 15 Hours

- 1.Modern Banking -Dr.R.K Datir
- 2.Indian banking system-I.V Trivedi & Renu jatana
- 3. Elements of Banking and Insurance Jyotsana sethi & Nishwan Bhatia

### SDC5LM17 - OPERATIONS MANAGEMENT

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

- To familiarize the students with the concepts, tools and practices of operation management
- To learn about the decisions and processes of operation management in a business firm

### Module - I

Operations management-meaning, definitions, scope and objectives-interaction of operations management with other areas-manufacturing and non manufacturing operations and their characteristics

15 Hours

### Module-II

Facilities planning-plant location-factors determining plant location-plant layout-process layout and product layout-materials handling-MRP-principle equipments.

15 Hours

## Module – III

Capacity planning-importance of capasity decisions-Determinants of effective capasity-maintenance management-types of maintenance-work study- time and method study-work measurement, meaning, scope and importance

15 Hours

## Module-IV

Operations planning and control-objectives of operation planning-planning procedureproduction planning functions- operation control-meaning, importance and objectives-techniques of operation control

15 Hours

## Module-V

Quality control-ojectives —need for quality-concept of quality-quality planning-statistical quality control-control charts -management of quality in organizations-quality circles-Characteristics-objective-TQM- Characteristics-principles-benifits

15 Hours

- 1. Russell, Roberta S and Bernard W Taylor III, Operations Management, Pearson Education, New Delhi 2004
- 2. Chase : Operations management for Competitive Advantage, Tata McGraw Hill,New Delhi.
- 3.Buffa, E.S 'Modern Production Management', New York, John Wiley,1987
- 4. Adam, E.E and Ebert R.J., 'Production and operations management' Prentice Hall of india ,New Delhi 1995
- 5. Chary, S.N. 'Production and Operations Management', Tata McGraw Hill, New Delhi 19

## SDC5LM18 - RETAIL MANAGEMENT

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

- To give an overview of the conceptual aspects of retail marketing management
- To familiarize students with significance of retail industry

## Module - I

Introduction to Retailing: Retailing in India – significance of retail industry-types of retailers-retailer characteristics-types of merchandise- multi- channel retailing-retail market strategy.

15 Hours

### Module-II

Consumer Buying Behavior: Factors influencing consumer behavior— The buying process—types of buying decisions—Consumer buying decision process—market segmentation—Bases for market segmentation—post purchase behaviour—Information system and supply chain management,—CRM process in retailing.

15 Hours

### Module-III

Retail Store Location:Factors affecting location-Types of retail location-Freestanding store-Part of Business district-Part of Shopping center-Site selection-Steps involved in choosing a retail location-Retail organization – human resource, finance and operation dimensions.

15 Hours

### Module-IV

The Merchandise Management: Types of merchandise- Managing the merchandise planning process- merchandise buying and handling process - Role of merchandiser-retail pricing-category management-Six components

15 hours

### Module - V

Retail Communication Mix:Methods of Retail communication mix-Advertising-sales promotion-personal selling-Publicity in marketing-Store layout-Factors affecting store layout-interior and exterior retail store layout -Store design and visual merchandising-Store design objectives- retail customer service

15 Hours

- 2. Swapna Pradhan, Retailing Management, Tata Mc Graw Hill (3rd Edition), 2010
- 3. Piyush Kumar Sinha, Uniyal, Managing Retailing, Oxford University Press, 2007
- 4. Chetan Bajaj, Rajnish Tuli & Nidhi Srinivastava, Retail Management, Oxford University Press, 2010
- 5.Barry Berman & Joel Evans, Retail Management A strategic Approach (11th Edition), 2010

## SDC5LM19 - AIR CARGO LOGISTICS MANAGEMENT

Number of Credit: 5 Hours per Week: 5

## **Objectives:**

- To familiarize the students with the concepts, tools and practices of Air cargo logistics management
- To give a detailed idea about the Airline marketing

### Module - I

Introduction to Air Cargo: Advantages-Definition-Aviation and airline terminology –IATA areas –country –currency – airlines – aircraft layout – different types of aircraft – aircraft manufacturers – ULD – International air routes – airports – codes – consortium – hub & spoke

15 Hours

### Module-II

Introduction to Airline Industry: History – Importance of Air cargo industry-navigation systems – air transport system – functions – terminal area – landside operations – civil aviation – safety and security – aircraft operator's security program – security v/s facilitation – ICAO security manual – training and awareness in airline – rescue and fire fighting – issues and challenges – airline regulations

15 Hours

### Module-III

Airline marketing and customer service standardization in logistics – airfreight exports and imports– understanding marketing, environment, marketing research, strategies and planning, segmentation, SWOT, marketing management control, consignee controlled cargo –sales leads –routing instructions –customer service, future trends.

15 Hours

### Module-IV

Air Freight Forwarding: Air freight exports and imports – special cargoes – consolidation – documentation – Air Way Bill (AWB) – communication – handling COD shipments – POD – conditions of contract – dangerous (DGR) or hazardous goods.

15 Hours

### Module-V

Advices - Booking - SLI - Labeling - Volume/Weight ratio - shipment planning - TACT - Air cargo rates and charges - aircraft types-aircargo services

15 Hours

- 1. Simon Taylor, Air transport logistics, Hampton
- 2. Paul Jackson and William Brackenridge, Air cargo distributions: A management analysis of its economic and marketing benefits, Grower Press.
- 3. Peter S. Smith, Air Frieght: operations, marketing and economics, Faber Page 65 of 70
- 4. Sung Chi-Chu, 4th Party Cyber Logistics for Air Cargo, Boston: Kluwer Academic

# Publishers.

- 5. Mark Wang, Accelerated Logistics, Santa Monica CA.
- 6. John Walter Wood, Airports: Some elements of design and future developments.

- 7. P.S. Senguttavan, Fundamentals of Air transport management.
  8. Oxford Atlas Oxford Publishing
  9. Ratandeep Singh, Aviation Century: Wings of change A global survey.

# SDC5LM20 PROJECT/ INDUSTRAIL VISIT

# Number of credit: 3

All students are required to do a Industrail visit or Project with the help of a supervising teacher. The project Viva evaluation will be conducted at the end of the semester and the evaluation process follows 100% external assessment. In industrail visit students can go to a logistic company/port/shipyard and prepare a report based on the visit.

## **SEMESTER:VI**

## SDC6LM21 - INTERNSHIP

**Number of Credit: 30** 

The objective of Industrail training/ Internship is to get a real life experience with the industry. In this programme all students will attach himself with a logistic organization approved by the Head of the Department. The duration of the training period must be 6 months. The student should actively participate in the operations of the organization and should work like any other employee of that organization. At the end of the internship, the student should prepare a comprehensive report. The report of the work done by the student should be attested by the organization. Student should also produce a certificate of internship from the organization. All the above details should be submitted to the Department for evaluation.

JOB ROLES  (AT THE COMPLETION OF 6 SEMESTERS)			
Sl.No.	Job Title	Qualification Pack Code	NSQF Level
1	Customer Relationship Manager	NA	NA
2	Human Resource Manager	NA	NA
3	Air Cargo Logistics  Management	NA	NA