#### **UNIVERSITY OF MUMBAI** No. UG/120 of 2016-17

#### CIRCULAR:-

A reference is invited to the Syllabi relating to the B.Com. (Transport Management) degree course vide this office Circular No. UG/12 of 2014 dated 1st July, 2014 the Principals of affiliated Colleges in Commerce are hereby informed that the approved by the Academic Council at its meeting held on 24th June, 2016 vide item No.4.75 and that in accordance therewith, the revised syllabus as per Choice Based Credit System for B. Com (Transport Management) for (Sem. I to VI)-Course Structure (Sem. I & II), which is available on the University's web site (www.mu.ac.in) and that the same has been brought into force with effect from the academic year 2016-17.

MUMBAI - 400 032 27 October, 2016 To,

(Dr.M.A. Khan) REGISTRAR

The Principals of affiliated Colleges in Commerce and the Heads of recognized Institutions concerned.

#### A.C/4.75 /24/06/2016

No. UG//20-A of 2016-17

MUMBAI-400 032

27-October, 2016

Copy forwarded with compliments for information to:-

- 1) The Dean, Faculty of Commerce,
- 2) The Director, Board of College and University Development,
- 3) The Controller of Examinations,
- 4) The Professor-cum- Director, Institute of Distance and Open Learning (IDOL),
- 5) The Co-Ordinator, University Computerization Centre.

(Dr.M.A. Khan) REGISTRAR

PTO..

## University of Mumbai



### **B.Com.** (Transport Management) **Programme Three Year Integrated Programme -Six Semesters** Course Structure

**Under Choice Based Credit System** 

To be implemented from Academic Year- 2016-2017 **Progressively** 

Board of Studies-in-Trade, Transport and Industry, University of Mumbai

#### **B.Com.** (Transport Management) Programme

## Under Choice Based Credit, Grading and Semester System Course Structure

F.Y.B.Com. (Transport Management)

(To be implemented from Academic Year- 2016-2017)

No. of Courses	Semester I	Credits	No. of Courses	Semester II	Credits	
1	Elective Courses (EC)		1	Elective Courses (EC)		
1	Transport Management	03	1	Logistic and Supply Chain Management	03	
2	Road and Road Transport	03	2	Air Transport	03	
3	Railway Transport	03	3	Shipping and Water Transport	03	
2	Ability Enhancement Courses (A	AEC)	2	Ability Enhancement Courses (AEC)		
2A	Ability Enhancement Compulso Course (AECC)	ry	2A Ability Enhancement Compulsory Course (AECC)		ory	
4	Business Communication-I	03	4	Business Communication-II	03	
2B	*Skill Enhancement Courses (St	<i>C)</i>	2B	**Skill Enhancement Courses (	(SEC)	
5	Any one course from the following list of the courses	02	5	Any one course from the following list of the courses	02	
3	Core Courses (CC)		3	3 Core Courses (CC)		
6	Business Economics-I	03	6	Traffic Management	03	
7	Business Mathematics	03	7 Financial Accounting (		03	
Total Credits		20		Total Credits	20	

	*List of Skill Enhancement Courses (SEC) for Semester I (Any One)		**List of Skill Enhancement Courses (SEC) for Semester II (Any One)
1	Foundation Course - I	1	Foundation Course - II
2	Foundation Course in NSS - I	2	Foundation Course in NSS - II
3	Foundation Course in NCC - I	3	Foundation Course in NCC - II
4	Foundation Course in Physical Education - I	4	Foundation Course in Physical Education - II
Note: Course selected in Semester I will continue in Semester II			

#### **S.Y.B.Com.** (Transport Management)

#### (To be implemented from Academic Year- 2017-2018)

No. of Courses	Semester III	Credits	No. of Courses	Semester IV	Credits
1	Elective Courses (EC)		1	Elective Courses (EC)	
1, 2 & 3	*Any three courses from the following list of the courses	09	1,2 & 3	*Any three courses from the following list of the courses	09
2	Ability Enhancement Courses (A	AEC)	2	Ability Enhancement Courses (AEC)	
4	Information Technology in Transport-I	02	4	Information Technology in Transport-II	02
3	Core Courses (CC)		3	Core Courses (CC)	
5	Service Marketing	03	5	Multi Modal Transport	03
6	Warehousing and Inventory Control	03	6	Surveys in Transport	03
7	Transport Law	03	7	Business Economics-II	03
Total Credits		20		Total Credits	20

*List of Discipline Related Elective(DRE) Courses for Semester III (Any Three)		*List of Discipline Related Elective(DRE) Course for Semester IV (Any Three)	
1	Production and Quality Management	1	Procurement Management
2	Customs Procedures and Cargo Handling	2	Traffic Management
3	Transport Project Management	3	Transportation, Containerization and Distribution Management
4	Financial Accounting	4	Taxation and Transportation
5	Managerial Skill Development	5	Health and Safety and Facility Management

#### **T.Y.B.Com.** (Transport Management)

(To be implemented from Academic Year- 2018-2019)

No. of Courses	Semester V	Credits	No. of Courses	Semester VI	Credits
1	Elective Courses (EC)		1	Elective Courses (EC)	
1,2,3 & 4	*Any four courses from the following list of the courses	12	1,2,3 & 4	*Any four courses from the following list of the courses	12
2	Core Courses (CC)		2	Core Courses (CC)	
5	Port Operations and Management	04	5	Transport Policy and Documentation	04
3	* Project Work		3	*Project Work	
6	Project on Internship Training	04	6	Project work	04
	Total Credits	20	Total Credits 2		

**Note:** Project work is considered as a special course involving application of knowledge in solving/analyzing/exploring a real life situation/ difficult problem. Project work would be of 04 credits each. A project work may be undertaken in any area of Elective Courses/ study area

	*List of Elective Courses for Semester V (Any Four)		*List of Elective Courses for Semester VI (Any Four)
1	Human Resource Management and Industrial Relations	1	International Trade and Transport
2	Transport Costing and Pricing	2	Fleet Operations and Management
3	Transport Insurance and Risk Management	3	Analytical Modelling in Transport
4	Strategic Management	4	Re-Engineering and Turnaround Management
5	Maritime Transport and Economics	5	Business Environment and Ethics
6	Transport Planning (Urban, Rural, Public, Mass)	6	Community Development Project

## University of Mumbai



# Revised Syllabus of Courses of B.Com. (Transport Management) Programme at First Year Semester I and II

Under Choice Based Credit, Grading and Semester System

(To be implemented from Academic Year- 2016-2017)

Board of Studies-in-Trade, Transport and Industry, University of Mumbai

Board of Studies-in-Trade, Transport and Industry, University of Mumbai

#### **B.Com.** (Transport Management) Programme

## Under Choice Based Credit, Grading and Semester System Course Structure

#### F.Y.B.Com. (Transport Management)

(To be implemented from Academic Year- 2016-2017)

No. of Courses	Semester I	Credits	No. of Courses	Semester II	Credits
1	1 Elective Courses (EC)		1	Elective Courses (EC)	
1	Transport Management	03	1	Logistic and Supply Chain	03
				Management	
2	Road and Road Transport	03	2	Air Transport	03
3	Railway Transport	03	3	Shipping and Water	03
				Transport	
2	Ability Enhancement Courses (A	AEC)	2 Ability Enhancement Courses (A		AEC)
2A	Ability Enhancement Compulsory Course (AECC)		2A	Ability Enhancement Compulsory Course (AECC)	
4	Business Communication-I	03	4	Business Communication-II	03
2B	*Skill Enhancement Courses (SE	C)	2B	**Skill Enhancement Courses (	SEC)
5	Any one course from the	02	5	Any one course from the	02
	following list of the courses			following list of the courses	
3	Core Courses (CC)		3	Core Courses (CC)	
6	Business Economics - I	03	6	Traffic Management	03
7	Business Mathematics	03	7	Financial Accounting	03
Total Credits		20		Total Credits	20

	*List of Skill Enhancement Courses (SEC)		**List of Skill Enhancement Courses (SEC)		
	for Semester I (Any One)		for Semester II (Any One)		
1	Foundation Course - I	1	Foundation Course - II		
2	Foundation Course in NSS - I	2	Foundation Course in NSS - II		
3	Foundation Course in NCC - I	3	Foundation Course in NCC - II		
4	Foundation Course in Physical Education - I	4	Foundation Course in Physical Education - II		

te: Course	selected in Se	mester I will co	ontinue in Sen	nester II	

#### **B.Com.** (Transport Management)

## Under Choice Based Credit, Grading and Semester System Course Structure

(To be implemented from Academic Year- 2016-2017)

#### Semester I

No. of Courses	Semester I	
1	Elective Courses (EC)	
1	Transport Management	03
2	Road and Road Transport	03
3	Railway Transport	03
2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulsory Course (AECC)	
4	Business Communication-I	03
2B	*Skill Enhancement Courses (SEC)	
5	Any one course from the following list of the courses	02
3	Core Courses (CC)	
6	Business Economics-I	03
7	Business Mathematics-I	03
	Total Credits	20

	*List of Skill Enhancement Courses (SEC)				
	for Semester I (Any One)				
1	Foundation Course - I				
2	Foundation Course in NSS - I				
3	Foundation Course in NCC - I				
4	Foundation Course in Physical Education - I				

#### **Revised Syllabus and Question Paper Pattern of Courses of**

# Revised Syllabus of courses of B.Com. (Transport Management) Programme at Semester I with effect from the Academic Year 2016-2017

#### **Elective Courses (EC)**

#### 1. Transport Management

Sr. No.	Modules	No. of Lectures
1	Introduction to Transport Management and System	15
2	Transport Planning	15
3	Transport Services , Costing and Performance	15
4	Administration and Control	15
	Total	60

Sr. No.	Modules/ Units		
1	Introduction to Transport Management and System		
	<ul> <li>Transportation- meaning, features, importance, functions, role, operational characteristics of transport, development of transport in India.</li> <li>Transport functions and systems.</li> <li>Challenges faced by Indian transport system.</li> <li>Impact of Transportation</li> <li>Modes of transport- air, water, land and others</li> <li>Means of transportation in India - Traditional Public road transport, Urban rail transport, Other local transport, Long distance transport, Aviation, Ports &amp; shipping, Waterways, Pipelines, Utility vehicle, Heavy hauler, BRTS</li> <li>Elements and components of transport.</li> <li>Transport Units</li> <li>Multi- Modal Transport.</li> <li>Intermodal Transport.</li> </ul>		
2	Intermodal Transport.  Transport Planning		
	<ul> <li>Transportation planning- Importance Methods, Steps, Interventions, Policy instrument transportation planning process, metropolitan planning</li> <li>Comprehensive Transport Planning- Factors required for planning process (Issues, Current Practices, and future recommendations), comparing conventional and comprehensive planning, Best practices in comprehensive planning.</li> <li>Integrated public transport planning.</li> <li>System Approach to transportation planning.</li> <li>Transportation Principles &amp; participants</li> <li>Transport Forecasting.</li> </ul>		
3	Transport Services , Costing and Performance		
	<ul> <li>Transportation Services-</li> <li>Terminal Services- Consolidation, dispersion, shipment services, vehicle services, interchange, loading and unloading, weighing, tracing, expediting.</li> <li>Line Haul Services- reconsignment, diversion, pulling, stopping in transit, transit privilege</li> <li>Transportation Documentation- domestic and international.</li> <li>Transportation costing and pricing- concepts, key cost driver, modal rate development, current issues and practices.</li> <li>Transportation performance analysis- symptoms of poor transportation management, main key performance indicators. Performance by transport mode.</li> </ul>		

Sr. No.	Modules/ Units	
4	Administration and Control	
	<ul> <li>Organization in transport sector - National and International levels , Functions and Role.</li> <li>Indian road network - Problems classification, Institutional framework, Rural road transport program, Road maintenance</li> <li>Urban public transport in India- Current status, Recent development, Responsibility of government &amp; public agency, Future scenario, Urban public transport modes, Issue in urban transport Strategies for urban transport in India.</li> <li>Transport Regulations- Need, Importance and Benefits, Areas of Regulation – economic, physical and social.</li> <li>Routing and Scheduling- Importance, benefits and problems of route planning and scheduling, principles of effective routing and scheduling.</li> <li>Land use forecast.</li> <li>Transportation problems- Issues, Goals &amp; Objectives , Evaluation, Stakeholders input, Environment, Smart growth &amp; sustainability, Energy , Technology, Economic &amp; financial issues and other</li> </ul>	
	New Development in transport sector	

#### Elective Courses (EC)

#### 2. Roads and Road Transport

Sr. No.	Modules	No. of Lectures
1	Road Transport System in India	15
2	Road Transport in India	15
3	Passenger Transport	15
4	Recent Development in Roads & Road Transport	15
	Total	60

Sr. No	Modules / Units		
1	Road Transport System in India		
	Road Network - Historical growth of road network - Nagpur Plan - Development in Planned Economy Classifications of Roads in India: National Highways, Freeway Highways, International Highways, State Highways, District Roads, Village Roads, Borde Roads - Advantage of Road Transport - Problems of Road Transport National Highway network - National Highway Development Plan - NHDP Phase I - NHDP Phase II - NHDP Phase III - NHDP Phase IV - NHDP Phase V - NHDP Phase VI - NHDP Phase VII - Status of Development of Golden Quadrilateral		
2	Road Transport in India		
	Passenger Road Transport System (PRTS) in India - Operational Framework of passenger Road Transport System in India - (a) State Road Transport Corporations; (b) Departmental undertaking; (c) Municipal undertaking; (d) Government Companies  Problems of PRTS in India - Legal constraints - Heavy burden of tax - Issue of Industrial relation. Nationalisation of Road Transport Industry - Privatisation - Change of outlook - Social welfare. Regulatory Mechanism		
3	Passenger Transport		
	Urban Transport : means of transport - Mass Transport System - Passenger Bus Service - Intermediate Public Transport (IPT) - Motorbikes - Auto Rickshas - Cycle Rickshas - Personal Modes - Urban Transport Problems - Rural Transport - Means of rural transport - Importance of rural transport  Freight Transport: Road Goods Transport Industries (RGTI) / Trucking Industries - Competition and Regulation in the Road Goods Transport Industry - Freight Rates, Operator Costs and Industry Profitability - Structure of the highway freight industry - Freight rates and industry profitability - Quality of service The vehicle fleet - Costs of truck delays and facilitation payments - Trucking safety		
4	Recent Development in Roads & Road Transport		
	National Urban Renewal Mission (NURM) - National Highways, Strategic roads, Roads of Economic and Inter- State importance, Road development in sensitive border areas and tribal roads. Review and Monitoring of National Highway Development Project comprising Golden Quadrilateral and North-South, East-West corridor projects. Examination of proposals from various States in the North- Eastern region for providing assistance through Non- lapsable Central Pool of Resources. Examining proposals received for the consideration of High Powered Committee on BOT projects. Examining proposals relating to National Highway Development Project for consideration of National Highways Authority of India Board. FDI, Build-Operate-Transfer (BOT) - NABARD - Rural Infrastructure Development Fund (RIDF).		



#### **Elective Courses (EC)**

#### 3. Rail Transport

Sr. No.	Modules	No. of Lectures
1	Introduction to Indian Railways	15
2	Mobility of Indian Railways to Passengers	15
3	Mobility of Indian Railways to Goods & Supplies	15
4	Railways Operation Managements	15
	Total	60

Sr. No	Modules / Units
1	Introduction to Indian Railways
	Background of Indian Railways Railway Transportation in India Today and its
	Significance, Railway Organization
2	Mobility of Indian Railways to Passengers
	Types of Travel
	Convenience and Comfort
	Variations over time and space.
	Railway Tourism
3	Mobility of Indian Railways to Goods & Supplies
	Node & Links
	Supply Chain
	Commodity Transport across India and other countries
4	Railways Operation Managements
	Costing & Prizing of Railway Transport Services
	HRM in Indian Railways
	Financial / Aspects and Revenue Generation

#### **Ability Enhancement Courses (AEC)**

#### 4. Business Communication - I

Sr. No.	Modules	No. of Lectures
1	Theory of Communication	15
2	Obstacles to Communication in Business World	15
3	Business Correspondence	15
4	Language and Writing Skills	15
	Total	60

Sr. No.	Modules / Units	
1	Theory of Communication	
	Concept of Communication: Meaning, Definition, Process, Need, Feedback Emergence of Communication as a key concept in the Corporate and Global wo Impact of technological advancements on Communication Channels and Objectives of Communication: Channels- Formal and Informal- Vertical, Horizontal, Diagonal, Grapevine Objectives of Communication: Information, Advice, Order and Instruction Persuasion, Motivation, Education, Warning, and Boosting the Morale Employees (A brief introduction to these objectives to be given) Methods and Modes of Communication: Methods: Verbal and Nonverbal, Characteristics of Verbal Communication Characteristics of Non-verbal Communication, Business Etiquette Modes: Telephone and SMS Communication 3 (General introduction to Telegrato be given) Facsimile Communication [Fax] Computers and E- communication Video and Satellite Conferencing	
2	Obstacles to Communication in Business World	
	Problems in Communication /Barriers to Communication:  Physical/ Semantic/Language / Socio-Cultural / Psychological / Barriers, Ways to Overcome these Barriers  Listening: Importance of Listening Skills, Cultivating good Listening Skills – 4  Introduction to Business Ethics:  Concept and Interpretation, Importance of Business Ethics, Personal Integrity at the workplace, Business Ethics and media, Computer Ethics, Corporate Social Responsibility  Teachers can adopt a case study approach and address issues such as the following so as to orient and sensitize the student community to actual business practices:  Surrogate Advertising, Patents and Intellectual Property Rights, Dumping of Medical/E-waste,  Human Rights Violations and Discrimination on the basis of gender, race, caste, religion, appearance and sexual orientation at the workplace  Piracy, Insurance, Child Labour	
3	Business Correspondence	
	Theory of Business Letter Writing:  Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of Effective Letter Writing, Principles of effective Email Writing,  Personnel Correspondence:	

	Statement of Purpose, Job Application Letter and Resume, Letter of Acceptance of		
	Job Offer, Letter of Resignation		
	[Letter of Appointment, Promotion and Termination, Letter of Recommendation		
	(to be taught but not to be tested in the examination)]		
Sr. No.	Modules / Units		
4	Language and Writing Skills		
	Commercial Terms used in Business Communication		
	Paragraph Writing:		
	Developing an idea, using appropriate linking devices, etc		
	Cohesion and Coherence, self-editing, etc [Interpretation of technical data,		
	Composition on a given situation, a short informal report etc.]		
	Activities		
	<ul><li>Listening Comprehension</li></ul>		
	Remedial Teaching		
	<ul><li>Speaking Skills: Presenting a News Item, Dialogue and Speeches</li></ul>		
	<ul><li>Paragraph Writing: Preparation of the first draft, Revision and Self – Editing,</li></ul>		
	Rules of spelling.		
	■ Reading Comprehension: Analysis of texts from the fields of Commerce and		
	Management		

#### Skill Enhancement Courses (SEC)

#### 5. Foundation Course - I

Sr. No.	Modules	No. of Lectures
	Over developed to disp. Conintry	
1	Overview of Indian Society	05
2	Concept of Disparity- 1	10
3	Concept of Disparity-2	10
4	The Indian Constitution	10
5	Significant Aspects of Political Processes	10
	Total	45

Sr. No.	Modules / Units		
1	Overview of Indian Society		
	Understand the multi-cultural diversity of Indian society through its demographic		
	composition: population distribution according to religion, caste, and gende		
	Appreciate the concept of linguistic diversity in relation to the Indian situation;		
	Understand regional variations according to rural, urban and tribal characteristics;		
	Understanding the concept of diversity as difference		
2	Concept of Disparity- 1		
	Understand the concept of disparity as arising out of stratification and inequality;		
	Explore the disparities arising out of gender with special reference to violence		
	against women, female foeticide (declining sex ratio), and portrayal of women in		
	media;Appreciate the inequalities faced by people with disabilities and		
	understand the issues of people with physical and mental disabilities		
3	Concept of Disparity-2		
	Examine inequalities manifested due to the caste system and inter-group conflicts		
	arising thereof; Understand inter-group conflicts arising out of communalism;		
	Examine the causes and effects of conflicts arising out of regionalism and linguistic		
	differences		
4	The Indian Constitution		
	Philosophy of the Constitution as set out in the Preamble; The structure of the		
	Constitution-the Preamble, Main Body and Schedules; Fundamental Duties of the		
	Indian Citizen; tolerance, peace and communal harmony as crucial values in		
	strengthening the social fabric of Indian society; Basic features of the Constitution		
5	Significant Aspects of Political Processes		
	The party system in Indian politics; Local self-government in urban and rural areas;		
	the 73rd and 74th Amendments and their implications for inclusive politics; Role		
	and significance of women in politics		

#### Skill Enhancement Courses (SEC)

#### 5. Foundation Course in NSS - I

Sr. No.	Modules	No. of Lectures
1	Introduction to NSS	10
2	Concept of Society and Social Issues in India	15
3	Indian Constitution and Social Justice	10
4	Human Personality and National Integration	10
	Total	45

Sr. No.	Modules / Units	
1	Introduction to NSS	
	Introduction to National Service Scheme(NSS)  Orientation and structure of National Service Scheme(NSS)  National Service Scheme(NSS)- its objectives  The historical perspective of National Service Scheme(NSS)	
	National Service Scheme(NSS)- Symbol and its meaning National Service Scheme(NSS)- its hierarchy from national to college level National Service Scheme(NSS) Regular activities Distribution of working hours- Association between issues and programs- community project- urban rural activities, Association- modes of activity evaluation	
2	Concept of Society and Social Issues in India	
	History and philosophy of social sciences in India Concept of society- Development of Indian society - Features of Indian Society- Division of labour and cast system in India Basic social issues in India Degeneration of value system, Family system, Gender issues, Regional imbalance	
3	Indian Constitution and Social Justice	
	Indian Constitution  Features of Indian Constitution - Provisions related to social integrity and development  Social Justice  Social Justice- the concept and its features	
	Inclusive growth- the concept and its features	
4	Human Personality and National Integration	
	Dimensions of human personality  Social Dimension of Human personality- Understanding of the socity  Physical Dimension of Human personality- Physical Exercise, Yoga, etc.  National Integration & Communal Harmony	
	National Integration- its meaning, importance and practice  Communal Harmony- its meaning, importance and practice	

#### Skill Enhancement Courses (SEC)

#### 5. Foundation Course in NCC - I

Sr. No.	Modules	No. of Lectures
1	Introduction to NCC, National Integration & Awareness	10
2	Drill: Foot Drill	10
3	Adventure Training, Environment Awareness and Conservation	10
4	Personality Development and Leadership	10
5	Specialized Subject: Army/ Navy/ Air	05
	Total	45

Sr. No.	Modules / Units
1	Introduction to NCC, National Integration & Awareness
	<ul> <li>Desired outcome: The students will display sense of patriotism, secular values and shall be transformed into motivated youth who will contribute towards nation building through national unity and social cohesion.</li> <li>Genesis, Aims, Objectives of NCC &amp; NCC Song</li> <li>Organisation &amp; Training</li> <li>Incentives &amp; Benefits</li> <li>Religions, Culture, Traditions and Customs of India</li> <li>National Integration: Importance and Necessity</li> <li>Freedom Struggle</li> </ul>
2	Drill: Foot Drill
	<ul> <li>Desired outcome: The students will demonstrate the sense of discipline, improve bearing, smartness, turnout, develop the quality of immediate and implicit obedience of orders, with good reflexes.</li> <li>General and Words of Command</li> <li>Attention, Stand at Ease and Stand Easy, Turning and Inclining at the Halt</li> <li>Sizing, Forming Up in Three Ranks and Numbering, Open and Close Order March and Dressing</li> <li>Saluting at the Halt, Getting On Parade, Dismissing and Falling Out</li> <li>Marching, Length of Pace and Time of Marching in Quick Time and Halt, Slow March and Halt</li> <li>Turning on the March and Wheeling.</li> <li>Saluting on the March.</li> <li>Formation of squad and Squad Drill.</li> </ul>
3	Adventure Training, Environment Awareness and Conservation
	<ul> <li>Adventure Training</li> <li>Desired outcome: The students will overcome fear &amp; inculcate within them the sense of adventure, sportsmanship, espirit-d-corp and develop confidence, courage, determination, diligence and quest for excellence.</li> <li>Any Two such as – Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc</li> <li>Environment Awareness and Conservation</li> <li>Desired outcome: The student will be aware of the conservation of natural resources and protection of environment.</li> <li>Natural Resources – Conservation and Management</li> <li>Water Conservation and Rainwater Harvesting</li> </ul>

Sr. No.	Modules / Units	
4	Personality Development and Leadership	
	<ul> <li>Desired outcome: The student will develop an all-round personality with adequate leadership traits to deal / contribute effectively in life.</li> <li>Introduction to Personality Development</li> <li>Factors Influencing /Shaping Personality: Physical, Social, Physiological, Philosophical and Psychological</li> <li>Self Awareness Know yourself/ Insight</li> <li>Change Your Mind Set</li> <li>Communication Skills: Group Discussion / Lecturettes (Public Speaking)</li> <li>Leadership Traits</li> <li>Types of Leadership</li> </ul>	
5	Specialized Subject: Army Or Navy Or Air	
	Army Desired outcome: The training shall instill patriotism, commitment and passion to serve the nation motivating the youth to join the defence forces. It will also acquaint, expose & provide basic knowledge about armed, naval and air-force subjects  A. Armed Force  Basic organisation of Armed Forces Organisation of Army Badges and Ranks  Introduction to Infantry and weapons and equipments Characteristics of 7.62mm SLR Rifle, Ammunition, Fire power, Stripping, Assembling and Cleaning  C. Military history Biographies of renowned Generals (Carriapa / Sam Manekshaw) Indian Army War Heroes- PVCs  D. Communication Types of Communications Characteristics of Wireless Technologies (Mobile, Wi-Fi etc.)	
	<u>Navy</u>	
	<ul> <li>A. Naval orientation and service subjects</li> <li>History of the Indian Navy-Pre and Post Independence, Gallantry award winners</li> <li>Organization of Navy- NHQ, Commands, Fleets, Ships and shore establishments</li> <li>Types of Warships and their role</li> <li>Organization of Army and Air Force- Operational and Training commands</li> <li>Ranks of Officers and Sailors, Equivalent Ranks in the Three Services</li> <li>B. Ship and Boat Modelling</li> </ul>	

- Principles of Ship Modelling
- Maintenance and Care of tools

Sr. No.	Modules / Units
	C. Search and Rescue
	SAR Organization in the Indian ocean
	D. Swimming
	Floating for three minutes and Free style swimming for 50 meters
	OR
	<u>AIR</u>
	A. General Service Knowledge
	Development of Aviation
	History of IAF
	B. Principles of Flight
	<ul> <li>Introduction</li> </ul>
	Laws of Motion
	Glossary of Terms.
	C. Airmanship
	• Introduction
	Airfield Layout
	Rules of the Air
	Circuit Procedure
	ATC/RT Procedures
	Aviation Medicine
	D. Aero- Engines
	Introduction to Aero-engines

## Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester I

## with Effect from the Academic Year 2016-2017 Skill Enhancement Courses (SEC)

#### 5. Foundation Course in Physical Education - I

Sr. No.	Modules	No. of Lectures
1	Introduction to Basic Relevant concepts in Physical Education	10
2	Components of Physical Fitness	15
3	Testing Physical Fitness	10
4	Effect of Exercise on various Body System	10
	Total	45

Sr. No.	Modules / Units	
1	Introduction to Basic Relevant concepts in Physical Education	
	Dimensions and determinants of Health, Fitness & Wellness	
	Concept of Physical Education and its importance	
	Concept of Physical Fitness and its types	
	Concept of Physical Activity, exercise and its types & benefits	
2	Components of Physical Fitness	
	Concept of components of Physical Fitness	
	Concept and components of HRPF	
	Concept and components of SRPF	
	Importance of Physical Education in developing physical fitness components.	
3	Testing Physical Fitness	
	Tests for measuring Cardiovascular Endurance	
	Tests for measuring Muscular Strength& Endurance	
	Tests for measuring Flexibility	
	Tests for measuring Body Composition	
4	Effect of Exercise on various Body System	
	Effect of exercises on Musculoskeletal system	
	Effect of exercises on Circulatory System	
	Effect of exercises on Respiratory System	
	Effect of exercises on Glandular System	

#### Core Courses (CC)

#### 6. Business Economics I

Sr.	Modules	No. of
No.		Lectures
1	Introduction	10
2	Demand Analysis	10
3	Supply and Production Decisions and Cost of Production	15
4	Market structure: Perfect competition and Monopoly and Pricing and Output Decisions under Imperfect Competition	15
5	Pricing Practices	10
	Total	60

Sr. No.	Modules / Units	
1	Introduction	
	Scope and Importance of Business Economics - basic tools- Opportunity Cost principle- Incremental and Marginal Concepts. Basic economic relations - functional relations: equations- Total, Average and Marginal relations- use of Marginal analysis in decision making,  The basics of market demand, market supply and equilibrium price- shifts in the demand and supply curves and equilibrium	
2	Demand Analysis	
	Demand Function - nature of demand curve under different markets  Meaning, significance, types and measurement of elasticity of demand (Price, income cross and promotional)- relationship between elasticity of demand and revenue concepts  Demand estimation and forecasting: Meaning and significance - methods of demand estimation: survey and statistical methods  (numerical illustrations on trend analysis and simple linear regression)	
3	Supply and Production Decisions and Cost of Production	
	Production function: short run analysis with Law of Variable Proportions- Production function with two variable inputs- isoquants, ridge lines and least cost combination of inputs- Long run production function and Laws of Returns to Scale - expansion path - Economies and diseconomies of Scale.  Cost concepts: Accounting cost and economic cost, implicit and explicit cost, fixed and variable cost - total, average and marginal cost - Cost Output Relationship in the Short Run and Long Run (hypothetical numerical problems to be discussed),  LAC and Learning curve - Break even analysis (with business applications)	
4	Market structure: Perfect competition and Monopoly and Pricing and Output  Decisions under Imperfect Competition	
	Short run and long run equilibrium of a competitive firm and of industry - monopoly - short run and long- run equilibrium of a firm under Monopoly  Monopolistic competition: Equilibrium of a firm under monopolistic competition, debate over role of advertising.  (topics to be taught using case studies from real life examples)  Oligopolistic markets: key attributes of oligopoly - Collusive and non-collusive oligopoly market - Price rigidity - Cartels and price leadership models  (with practical examples)	
5	Pricing Practices	
	Cost oriented pricing methods: cost – plus (full cost) pricing, marginal cost pricing,	

Mark up pricing, discriminating pricing, multiple – product pricing - transfer pricing
(case studies on how pricing methods are used in business world)

#### Core Courses (CC)

#### 7. Business Mathematics

Sr. No.	Modules	No. of Lectures
1	Introduction, Organising, Data, Frequency Distribution, Data Representation	12
2	Measures of Central Tendencies	12
3	Measures of Dispersion	12
4	Probability, Probability Distribution and decision Theory	12
5	Index Nos.	12
	Total	60

Sr. No.	Modules / Units	
1	Introduction, Organising, Data, Frequency Distribution, Data Representation	
	Organizing Data, Frequency Distribution, Measure of Central tendency, Org Data,	
	preparation of frequency distribution graphical and diagrammatic representation	
	histogram, frequency polygon and gives. Definition of averages and objective of	
	averages types of average. Arithmetic mean, Geometric, harmonic mean and its usages,	
	mode and medium (using graph also) for both) for grouped as well as ungrouped data	
2	Measures of Central Tendencies	
	Definition of Averages and objective of Averages Types of Averages. Arithmetic mean,	
	Geometric Mean, Harmonic Mean and its advantages, Disadvantages and usages,	
	mode, median, quartiles, deciles and percentiles for both grouped as well as ungrouped	
	data.	
3	Measures of Dispersion	
	Concept and idea of dispersion. Various measures Range, quartile deviation, Mean	
	Deviation, Standard Deviation and corresponding relative measure of dispersion.	
	Geographical representation and utility of various is measure of Dispersions	
4	Probability, Probability Distribution and decision Theory	
	Concept of probability yen diagrams, Rules of Probality conditional & unconditional	
	probality, Baye theorem. Discrete and continuous variable. Expected value of the	
	variable, Decision theory normal distribution	
5	Index Nos.	
	Concept and usage of index nos. Construction of index nos. Types of index nos.	
	Aggregate and Relative method of constructing index nos. Chain base index nos. Test of	
	consistency: Time reversal factor reversal and circular test . Quantity and Value index	
	nos for agricultural, industrial production, Retail Prices, Consumer price index nos. for	
	security prices, etc.	

## **B.Com.** (Transport Management) Programme

## Under Choice Based Credit, Grading and Semester System Course Structure

(To be implemented from Academic Year- 2016-2017)

### Semester II

No. of Courses	Semester II	Credits
1	Elective Courses (EC)	
1	Logistic and Supply Chain Management	03
2	Air Transport	03
3	Shipping and Water Transport	03
2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulsory Course (AECC)	
4	Business Communication-II	03
2B	**Skill Enhancement Courses (SEC)	
5	Any one course from the following list of the courses	02
3	Core Courses (CC)	
6	Traffic Management	03
7	Financial Accounting	03
	Total Credits	20

**List of Skill Enhancement Courses (SEC)	
for Semester II (Any One)	
1	Foundation Course - II
2	Foundation Course in NSS - II
3	Foundation Course in NCC - II
4	Foundation Course in Physical Education - II

## **Elective Courses (EC)**

## 1. Logistics and Supply Chain Management

Sr. No.	Modules	No. of Lectures
1	Introduction to Logistics and Supply Chain Management	15
2	Transportation and Warehousing	15
3	Packaging and Material Handling	15
4	Inventory Management and Strategy	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction to Logistics and Supply Chain Management	
	Logistic- basic concept/ Definitions/ Scope/ Functions/ Logistics for business excellence/ Logistic Management- objective, logistic solutions/ Logistic Costing/ Logistical Network Analysis.  Supply Chain Management- Basic Concept/ Definitions/ Scope/ Comparison between logistics and Supply Chain Management/ Global Supply Chain scenario and importance/ Conventional Supply Chain/ Participants/ Channels agencies/ Relationship Management/ Concept of extended enterprises/ Bull-Whip effect.	
2	Transportation and Warehousing	
	Transport- Definition/ Principles/ Role/ Functions/ Scope/ Mode of Transport/ Intermodal Transport/ Ownership Transport/ Routing Vehicles Warehousing- Definition/ Principles/ Role/ Functions/ Scope/ Purpose of warehouse/ Types of warehouse/ Warehousing Strategy/ Planning and Distribution/ Warehouse layout Design.	
3	Packaging and Material Handling	
	Packaging- Definition/ Principles/ Role/ Functions/ Importance/ Packaging perspective/ Packaging for Material Handling Efficiency/ Packaging Material.  Material Handling- Definition/ Principles/ Role/ Functions/ Importance/Basic handling consideration/ Mechanized System/ System Design/ Methods.	
4	Inventory Management and Strategy	
	Inventory Functionality and Principles/ Types/ Characteristic/ Planning/ Inventory Carrying Cost/ Inventory Management Policies and Practices/ Inventory Control/ Collaborative Inventory Planning/ Product/Market Classification.	

**Elective Courses (EC)** 

## 2. Air Transport

Sr. No.	Modules	No. of Lectures
1	Introduction of Air Transport	15
2	Cargo Operation	15
3	General Instruction of Airport	15
4	Planning and design of terminal area	15
	Total	60

Sr. No.	Modules / Units
1	Introduction of Air Transport
	History of aviation, Growth of air transportation in India, Civil Aviation Department: its establishment and administrative structure, Types of airline operations, Types of aircraft and performance, Route networks, Hubs, Airport functions, International aviation, Principal organizations supporting aviation management, Chicago convention on international aviation, Sovereignty of air space, Air transit agreements, Open skies concept, Airline marketing: Overview of practices in sales, advertising, public relations and marketing efforts, Airline marketing share analysis, Branding and corporate identity, Passenger operations: Ticketing systems, Seat inventory management, Provision and maintenance of facilities, Public announcement system, Baggage claim, Passenger relations, Regulation of passenger movements, Disruptive situations
2	Cargo Operation
	Cargo operations: Ground handling practices, Documentation procedures, Responsibilities in various operations relating to transshipment of air cargo, security practices, Containerization, Logistics of air freight, Regulations and laws pertaining to air cargo operations, Handling of hazardous cargo and liability practices, Basics of safety and risk management, Safety performance Monitoring and auditing, Financial management and accounting: Costing and pricing, Setting of airport fees, rates and charges, Tariff formulation and competitive practices, Impact of aviation on environment, aircraft noise and abatement procedures, aircraft emissions
3	General Instruction of Airport
	General Instruction of Airport: Airport site selection, Size of airport, Obstructions, Zoning laws, Layout and capacity, airport architecture, Environmental considerations, Runway design, Runway orientation, Basic running length, Geometric design, balanced field concept, Airport capacity, Runway intersections, Taxiway design, Layout of taxiway, Geometric standards, loading aprons, holding aprons, Bypass or turnaround taxiway, Visual aids for pilots, Airport lighting, Visibility factors, Access to airport: Security and airfield operations
4	Planning and design of terminal area
	Planning and design of terminal area: Terminal building, Passenger flow, Parking of vehicles, Size of apron, Hangars, Protection from jet blast, Typical airport layouts, Air traffic control: Flight rules, Air traffic control networks and aids, Automation of air traffic aids, Passenger safety and segregation: Fire safety, Risk management, Safety analysis, Safety performance monitoring and auditing, Terminal operations: Passenger service expectations, check-in and transfer time, walking distances and route finding, use of buses and air bridges, Optimal use of apron space, Holding lounge arrangements, Performance indicators: Passenger throughput, Arrivals and departures of passengers and cargo, Movement of aircraft, Runway capacity, Aircraft age, flight hours, cycles, design service goal, utilization factor, Available seat kilometres, Revenue passenger seat kilometres, Available tonne kilometres, Revenue tonne kilometres, Load factor

## **Elective Courses (EC)**

## 3. Shipping & Water Transport

Sr. No.	Modules	No. of Lectures
1	Introduction of Shipping	15
2	General Structure of Shipping Industry	15
3	Cargo Documentation	15
4	Multimodalism	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction of Shipping	
Modes of transportation and their advantages and disadvantages, Ships		
	types and sizes with their important features and their suitability to different cargoes,	
	Foreign going, Coastal, inland vessels, etc.	
	Basic shipping terminology including abbreviations, General particulars of ships.	
	Bills of Lading – functions, conditions, contents, types and general information	
2	General Structure of Shipping Industry	
	Liner and tramp services, Liner shipping – essential features, break bulk, modes of	
	unitization, , container sizes and types, container terminology, freighting, CYs, CFSs	
	and ICDs, marketing of liner shipping, documents. Tramp shipping – types of charters	
	– time, trip-time, voyage, consecutive voyages, bareboat etc.	
	Agents – ship, port and liner agents and their roles in shipping, Freight forwarders,	
	Freight brokers, ship brokers and other intermediaries in shipping.	
3	Cargo Documentation	
	Manifest, Mate's Receipt, Tally sheets, Notice of Readiness, Statement of Facts, etc.	
	Custom house work – Inward and outward entry of ships documentation	
	Customs Bill of Entry and Shipping Bill	
4	Multimodalism	
	Concept of multimodal transport, Introduction to convergence of different modes of	
	transport, combined bill of lading, Multimodal Transport Document, Risk and	
	liabilities of Multimodal carrier	

## **Ability Enhancement Courses (AEC)**

## 4. Business Communication - II

Sr. No.	Modules	No. of Lectures
1	Presentation Skills	15
2	Group Communication	15
3	Business Correspondence	15
4	Language and Writing Skills	15
	Total	60

Sr. No.	Modules / Units	
1	Presentation Skills	
	Presentations: (to be tested in tutorials only) 4 Principles of Effective Presentation  Effective use of OHP  Effective use of Transparencies  How to make a Power-Point Presentation	
2	Group Communication	
	Interviews: Group Discussion Preparing for an Interview, Types of Interviews – Selection, Appraisal, Grievance, Exit  Meetings: Need and Importance of Meetings, Conduct of Meeting and Group Dynamics Role of the Chairperson, Role of the Participants, Drafting of Notice, Agenda and Resolutions  Conference: Meaning and Importance of Conference Organizing a Conference Modern Methods: Video and Tele – Conferencing  Public Relations: Meaning, Functions of PR Department, External and Internal Measures of PR	
3	Business Correspondence	
	Trade Letters: Order, Credit and Status Enquiry, Collection (just a brief introduction to be given)  Only following to be taught in detail:- Letters of Inquiry, Letters of Complaints, Claims, Adjustments Sales Letters, promotional leaflets and fliers Consumer Grievance Letters, Letters under Right to Information (RTI) Act [Teachers must provide the students with theoretical constructs wherever necessary in order to create awareness. However students should not be tested on the theory.]	
4	Language and Writing Skills	
	Reports: Parts, Types, Feasibility Reports, Investigative Reports  Summarisation: Identification of main and supporting/sub points Presenting these in a cohesive manner	

## Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester II

### with Effect from the Academic Year 2016-2017

### Skill Enhancement Courses (SEC)

### 5. Foundation Course - II

Sr. No.	Modules	No. of Lectures
1	Globalisation and Indian Society	07
2	Human Rights	10
3	Ecology	10
4	Understanding Stress and Conflict	10
5	Managing Stress and Conflict in Contemporary Society	08
	Total	45

Sr. No	Modules /Units
1	Globalisation and Indian Society
	Understanding the concepts of liberalization, privatization and globalization; Growth of information technology and communication and its impact manifested in everyday life; Impact of globalization on industry: changes in employment and increasing migration; Changes in agrarian sector due to globalization; rise in corporate farming and increase in farmers' suicides.
2	Human Rights
	Concept of Human Rights; origin and evolution of the concept; The Universal Declaration of Human Rights; Human Rights constituents with special reference to Fundamental Rights stated in the Constitution
3	Ecology
	Importance of Environment Studies in the current developmental context; Understanding concepts of Environment, Ecology and their interconnectedness; Environment as natural capital and connection to quality of human life; Environmental Degradation- causes and impact on human life; Sustainable development- concept and components; poverty and environment
4	Understanding Stress and Conflict
	Causes of stress and conflict in individuals and society; Agents of socialization and the role played by them in developing the individual; Significance of values, ethics and prejudices in developing the individual; Stereotyping and prejudice as significant factors in causing conflicts in society. Aggression and violence as the public expression of conflict
5	Managing Stress and Conflict in Contemporary Society
	Types of conflicts and use of coping mechanisms for managing individual stress; Maslow's theory of self-actualisation; Different methods of responding to conflicts in society; Conflict-resolution and efforts towards building peace and harmony in society



Skill Enhancement Courses (SEC)

### 5. Foundation Course in NSS - II

Sr. No.	Modules	No. of Lectures
1	Socio-economic Survey and Special Camp	10
2	Orientation of the College Unit and Communication Skills	15
3	Rapport with Community and Programme Planning	10
4	Government Organisations /Non-Government Organisations	10
	Total	45

Sr. No.	Modules / Units	
1	Socio-economic Survey and Special Camp	
	Socio economic survey	
	Socio-economic survey- its meaning and need,	
	Process of Socio-economic survey- design of questionnaire; data collection, data	
	analysis and report writing	
	Special camping activity	
	Concept of camp- Identification of community problems- Importance of group	
	living- Team building- Adoption of village- Planning for camp- pre camping, during the course of camp and post camping activities	
2	Orientation of the College Unit and Communication Skills	
_	Training and orientation of the program unit in the college	
	Leadership training – formation of need based programmmes- Concept of	
	campus to community(C to C) activities	
	Communication skills and Documentation	
	Communication skills- the concept, Verbal, Non-Verbal communication	
	The documentation- Activity Report Writing – basics of NSS accounting – Annual	
	Report – Press note and preparation	
3	Rapport with Community and Programme Planning	
	Working with individual group and community	
	Ice breaking- interaction games – conflict resolution	
	Program planning	
	Programme planning- the concept and its features, requirements for successful	
	implementation of program- program flow charting- feedback	
4	Government Organisations /Non-Government Organisations	
	Structure of Government Organisations and Non-Government Organisations	
	Government organisations (GO)- its meaning -Legal set up, functioning, Sources	
	of funding  Non-Covernment organizations (NCO) its meaning Legal set up functioning	
	Non-Government organisations (NGO)- its meaning -Legal set up, functioning,	
	Sources of funding National Service Scheme(NSS)- Government organisations (GO) and Non-	
	Government organisations (NGO)	
	Government schemes for community development	
	Schemes os Government welfare departments for community development	
	provisions & examples	

## Skill Enhancement Courses (SEC)

### 5. Foundation Course in NCC - II

Sr. No.	Modules	No. of Lectures
1	Disaster Management, Social Awareness and Community Development	10
2	Health and Hygiene	10
3	Drill with Arms	10
4	Weapon Training	10
5	Specialized Subject: Army Or Navy Or Air	05
	Total	45

Sr. No.	Modules / Units	
1	Disaster Management, Social Awareness and Community Development	
	<ul> <li>Disaster Management:</li> <li>Desired outcome: The student shall gain basic information about civil defence organisation / NDMA &amp; shall provide assistance to civil administration in various types of emergencies during natural / manmade disasters</li> <li>Civil Defence Organisation and Its Duties/ NDMA</li> <li>Types of Emergencies/ Natural Disaster</li> <li>Assistance during Natural / Other Calamities: Flood / Cyclone/ Earth Quake, Accident etc.</li> <li>'Avan' model of NCC</li> </ul>	
	Social Awareness and Community Development:  Desired outcome: The student shall have an understanding about social service and its need, about NGOs and shall participate in community action programmes for betterment of the community.  Basics of Social Service, Weaker Sections of Our Society and Their Needs  Social/ Rural Development Project: MNREGA, SGSY, NSAP etc.  Contribution of Youth towards Social Welfare  Civic Responsibilities  Causes & Prevention of HIV/AIDS; Role of Youth	
2	Health and Hygiene	
	<ul> <li>Desired outcome: The student shall be fully aware about personal health and hygiene lead a healthy life style and foster habits of restraint and self awareness.</li> <li>Structure and Functioning of the Human Body</li> <li>Hygiene and Sanitation (Personal and Food Hygiene)</li> <li>Infectious &amp; Contagious Diseases &amp; Their Prevention</li> </ul>	
3	Drill with Arms	
	Desired outcome: The students will demonstrate the sense of discipline, improve bearing, smartness, turnout, develop the quality of immediate and implicit obedience of orders, with good reflexes.  • Attention, Stand at Ease and Stand Easy  • Getting on Parade with Rifle and Dressing at the Order  • Dismissing and Falling Out  • Ground / Take Up Arms  • Present From the Order and Vice-versa  • General Salute, Salami Shastra	
4	Weapon Training	
	<ul> <li>Desired outcome: The student shall have basic knowledge of weapons and their use and handling.</li> <li>Characteristics of a Rifle / Rifle Ammunition and its Fire Power</li> <li>Stripping, Assembling, Care and Cleaning and Sight Setting of .22 rifle</li> <li>Stripping, Assembling, Care and Cleaning of 7.62mm SLR</li> </ul>	

 Loading, Cocking and Unloading • The lying position, Holding and Aiming- I Trigger control and firing a shot • Range procedure and safety precautions • Short range firing, Aiming- II -Alteration of sight Sr. No. **Modules / Units** 5 Specialized Subject: Army Or Navy Or Air **Desired outcome:** The training shall instill patriotism, commitment and passion to serve the nation motivating the youth to join the defence forces. It will also acquaint, expose & provide basic knowledge about armed, naval and air-force subjects A. Map reading Introduction to types of Maps and Conventional signs Scales and Grid system Topographical forms and technical terms · Relief, contours and Gradients Cardinal points and Types of North Types of bearings and use of Service Protractor Prismatic compass and its use and GPS B. Field Craft and Battle Craft Introduction Judging distance Description of ground • Recognition, Description and Indication of landmarks and targets OR Navy A. Naval Communication • Introduction to Naval Modern Communication, Purpose and Principles Introduction of Naval communication Duties of various communication sub-departments Semaphore Introduction of position of letters and prosigns Reading of messages Transmission of messages B. Seamanship • Anchor work Parts of Anchor and Cable, their identification Rigging

securing of ropes

Types of ropes and breaking strength- stowing, maintenance and

 Practical Bends and Hitches: Reef Knot, Half hitch, Clove Hitch, Rolling Hitch, Timber Hitch, Bow Line, Round Turn and Two half hitch and Bow line on the Bight and its basic elements and uses.

 Introduction to Shackles, Hooks, Blocks and Derricks, Coiling Down and Splicing of rope

### C. Boat work

- Parts of Boat and Parts of an Oar
- Instruction on boat Pulling-Pulling orders
- Steering of boat under oars, Practical instruction on Boat Pulling, Precautions while pulling

Sr. No.	Modules / Units
	OR
	Air
	A. Air frames
	Aircraft Controls
	Landing Gear
	B. Instruments
	Basic Flight Instruments
	C. Aircraft Particulars
	<ul> <li>Aircraft Particulars (Type specific)</li> </ul>
	D. Aero modelling
	History of Aero modelling
	<ul> <li>Materials used in Aero modelling</li> </ul>
	Type of Aero models
	Flying/ Building of Aero models

## Skill Enhancement Courses (SEC)

## 5. Foundation Course in Physical Education - II

Sr. No.	Modules	No. of Lectures
1	Development of Fitness	10
2	Health, Fitness and Diseases	15
3	Yoga Education	10
4	Daily Schedule of Achieving Quality of Life and Wellness	10
	Total	45

Sr. No.	Modules / Units	
1	Development of Fitness	
	Benefits of physical fitness and exercise and principles of physical fitness	
	Calculation of fitness index level 1-4	
	Waist-hip ratio Target Heart Rate, BMI and types and principles of exercise	
	(FITT)	
	• Methods of training – continues, Interval, circuit, Fartlek and Plyometric	
2	Health, Fitness and Diseases	
	Definition of obesity and its management	
	Communicable diseases, their preventive and therapeutic aspectS	
	Factors responsible for communicable diseases	
	Preventive and therapeutic aspect of Communicable and non- communicable	
	diseases	
3	Yoga Education	
	Meaning and history of yoga	
	Ashtang yoga and types of yoga	
	Types of Suryanamaskar and Technique of Pranayam	
	Benefits of Yoga	
4	Daily Schedule of Achieving Quality of Life and Wellness	
	Daily schedule based upon one's attitude, gender, age &occupation.	
	Basic – module: - Time split for rest, sleep, diet, activity & recreation.	
	• Principles to achieve quality of life:- positive attitude, daily regular exercise,	
	control over food habits & healthy hygienic practices.	

Core Courses (CC)

## **6 Traffic Management**

Sr. No	Modules	No. of Lectures
1	Traffic System Components	15
2	Accident Studies and Road Safety	15
3	Route Assignment Analysis and Highway Capacity	15
4	Traffic Signal Design	15
	Total	60

Sr. No.	Modules / Units	
1	Traffic System Components	
	Introduction, Road User and Vehicle Characteristics, Roadways and their geometric characteristics, Traffic Stream Characteristics, Volume Studies and Characteristics, Speed, Travel Time, and Delay Studies, Road Parking Studies and Programs	
2	Accident Studies and Road Safety	
	Accident Reporting, Accident Recording, Causes of Accidents, Studies of High Accident Locations, Preventive Measures for Accidents, Safety Measures and Remedial Facilities, Intelligent Transportation Systems: applications in traffic management and control, Traffic Regulations in various Countries	
3	Route Assignment Analysis and Highway Capacity	
	Choice of Routes, Factors Affecting Route Choice, Methods of Route Assignment, Capacity Restraint Assignment Techniques, Highway capacity: Its importance in transportation studies – basic, possible and practical capacity – determination of theoretical maximum capacity -passenger car units – level of service – factors affecting level of service, Traffic Control for Freeways and Rural Highways	
4	Traffic Signal Design	
	Basic Principles of Intersection Signalization, Elements of Intersection Design, Analysis and applications of Signalized Intersections, Actuated Signal Control and Detection, Signal Coordination for Arterials and Networks	

## Core Courses (CC)

## 7. Financial Accounting

Sr. No.	Modules	No. of Lectures
1	Introduction to Accounting	15
2	Inventory Valuation	15
3	Consignment Accounts	15
4	Fire Insurance Claims	15
	Total	60

Sr. No.	Unit/Modules	
1	Introduction to Accounting	
	Definition/ Meaning/ Objectives/ Needs/ Functions/ Scope/ Development of	
	accounting/ Users of accounting/ Disclosures/ Accounting Principles/ Accounting	
	Concepts/ Accounting Convention/ Accounting Standards	
	Accounting Procedure- Journal/ Subsidiary Books/ Ledger/ Opening Entry/ Trial	
	Balance	
2	Inventory Valuation	
	Meaning/ Cost for Inventory Valuation/ Inventory System: Periodic Inventory and	
	Perpetual inventory System/ Methods of Stock Valuation as per AS-2: FIFO and	
	Weighted Average Method/ Computation of Valuation of Inventory.	
3	Consignment Accounts	
	Accounting for consignment transaction/ Valuation of stock/ Invoicing of goods at	
	higher price.	
4	Fire Insurance Claims	
	Computation of loss of stock by fire/ Ascertainment of Claim as per the insurance	
	policy (Excluding loss of profit and consequential loss).	

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- Slinn, M., Guest, P. and Heimann, P. Traffic Engineering Design: Principles and Practice, 2nd Edition,

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- TRB, Highway Capacity Manual, 2000, Transportation Research Board, USA.
- Slater, R.J. Highway Traffic Analysis and Design. Macmillan, 1990.

#### **Reference Books**

- Relevant IRC Codes, and Literature on Traffic Flow theory.
- Khadiyali L.R. Traffic Engineering and Transport planning, Khanna Tech Publishers
- Khanna O.P and Jesto C.G; Highway Engineering, Nem Chand Publishers
- Martin, Whol, Traffic system Analysis for Engineers Donald Drew, Traffic Flow Theory.

#### **Financial Accounting**

- Introduction to Accountancy by T. S. Grewal, S. Chand and Company (P) Ltd., New Delhi
- Financial Accounting by P.C. Tulsian, Pearson Publications, New Delhi
- Compendium of Statement and Standard of Accounting, ICAI
- Accounting Principles by R.N. Anthony and J.S. Reece, Richard Irwin, Inc
- Financial Accounting by M. Mukherjee and M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi
- Financial Accounting by V. Rajasekaran, Pearson Publications, New Delhi.
- Financial accounting by M. Mukharjee and M. hanif, tata McGraw Hill Education Pvt. Ltd., New Delhi.
- Company Accounting Standards by ShrinivasanAnand, Taxman, New Delhi.

#### **Scheme of Evaluation**

The performance of the learners will be evaluated in two Components. One component will be the Internal Assessment component carrying 25% marks and the second component will be the Semester-wise End Examination component carrying 75% marks. The allocation of marks for the Internal Assessment and Semester End Examinations will be as shown below:-

#### A) Internal Assessment: 25 %

### Question Paper Pattern (Internal Assessment- Courses without Practical Courses)

Sr. No.	Particular	Marks	
1	One class test (20 Marks)		
	Match the Column/ Fill in the Blanks/ Multiple Choice Questions	05 Marks	
	(½ Mark each)		
	Answer in One or Two Lines (Concept based Questions)	05 Marks	
	(01 Mark each)		
	Answer in Brief (Attempt Any Two of the Three)	10 Marks	
	(05 Marks each)		
2	Active participation in routine class instructional deliveries and	05 Marks	
	overall conduct as a responsible learner, mannerism and		
	articulation and exhibit of leadership qualities in organizing		
	related academic activities		

## Question Paper Pattern (Internal Assessment- Courses with Practical Courses)

Sr. No.	Particular	Marks
1	Semester End Practical Examination (20 Marks)	
	Journal	05 Marks
	Viva	05 Marks
	Laboratory Work	10 Marks
2	Active participation in routine class instructional deliveries and	05 Marks

overall conduct as a responsible learner, mannerism and articulation and exhibit of leadership qualities in organizing related academic activities articulation and exhibit of leadership qualities in organizing related academic activities

#### B) Semester End Examination: 75 %

- i) Duration: The examination shall be of 2 ½ Hours duration
- ii) Theory question paper pattern
  - There shall be five questions each of 15 marks.
  - All questions shall be compulsory with internal choice within the questions.
  - Question may be subdivided into sub-questions a, b, c... and the allocation of marks depends on the weightage of the topic.

(Detail question paper pattern has been given separately)

#### **Passing Standard**

The learners to pass a course shall have to obtain a minimum of 40% marks in aggregate for each course where the course consists of Internal Assessment and Semester End Examination. The learners shall obtain minimum of 40% marks (i.e. 10 out of 25) in the Internal Assessment and 40% marks in Semester End Examination (i.e. 30 Out of 75) separately, to pass the course and minimum of Grade E to pass a particular semester A learner will be said to have passed the course if the learner passes the Internal Assessment and Semester End Examination together.

## Question Paper Pattern (Practical Courses)

Maximum Marks: 75

Questions to be set: 05

Duration: 2 1/2 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

Question No	Particular	Marks
Q-1	Objective Questions  A) Sub Questions to be asked 10 and to be answered any 08  B) Sub Questions to be asked 10 and to be answered any 07  (*Multiple choice / True or False / Match the columns/Fill in the blanks)	15 Marks
Q-2	Full Length Practical Question  OR	15 Marks
Q-2	Full Length Practical Question	15 Marks
Q-3	Full Length Practical Question  OR	15 Marks
Q-3	Full Length Practical Question	15 Marks
Q-4	Full Length Practical Question  OR	15 Marks
Q-4	Full Length Practical Question	15 Marks
Q-5	A) Theory questions B) Theory questions  OR	08 Marks 07 Marks
Q-5	Short Notes To be asked 05 To be answered 03	15 Marks

#### Note:

Practical question of 15 marks may be divided into two sub questions of 7/8 and 10/5 Marks. If the topic demands, instead of practical questions, appropriate theory question may be asked.

#### Question Paper Pattern (Theoretical Courses)

Maximum Marks: 75

Questions to be set: 05

Duration: 2 1/2 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

Question No	Particular	Marks
Q-1	Objective Questions  A) Sub Questions to be asked 10 and to be answered any 08  B) Sub Questions to be asked 10 and to be answered any 07  (*Multiple choice / True or False / Match the columns/Fill in the blanks)	15 Marks
Q-2	Full Length Question  OR	15 Marks
Q-2	Full Length Question	15 Marks
Q-3	Full Length Question  OR	15 Marks
Q-3	Full Length Question	15 Marks
Q-4	Full Length Question  OR	15 Marks
Q-4	Full Length Question	15 Marks
Q-5	A) Theory questions B) Theory questions OR	08 Marks 07 Marks
Q-5	Short Notes To be asked 05 To be answered 03	15 Marks

#### Note:

Theory question of 15 marks may be divided into two sub questions of 7/8 and 10/5 Marks.



#### (2)

#### UNIVERSITY OF MUMBAI No. UG/18 3 of 2017-18

#### CIRCULAR:-

A reference is invited to the syllabi relating to the Bachelor of Commerce (B.Com.) Programme <u>vide</u> this office Circular No.UG/27 of 2016-17, dated 1<sup>st</sup> July, 2016 and the Head, University Departments of Commerce and the Principals of the affiliated Colleges in Commerce are hereby informed that the proposal received from Ad-hoc Dean, Faculty of Commerce and Management has been accepted by the Academic Council at its meeting held on 11<sup>th</sup> May, 2017 <u>vide</u> item No.4.312 and that in accordance therewith, the revised syllabus as per the (CBCS) for Bachelor of Commerce in (Transport Management) (Sem -III & IV), which is available on the University's website (<u>www.mu.ac.in</u>) and that the same has been brought into force with effect from the academic year 2017-18, accordingly.

MUMBAI – 400 032 g<sup>47</sup> August, 2017 To (Dr. M.A.Khan) REGISTRAR

The Head, University Department of Commerce and the Principals of the affiliated Colleges in Commerce.

#### A.C/4.312/11/05/2017

\*\*\*\*\*\*

No. UG/183 - A of 2017

MUMBAI-400 032

8 August, 2017

Copy forwarded with Compliments for information to:-

- 1) The Co-ordinator, Faculty of Commerce,
- 2) The Chairman, Ad-hoc Board of Studies in Commerce,
- 3) The Offg. Director, Board of Examinations and Evaluation,
- 4) The Director, Board of Students Development,
- 5) The Professor-cum-Director, Institute of Distance and Open Learning (IDOL),
- 6) The Co-Ordinator, University Computerization Centre,

(Dr. M.A.Khan) REGISTRAR

#### University of Mumbai



# Revised Syllabus and Question Paper Pattern of Courses of B.Com. (Transport Management) Programme at Second Year Semester III and IV

Under Credit, Grading and Semester System
With Effect from Academic Year 2017-2018

Board of Studies-in-Transport Management, University of Mumbai

# Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester III

No. of Courses	Semester III	Credits
1	Elective Courses (EC)	
1,2,&3	*Any three courses from the following list of the courses	09
1	Production and Quality Management	03
2	Custom Procedures and Cargo Handling	03
3	Transport Project Management	03
4	Transport and Environment Management	03
5	Managerial Skill Development	03
2	Ability Enhancement Courses (AEC)	
4	Information Technology in Transport-I	02
3	Core Courses (CC)	
5	Service Marketing	03
6	Warehousing and Inventory Control	03
7	Transport Law	03
	Total Credits	20

With effect from Academic Year 2017-2018

Programme at Semester III

#### with effect from the Academic Year 2017-2018

#### **3.1.1 Production and Quality Management**

SN	Modules	No. of Lectures
1	Product and Production	15
2	Productivity and Quality	15
3	Total Quality Management	15
4	Quality Improvement Strategies and Certifications	15
	Total	60

SN	Modules/ Units	
1	Product and Production	
	<ul> <li>Product-Meaning, Objectives ,Need, Planning, Design, Development, Life Cycle.</li> <li>Production Management- Meaning, objective, Characteristics, Need, Components, Manufacturing systems, Intermittent and continuous production systems, Decision making, problems.</li> <li>Functions of Production Manager.</li> </ul>	
	Plant Location and Layout- Objectives, principles of good product layout, types of layout, Importance of purchase management, product life cycle.	
2	Productivity and Quality	
	<ul> <li>Productivity: Meaning, concept, various ways and methods of calculating it. Ways to improve productivity. Partial productivity and total productivity.</li> <li>Quality Management: Concept, Importance, Principles, factors affecting quality, characteristics,</li> <li>Product and service quality dimensions- Physical aspects, reliability, personal interaction, problem solving and policy.</li> <li>Quality Standards: Storage, packaging and material handling.</li> <li>Quality Assurance. Quality circle.</li> </ul>	
3	Total Quality Management	
	<ul> <li>Total quality management- definition, basics, Concept, importance Principles, cost of quality, eight building blocks, seven stages and pillars of TQM, Seven deadly disasters. Factors affecting TQM</li> <li>Philosophy and approach to quality: Edward Deming, J. Juran, Kaizer P.Crosbys Philosophy. 7 Quality Control Tools and Advance Quality control tools.</li> </ul>	
4	Quality Improvement Strategies and Certifications	
	<ul> <li>Lean thinking, Kerpner Tregor methodology of problem solving, 6 sigma, DMAIC/DMADV, TAGUCHI's Quality Engineering, ISO 9000, ISO 1400, QS 9000. Malcon Baldrige National Quality Award (MBNQA), Demings Application Prize, Poka Yoke, Work Methodology, Study methodology, National Productivity council, JIDOKA, KANBAN, ISHIKAWA, Mini, Mura, Muda, Ergonomics, SMED, Brainstorming, Delphi and nominal group techniques, Lateral thinking, Split brain theory, Benchmarking.</li> </ul>	

#### 3.1.2 Custom Procedures and Cargo Handling

SN	Modules	No. of Lectures
1	Introduction	15
2	Role and Documentation	15
3	Cargo Handling	10
4	Procedure of Cargo Handling	10
	Total	50

SN	Modules/ Units	
1	Introduction	
	• Impact of custom procedure, Custom procedure for home consumption, role of customs, Procedure for clearance of import and export goods, import export restrictions and prohibitions, , transshipment of cargo, import/ export through post, re import and re export, custom clearance - seaport, airport, ICD	
2	Role and Documentation	
	<ul> <li>Role in Cargo Handling of various authorities -Custom cargo service providers, custom house agent, freight forwarders, CFS, ICD authority, MTO, NVOCC.</li> <li>Cargo Documentation- Bill of lading, Bill of entry, Packing List, Invoice, others, types of Bond. Difference between airway bill, seaway bill and bill of lading.</li> <li>Check System- 1st Check System, custom examination, Calculation of Custom Duty.</li> </ul>	
3	Cargo Handling	
	<ul> <li>Cargo Handling – at airport, seaport, ICD.</li> <li>CFS agent.</li> <li>Equipment used in Cargo Handling.</li> <li>Cargo rates and charges, Unitization, consolidation of cargo, world geography- geography and IATA 3 letter codes, Time difference, calculation of transportation time.</li> </ul>	
4	Procedure of Cargo Handling	
	Bulk loading limitation in railways, airways and shipment, cargo terminal facilities, special cargoes, Cargo booking procedures in India ( railway, airways and shipment), online booking procedures, labeling and marking of cargo.	

#### 3.1.3. Transport Project Management

SN	Modules	No. of Lectures
1	Introduction to Project Management	15
2	Organization Structure and Project Manager	15
3	Project Planning and Budgeting	20
4	New Dimensions in Project Management	10
	Total	60

SN	Modules/ Units	
1	Introduction To Project Management	
	Introduction-Meaning, Features ,Need, Types, History	
	<ul> <li>Project Management knowledge areas- deliverables typically provided for each knowledge areas,</li> </ul>	
	<ul> <li>Project Management-Project Life cycle, Phases of project management life cycle, Project Management Process, Project Stakeholders and Project Interface, Project champions, roles and responsibilities of various stakeholders in project management.</li> </ul>	
2	Organization Structure and Project Manager	
	• Organization Structure- Types, forms, Work breakdown structure, master production scheduling, system integration, strategic business unit, change management. How to select a good project team, role and responsibilities of stakeholders.	
	• <b>Project Manager-</b> Role (especially in planning), Importance, Selecting criteria of project manager, project and project manager, project manager and organization, location of project manager in organization, managing conflict by project manager, relationship of line- staff- project manager.	
3	Project Planning and Budgeting	
	• Project Planning (Detailed project plan, cost ), Project Selection (dealing with risk and uncertainty), Project Feasibility Study (feasibility, technical, marketing, operational), SWOT Analysis, Project Selection Models (Numeric and Non numeric), budget and cost estimation (leverages, profitability statement, valuation of shares), scheduling, resource allocation, project communication and documentation, project monitoring and controlling, project close out, termination and follow up, project auditing.	
4	New Dimensions in Project Management	
	• Contract Management, Managing crisis in project, <b>Modern development in project management</b> - PMIS, Project Management Methodology, Continuous improvement, capacity planning, project management maturity model, managing multiple projects, competency models.	
	• Live case studies:- dedicated freight corridor, bullet trains, monorails, pod taxis, metro projects.	

#### 3.1.4. Transport and Environment Management

SN	Modules	No. of Lectures
1	Introduction	15
2	Environment law and Remedies	15
3	Environment Audit and Waste management	15
4	Environmental impact	15
	Total	60

SN	Modules/ Units
1	Introduction
	<ul> <li>Environment: Meaning, features, classification, components, objectives of environmental studies, factors influencing environment, 3R's.</li> <li>Environmental degradation- meaning, types (extreme events and hazardous pollution) Interface between pollution and transport. Environmental impacts of transportation: air, water, noise, global diming, global warming, desertification, ozone depletion and others.</li> </ul>
	Environment management issues
	Environment externalities.
2	Environment law and Remedies
	<ul> <li>Green belt- meaning, encroachment on green belt. Green house gasmeaning, effect, causes and damages, measures to mitigate green house effect. Green logistics- meaning importance, paradoxes of green logistics, cases. Sustainable transportation- meaning, elements of sustainable transport, criticism. Fossil fuels, bio fuels, shift from fossil fuels to bio fuels. Transport and urban problems. Designing traffic system to reduce pollution, monitoring tools for environment management, Government incentives to reduce pollution, transport schemes and environment impact with cases.</li> <li>Environment and law: Environment Protection Act, World Commission on environment and development report, 1987. International Earth Summit, 1992., Kyoto protocol, problems in implementing environment laws and order.</li> </ul>
3	Environment Audit and Waste management
	<ul> <li>Corporate environment and business ethics: Role of stakeholders. Environment and health., Waste management meteorology. waste audit and waste minimization. Environmental audit- audit as per ISO 9011, roles and qualifications of auditor. Environment performance indicators,</li> <li>Environmental impact of roads: noise and acoustical engineering, combustion by-products of gasoline and fossil fuels, habitat destruction, habitat fragmentation. Barriers to animal movement. Increased animal mortality due to traffic. Toxic effects on plants and animals. Poaching of flora and fauna. Curtailment of space for growth of forest. Problems of ill legal logging. Road Ecology: Hydrology: Storm water run-off as a source of pollution, storm sewers, air and noise pollution, Plant life, Effects on wild life, Increased human encroachment,</li> <li>Mitigating efforts: Measures to reduce traffic noise, habitat</li> </ul>
4	construction and planting of trees Environmental impact
4	Divisonmental impact

**Environmental impact of aviation:** Increase in demand for air travel and related statistics of carbon emissions, acidification, photo-chemical air pollution, Impact in terms of noise and air quality, Greenhouse effect, Role of International Civil Aviation Organization (ICAO), Ban on noisy aircrafts, Enforcement of aircraft construction standards

**Maritime and inland waterway transport:** Atmospheric emissions of seagoing ships, Regulations for polluting emissions from inland waterway vehicles, Role of Inland Waterways Authority of India

Integration of environment and sustainable development into transport policy, Existing machinery for policy implementation in India Strategies to minimize environmental impact of transport: Promotion of public transport, intermodal and combined transport in urban areas, Elimination of negative effects of transport growth through land-use measures, Infrastructure charging, Promoting research to reduce CO2 emissions and noise, Variation of tolls based on vehicle emission classes and time of day.

#### 3.1.5. Managerial Skill Development

SN	Modules	No. of Lectures
1	Introduction to Management	15
2	Intra Personal skills	10
3	Inter personal Skills	10
4	Leadership Skills	15
5	Negotiation Skills	10
	Total	60

SN	Modules/ Units
1	Introduction to Management
	<ul> <li>Management – Definition, Features, Importance, Function, Functional Areas of Management, Levels of Management, Role and Skills of manager, Evolution of management thoughts, Contribution of F.W. Taylor, Henri Fayol and Contingency approach, PODSCORB.</li> </ul>
2	Intra Personal skills
	<ul> <li>Self-awareness- Concept, The Johari Window.</li> <li>Stress management-meaning, types, elements, stress management techniques, Causes and effects of stress.</li> <li>Problems solving skills, Time management skills and techniques.</li> <li>Delegation skills – Importance, Prioritization, Advantages of delegation &amp; principles of delegation</li> <li>Employability in transport- careers and challenges</li> </ul>
3	Inter personal Skills
	<ul> <li>Supportive communication- Concept</li> <li>Motivation-meaning, factors, types, theories of motivation –Maslow's theory, theory X theory Y, McGregor theory, Hygiene theory (Herzberg theory)</li> <li>Managing Change &amp; Conflict-Definition, Importance, Change agents, Managing Change (process), Interpersonal conflict management.</li> </ul>
4	Leadership Skills
	<ul> <li>Leadership Skills-Meaning , definition, Characteristics, leader V/s managers, Traits of leaders, leadership styles, Theories of leadership-Great Man, Trait Theory, Behavioural theory, Contingency (fielders contingency theory, Hersey blackhead situational leadership theory, vroom, mount and Blake theory) , Women as leader, Empowerment-dimensions, Teamwork- Meaning of team, stages of team development, problems &amp; barriers</li> <li>Groups- Groups in organization, group dynamic, group decision making</li> </ul>
5	Negotiation Skills
	<ul> <li>Negotiation skills-approaches, self-assessment, strategies to influence people, group negotiation, how to deal with difficult negotiation</li> <li>Controlling – Meaning, Techniques &amp; prerequisite</li> <li>TQM, Knowledge management, customers service management skills, DESCRIBED model.</li> </ul>

#### 3.2.4 Information Technology in Transport

SN	Modules	No. of Lectures
1	E-Commerce & ICT	12
2	Computer Organization & Internet	1
3	ICT soft Tools – Word Processor	15
4	ICT soft Tools – Spreadsheet	15
	Total	60

SN	Modules/ Units
1	E-Commerce & ICT
	<ul> <li>E-Commerce</li> <li>Introduction, Definition, Advantages &amp; Disadvantages, Types of E-Commerce, Electronic Data Interchange, EDI Applications in Business, EDI implementation, E-Commerce: Its Impact on Transportation, Logistics, and Supply Chain Management, Types of Electronic Payment Systems, Smart Cards &amp; Electronic Payment Systems, Credit Card-Based Electronic Payment Systems.</li> <li>Information &amp; Communication Technology</li> </ul>
	<ul> <li>Introduction, Objectives, Advantages &amp; Disadvantages, Use of ICT in day to day life, ICT Applications: Communication applications, measurement applications, booking systems, monitoring and tracking systems, satellite systems.</li> </ul>
2	Computer Organization & Internet
	<ul> <li>Computer Organization</li> <li>What is Hardware &amp; Software?, Components of Computer System, Input devices and their uses, Output Devices and their uses, Primary Memory-RAM, ROM, PROM, EPROM, EEPROM, Secondary Memory- portable and removable hard drives, magnetic tape drives and magnetic tapes, memory cards, Optical storage media (CD/DVD/Bluray).</li> <li>Internet</li> <li>Defining and describing the Internet, Brief history, future of the Internet, Internet Resources- Email, Newsgroups, Conferencing, Types of Internet Access, Internet service providers, World Wide Web, Protocols: Uniform resource locator, File Transfer protocol, Internet Protocol, Web-browser: Returning to the home page, Changing the home page, Favourites and Bookmarks, Cookies, Search Techniques, Examples of search tools, Protecting the computer: Viruses, Virus protection software, Updating the software, Scanning files., Using Search Engine.</li> </ul>
3	ICT soft Tools – Word Processor
	• Getting Started with Word 2010: Starting Word, Opening a saved Word document, Entering text in a document, previewing a document, saving a document, printing a document, Closing a document and

exiting Word, Editing a Document: Navigate through a document, Scroll through text, Insert and delete text in a document, Select text, Undo and redo commands, Use drag and drop to move text, Copy, cut and paste, Formatting A Document: Format and align text, Line and paragraph spacing, Add bulleted and numbered lists, Add borders and shading, Using Editing and Proofing Tools: Document views, Spell and grammar check, Shortcut Menus, Find and replace text, Changing the Layout of a Document: Adjust page margins, Change page orientation, Create headers and footers, Set and change indentations, Insert and clear tabs. **Inserting Elements to Word Documents:** Insert and delete a page break, Insert page numbers, Insert the date and time, Insert special characters(symbols), Insert a picture from a file, Resize and reposition a picture, Using Words new picture tools, Working with Tables: Insert a table, Convert a table to text, Navigate and select text in a table, Resize parts of a table, Align text in a table, Format a table, Insert and delete columns and rows, Borders and shading, Merge table cells.

#### 4 ICT soft Tools – Spreadsheet

Learning Worksheet Fundamentals: Understand basic workbook concepts, Create a workbook, Select cells, Use undo and redo. Enter text, numbers and dates in a workbook, Enter a range of data, Edit cell contents, Save a workbook for the first time, Close a workbook and guit excel, Editing and Formatting Worksheets: Format numeric data, Adjust the size of rows and columns, Align cell contents, Create and apply conditional formats, Find and replace cell contents, Insert and delete row and columns, Cut, copy and paste, Formatting Worksheets: Format text and numbers, Create and modify styles, Use Format Painter, Add borders and shading to cells, Merge cells, Wrap text in a cell, Changing Print Options: Add a header and footer to a worksheet, Change the page orientation, Set and clear print areas, Set other print options, Worksheets & Workbook: Autocomplete, Use numbered series and AutoFill, Hide and unhide rows and columns, Freeze and unfreeze rows and columns, Add and delete worksheets, Rename worksheets, filtering Data, Sort data, Performing Basic Calculations: Formula basics, Create formulas using cell references, Create formulas using functions, Work with the formula tab, Link workbooks, Excel 2010 Charts: Chart basics, Create a chart, Chart & Axis Titles, Change the chart type & organize the source data, Update data and format the Axes, Add gridlines and arrows.

#### 3.3.5 Service Marketing

SN	Modules	No. of Lectures
1	Introduction to Service Marketing	15
2	Key Element of Service Marketing Mix	15
3	Managing Quality in Service Marketing	15
4	Globalisation and Recent Trends in Service Marketing	15
	Total	60

SN	Modules/ Units
1	Introduction to Service Marketing
	<ul> <li>Services Marketing Concept, Distinctive Characteristics of Services, Services Marketing Triangle, Purchase Process for Services, Marketing Challenges of Services, Role of Services in Modern Economy, Services Marketing Environment, Goods vs Services Marketing, Goods Services Continuum, Consumer Behavior, Positioning a Service in the Market Place, Variations in Customer Involvement, Service Recovery, Complain Handling, Type of Contact: High Contact Services and Low Contact Services, Sensitivity to Customers' Reluctance to Change</li> </ul>
2	Key Element of Service Marketing Mix
	<ul> <li>The Service Product, Pricing Mix, Promotion &amp; Communication Mix, Place/Distribution of Service, People, Physical Evidence, Process- Service Mapping Flowcharting, Branding of Services – Problems and Solutions, Brand Positioning, Options for Service Delivery, STP in service sector.</li> </ul>
3	Managing Quality in Service Marketing
	<ul> <li>Improving Service Quality and Productivity, Service Quality – GAP Model, Benchmarking, Measuring Service Quality -Zone of, Tolerance and Improving Service Quality, The SERVQUAL Model, Defining Productivity – Improving Productivity, Demand and Capacity Alignment</li> </ul>
4	Globalisation and Recent Trends in Service Marketing
	• International and Global Strategies in Services Marketing: Services in the Global, Economy- Moving from Domestic to Transnational Marketing, Factors Favoring Transnational Strategy, Elements of Transnational Strategy, Recent Trends in Marketing Of Services in: Tourism, Hospitality, Transportation (Air, Water, Road, Rail), Unethical Practices in Service Sector, Live Case Studies.

#### 3.3.6 Warehousing and Inventory Control

SN	Modules	No. of Lectures
1	Introduction to Warehousing	15
2	Warehousing Operations	15
3	Warehousing Management	15
4	Inventory Management & Control	15
	Total	60

SN	Modules/ Units	
1	Introduction to Warehousing	
	Evolution & History of Warehousing	
	Warehouse- Meaning, Definition, Importance, Need, Characteristics of warehouses, Uses of warehousing, Tasks, Warehousing Functions.	
	• Issues Affecting Warehouses- Insufficient space, slow picking & discrepancies, Warehousing slotting problems, inaccurate quantities, Capacity, Damage etc.	
	Storage- Meaning, Reasons, Need for Storage.	
	Factors to be considered for selection of Warehouse.	
	Types of Warehouses- Private, Public, Government, Bonded, Co-operative, Cross Docking, Contract, Centralized & Decentralized warehouses.	
	Advantages and Disadvantages of different types of Warehouses.	
	Private & Public Warehouse Expenses.	
	Economic & Service benefits of Warehouses	
	• Size and Number of Warehouse- Factors affecting Warehouse size and number, Warehouse size and material handling equipment, demand and warehouse size.	
	Characteristics of Ideal Warehouse.	
	Significance of Warehousing in Logistics.	
	Role of Warehouse Manager, attracting & retaining warehouse employees.	
2	Warehousing Operations	
	Location Analysis- Meaning, Considerations for the location of a warehouse	
	<ul> <li>Location of Warehouse- location analysis-market positioned- warehouses- production positioned-intermediately positioned warehouse positioned.</li> </ul>	
	• Setting up a warehouse, Determining Storage requirements, Warehousing Preparation Planning, Resource Requirements, Legal Considerations.	
	<ul> <li>Warehouse Layout and Design- randomized storage, dedicated storage, warehouse redesign.</li> </ul>	
	• Storage System- Meaning, Types of storage systems, Benefits of storage systems, Factors influencing choice of storage system.	
	• Warehouse Operations- Process of Warehousing operations, Monitoring warehouse operations, receiving and put away principles, pallet storage	

	retrieval system, case picking system, small item picking system, order picking operations, utilizing and shipping  • Warehouse Audit				
	Warehouse Work force design.				
3	Warehousing Management				
	Warehouse Handling Equipment- Types of material handling systems-manual system, automated systems & semi-automated, Merits & demerits of various handling systems				
	<ul> <li>Warehouse Management System (WMS)- Meaning, Need of Warehouse Management systems, Master Production Scheduling, Material Requirement Planning (MRP), benefits of MRP, Closes Loop MRP, MRP II, Distribution Requirement Planning (DRP), EOQ,</li> </ul>				
	• Just in Time (JIT)- Meaning, Objectives, Benefits, JIT as a philosophy.				
	Comparison between Independent and Dependent demand system.				
	<ul> <li>Packaging- Meaning, Purpose, Functions, Types, Factors influencing package design.</li> </ul>				
	• Technology for warehouse management- Bar code, RFID, Scanning Devices, EDI, ERP.				
4	Inventory Management & Control				
	<ul> <li>Inventory- Meaning, Necessity of Inventory, Types of Inventory- Based on physical form, Position in the supply chain, Inventory performance Cycle, Inventory Costs- Material Costs, Procurement costs, Inventory Carrying costs,</li> <li>Inventory Management- Meaning, Importance of Inventory Management in Supply Chain Management, Functions of Inventory Management, Objectives &amp; Importance of Inventory Management.</li> <li>Inventory Control- Meaning, Objectives, Advantages, Limitations, Mechanism of inventory control.</li> <li>Selective inventory control- ABC, HML, VED, SDE, GOLF, FSN, XYZ.</li> <li>Concept of EOQ, Reorder Level.</li> <li>Methods of controlling stock levels.</li> <li>Role of Inventory Manager in Inventory Management &amp; Inventory Control</li> </ul>				

#### 3.1.3. Transport Law

SN	Modules	No. of Lectures
1	Laws relating to Roadways	15
2	Railways and Shipping Laws	15
3	Multimodal and Customs law	15
4	Laws relating to foreign trade	15
	Total	60

SN	Modules/ Units
1	Laws relating to Roadways
	Motor Vehicle Act, 1988.
	Road Transport Corporation.
	National Highway Act.
2	Railways and Shipping Laws
	• Railway Act, 1989.
	• Merchant Shipping Act, 1958.
3	Multimodal and Customs law
	• Indian Contract Act, 1872.
	• Sale of Goods Act, 1930.
	Multimodal Transport and Goods Act 1993.
	• Customs Act 1962.
4	Laws relating to foreign trade
	Common Carrier Act 1965
	Role of ICAO
	Indian Foreign Trade Act
	• FEMA & FERA

# Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester IV

No. of Courses	Semester IV	Credits			
1	Elective Courses (EC)				
1,2,&3	*Any three courses from the following list of the courses	09			
1	Procurement Management	03			
2	Management Accounting	03			
3	Transportation, Containerization and Distribution Management	03			
4	Taxation and Transportation	03			
5	Health and Safety and Facility Management	03			
2	Ability Enhancement Courses (AEC)				
4	Information Technology in Transportation-II	02			
3	Core Courses (CC)				
5	Multi Modal Transport	03			
6	Surveys in Transport	03			
7	Business Economics-II	03			
	Total Credits	20			

Note: The Svllabus of Ability Enhancement and Core Courses are same at all SY

### **4.1.1 PROCUREMENT MANAGEMENT**

SN	Modules	No. of Lectures
1	Introduction to Procurement Management	15
2	Purchasing Scope, Strategies & Policies	15
3	Sourcing Strategies, Relationships & Performance Measurement	15
4	Strategic Procurement & Quality Management	15
	Total	60

SN	Modules/ Units		
1	Introduction to Procurement Management		
	<ul> <li>Procurement:- Meaning, definition, objectives, functions, importance, challenges, purchase principles, evolution of procurement, procurement process, prerequisite of procurement, procurement skills.</li> <li>Functional integration of procurement- production inventory and distribution, seven R's of procurement, procurement methods,</li> <li>Purchasing cycle, purchasing document- quotation, purchase order, purchase release and other documents.</li> </ul>		
2	Purchasing Scope, Strategies & Policies		
	<ul> <li>Types of purchases -: Raw material, semi-finished, products and components, finished products, maintenance repair and operating items, production support items, services, capital equipment, transportation and third party logistics. Factors affecting purchasing position, Organizational structure for purchasing function, centralized and decentralized purchases, SCM and procurement management.</li> <li>Purchasing policy:- advantages, disadvantages, effective purchasing policy, policy hierarchy, components of purchasing cycle:- role of purchasing, code of conduct, social and minority business, objectives, operational issues, purchasing procedure, purchasing linkages:- internal and external linkages.</li> <li>Purchasing strategy:- purchasing strategy development process, types of purchasing strategies.</li> <li>Purchasing ethics:- types of unethical purchasing behavior. SIM code of ethics. Role of organization in supporting ethical behavior, laws affecting purchasing- warranties, transportation terns and risk of loss, sellers rights, buyers rights, cancelation of orders, breach of contract, acceptance and rejection of goods, patents and intellectual properties.</li> </ul>		
3	transportation strategies, trends affecting transportation.  Sourcing Strategies, Relationships & Performance Measurement		
	<ul> <li>Concepts: Insourcing and Outsourcing, Backward Integration and Forward integration, Bidding, Tendering.</li> <li>World-wide sourcing: meaning, need, barriers, international sourcing process, organizational structure for world-wide sourcing, organization structure for world-wide sourcing.</li> <li>Buyer seller relationship:- advantages and obstacles to closer buyer- seller relationship, collaborative buyer seller relationship, strategic alliance, cross functional team approach, benefits and drawbacks, purchasing contribution to new product development.</li> <li>Performance management- need, problems, performance measurement</li> </ul>		
	categories, developing performance measurement and evaluation system.		

Performance benchmarking.

- **Supply evaluation, selection and measurement process:** supply revaluation and selection process, key supply revaluation criteria.
- **Supplier measurement and evaluation:-** what to measure, measurement techniques, measurement decisions.

#### 4 Strategic Procurement & Quality Management

- **Supplier quality management:-** meaning, importance, managing supplier quality, purchasing's role in suppliers quality. World class supplier quality performance.
- **Counter trade:-** meaning, types, issues, processing from domestic to global sourcing, canalization.
- **Negotiation:-** meaning, negotiation framework, powers in negotiation, negotiation techniques.
- **Contracts:** types of contract- fixed price, cost based, long term, unique type of contract.
- Stock control and storage, Budgeting.
- KPI's used by organization for successful procurement.
- **E procurement-** B2B, new trends in procurement management, sustainable procurement.

### **4.1.2** Management Accounting

SN	Modules	No. of Lectures
1	Introduction	15
2	Budgets	15
3	Introduction to cost accounting	15
4	Marginal and Absorption costing	15
	Total	60

SN	Modules/ Units	
1	Introduction	
	• Financial Analysis and Interpretation:- Comparative, Common size, Trend	
	Analysis.	
	Working Capital Management	
	Ratio Analysis.	
2	Budgets	
	Budget & Budgetary control.	
	Cash Budget	
	Fixed and Flexible Budget	
3	Introduction to cost accounting	
	<ul> <li>Introduction-Meaning, define, objectives &amp; advantages, difference &amp; relationship between cost, finance &amp; management, accounting, essential of a good cost accounting system.</li> <li>Cost concept &amp; classification, Role of a cost accountant in an organization,</li> <li>Preparation of cost sheet</li> <li>Reconciliation of financial and cost sheet</li> </ul>	
4	Marginal and Absorption costing	
	Meaning, advantages and limitations	
	<ul> <li>Cost volume profit analysis -meaning &amp; computation of breakeven point, break even sales(units) ,break even sales (Rs), margin of safety</li> <li>Managerial decision making         (product mix decisions, make or buy decisions, operation or shut down decisions, accept-reject export orders)</li> <li>Case Study: Study of balance sheet of various transport industries (eg:- port, road, rail, aviation industries, logistic companies, IRCTC, etc.)</li> </ul>	

### 4.1.3 Transportation, Containerization and Distribution Management

SN	Modules	No. of Lectures
1	Transportation	10
2	Containerization	20
3	Distribution	15
4	Distribution control and evaluation	15
	Total	60

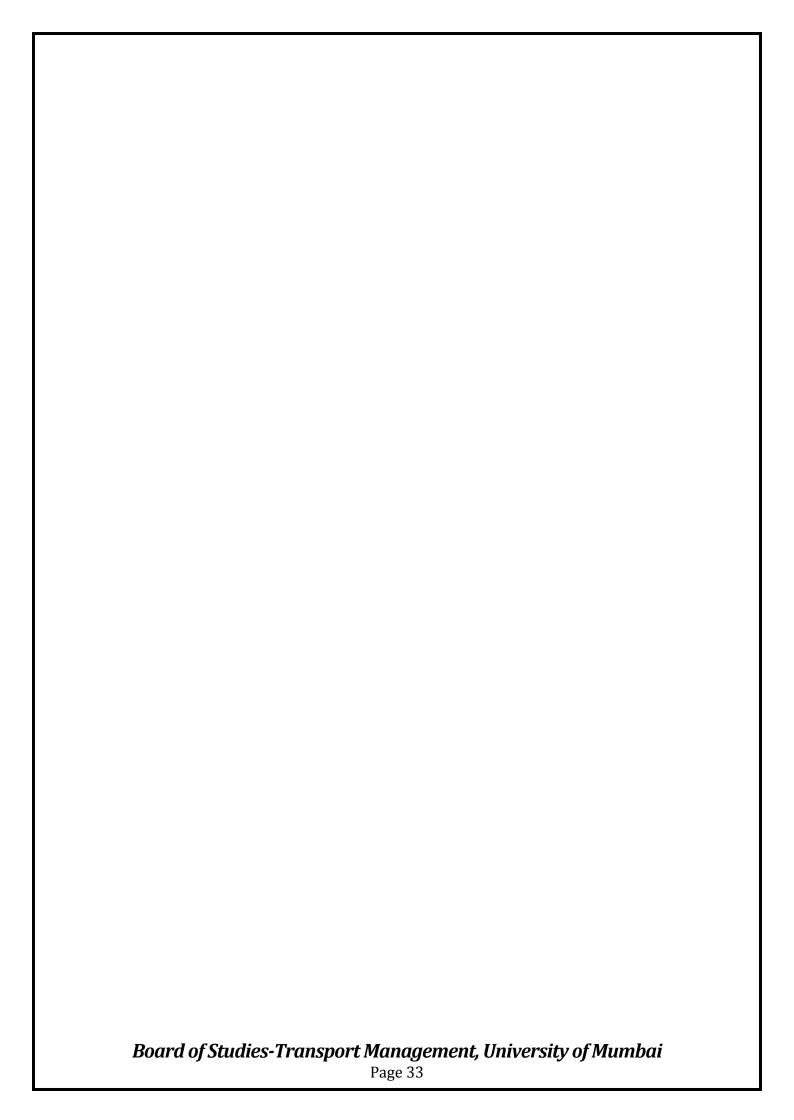
SN	Modules/ Units		
1	Transportation		
	<ul> <li>Transport Terminal Function: terminal and location- port terminals- rail terminals-airport terminals- transport terminal governance.</li> <li>Four Stage Modeling Process: Conventional and four stage modeling process-trip generation models- trip distribution models and calibration- methods of trip assignment models- multi modal trip assignment-mode choice and modal split models</li> <li>Advance Travel Forecasting: Advanced travel demand forecasting methods-activity based modeling-comparison of conventional and activity based modeling- integration of system simulation modeling, transportation network planning sustainability</li> </ul>		
2	Containerization		
	<ul> <li>Meaning, Definition, features, benefits, constraints, Evolution of Containerization, classifications of containers, packing of cargo in containers.</li> <li>Freighting and size of containers: FCL and LCL cargo, Freighting of cargos, slot utilization strategies, estimation of optimum container fleet size, consolidation</li> <li>Container leasing- types, terms and conditions.</li> <li>Multimodal transport and containerization: Alternate uses of containers, marketing of used containers, multimodal transport options for containers, insurance for containers, strategies for managing container imbalance</li> <li>Container manufacturing trends, maintenance and repairs of containers, tracking of container movement, container interchange</li> <li>Container terminal business, World's leading container terminals and location characteristics, container terminal infrastructure, container terminal productivity, container terminal profitability, inland container terminals, container freight stations,</li> <li>Inland container depot (ICD): roles and functions, CFS, Export clearance at ICD, CONCOR, ICDs under CONCOR, Chartering: meaning, kinds of charter, charter party and arbitration</li> <li>Containerizations- global scenario.</li> </ul>		

#### 3 Distribution

- Meaning, importance, need, functions, evolution of distribution channels, market forces affecting distribution.
- Organization for distribution:- distribution organization structure, private and public organization, rising cost and need for control, complexities for physical distribution,
- **Distribution channel management-** meaning and need, channel partnerstypes roles and functions, choice of distribution system
- Factors affecting choice of distribution channels
- Factors affecting effective channel of distribution management- channel design, channel policy, channel conflict- meaning, types, reasons, resolution of conflict- methods, Kenneth Thomas five style of conflict resolution.
- Training, selection, motivation of channel members

#### 4 Distribution Control and Evaluation

- Cost control of total distribution system- task and approaches, physical distribution cost analysis, elements of total cost in physical distribution system, physical distribution efficiency.
- **Order processing** definition, meaning, order acquisition, order entry, document processing, status reporting, factors affecting processing time, customer service.
- Packaging- functions of packaging, cost of packaging, designing a package, packaging materials, choosing right materials, Concept of unitization and palletization.
- **Distribution control and evaluation**: Distribution control stages, standards and goals, performance report, measurement monitoring, corrective actions.
- Channel control-instruments of control, contract or agreement, budgets and reports, distribution audit. changing channel arrangements.
- New trends in distribution management, Ethics in distribution management.



### 4.1.4 Taxation and Transportation

SN	Modules	No. of Lectures
1	Direct Tax	15
2	PGBP and TDS	15
3	Indirect Tax	15
4	Additional Taxes	15
	Total	60

SN	Modules/ Units		
1	Direct Tax		
	• Definition: Assesse, Assessment Year, assessment, annual value, business,		
	capital asset, income, person, previous year, transfer.		
	Basis of Charge: Previous Year, Residential Status, Scope of total income,		
	deemed income, income deemed to accrue or arise in India.		
	Income from Salaries		
	Computation of Capital Gain		
2	PGBP and TDS		
	Profit and Gains from Business and Profession (Special preferences to taxation)		
	and provision related to transportation)		
	• TDS (194 C, 194J, 192, 194H)		
3	Indirect Tax		
	Customs Act, GST Act		
4	Additional Taxes		
	• Road Tax, Vehicle Tax, Toll Tax, Octroi, Infrastructure Cess, Fire Tax,		
	Municipal Tax.		

### 4.1.5 Health & Safety and Facility Management

SN	Modules	No. of Lectures
1	Health and Safety	15
2	Safety Management Systems	15
3	Safety Regulations	15
4	Facility Management	15
	Total	60

SN	Modules/ Units		
1	Health and Safety		
	<ul> <li>Introduction: Concept, Scope, Nature of Occupational Health and Safety, Key Elements of Health and Safety, Benefits and Problems Associated with Occupational Health and Safety Management, Role of National Government and International Bodies in formulating and frame work for regulation of Health and Safety, Health and Safety Training Programme.</li> <li>Exposure to Risks – Physical work factors, Harassment and Violence, Work organizational factors, Working time.</li> <li>Health Outcomes – Occupational Accidents, recognized occupational disease, occupational health problems, work related health problems.</li> <li>Health and safety issues and guidelines at airport, shipping and railways.</li> </ul>		
2	Safety Management Systems		
	<ul> <li>Overview and Understanding Safety</li> <li>Factors for improving safety on roads – causes of accidents due to drivers and pedestrians-design, selection, operation and maintenance of motor trucks,</li> <li>Responsibility for Management of Safety, Basics of Safety Management,</li> <li>Risk Management</li> <li>Hazards Management- Industry specific hazard, HNS Management Cycle. Hazard and Incident Identification and Reporting.</li> </ul>		
3	Safety Regulations		
	<ul> <li>Policy Issues, Safety and Injury Control Programs, Multidisciplinary approach to Planning for Safety and Injury Control - pre crash, crash, and post crash,</li> <li>Accident investigation- Objectives, Parties involved in the Accident Investigation, Accident Investigation Tools and Procedures,</li> <li>Safety Recommendations, Safety Performance Monitoring, Safety Auditing, Safety Committee, Employee Participation in safety.</li> <li>Rehabilitation Policy.</li> <li>ILO conventions and recommendations for safety health and welfare.</li> </ul>		

4	Facility Management	
	• Introduction- Meaning, Role, Scope, Job Description and Profile of Facility	
	Manager	
	Skills required by Facility Manager, Responsibility of Facility Manager,	
	Characteristics of a successful facilities manager,	
	• Facility Management - 3P's, Outsourced and Insourced Facility Management-	
	Advantages and Disadvantages,	
	• Six stages of FM process, FM organizational models, FM principles and	
	theories.	
	Facility- Core, Non Core, Basic facility.	
	Benchmarking- meaning, importance, tools and techniques.	
	Ergonomics and workplace.	
	Space requirement and asset management.	
	Customer Service and feedback.	
	Disaster management.	
	Energy Management and Sustainable technology.	

### 4.2.4 Information Technology-II in Transportation

SN	Modules	No. of Lectures
1	Excel	15
2	Advanced Excel	15
3	Introduction to Remote Sensing & GPS	15
4	E Business	15
	Total	60

SN	Modules/ Units		
1	Excel		
	<ul> <li>Lookup and Reference Functions: VLOOKUP, HLOOKUP, INDEX, ADDRESS, MATCH, OFFSET, TRANSPOSE</li> <li>Logical Function: IF / ELSE, AND, OR, NOT, TRUE, NESTED IF/ELSE</li> <li>Database Functions: DGET, DMAX, DMIN, DPRODUCT, DSTDEV, DSTDEVP, DSUM, DVAR, DVARP</li> <li>Date and Time Functions: DATE, DATEVALUE, DAY, DAY360, SECOND, MINUTES, HOURS, NOW, TODAY, MONTH, YEAR, YEARFRAC, TIME, WEEKDAY, WORKDAY</li> </ul>		
2	Advanced Excel		
	<ul> <li>Information Functions: CELL, ERROR.TYPE, INFO, ISBLANK, ISERR, ISERROR, ISEVEN, ISLOGICAL, ISNA, ISNONTEXT, ISNUMBER, ISREF, ISTEXT, TYPE etc</li> <li>Math and Trigonometry Functions: RAND, ROUND, CEILING, FLOOR, INT, LCM, MOD, EVEN, SUMIF, SUMIFS</li> <li>Statistical Functions: AVEDEV, AVERAGE, AVERAGEA, AVERAGEIF, COUNT, COUNTA, COUNTBLANK, COUNTIF, FORECAST, MAX, MAXA, MIN, MINA, STDEVA</li> <li>Text Functions: LEFT, RIGHT, TEXT, TRIM, MID, LOWER, UPPER, PROPER, REPLACE, REPT, FIND, SEARCH, SUBSTITUTE, TRIM, TRUNC, CONVERT, CONCATENATE, DOLLAR</li> </ul>		
3	Introduction to Remote Sensing & GPS		
	<ul> <li>Introduction to Remote Sensing</li> <li>Spectural reflectance curves of earth objects. Electromagnetic energy transfer through atmosphere and digital data acquisition, earth observation satellite systems and energy bands; analysis of digital data; effective combination of energy bands for different purposes; production of colour composites; interpretation of satellite images.</li> </ul>		

#### • GIS Techniques

• Introduction to GIS, different forms of data such as vector raster and attribute data, development and use of a GIS.

#### GPS Applications

 GPS & Communication Applications in Transport, Navigation & Fleet Management Using GPS

### 4 | E Business

- Management Information System in Transport Introduction to management information systems, Types of Management Information systems;
- Digital Firm and E Business Management of software and hardware assets,
  Data analysis and database design for Management Information Systems,
  Computer systems include Scheduling systems, Estimating systems, Cost
  control systems and Accounting systems etc.; Use of general software such
  as MS-Access and MS-Excel for the development of Management
  Information systems.

### 4.3.5 Multi Modal Transport

SN	Modules	No. of Lectures
1	Multimodal Transport	15
2	Multi Modal Transport System In India	15
3	Regulatory Reforms In Multimodal Transport	15
4	Global Perspective Of Multimodal Transport	15
	Total	60

SN	Modules/ Units		
1	MULTIMODAL TRANSPORT		
	<ul> <li>Concept of Multi Modal Transport, Components of Multi Modal Transportation System, Benefits of Multi Modal Transport,</li> <li>Multi Modal Transport Operator, Responsibilities and Liabilities of the Multi Modal Transport Operator,</li> <li>Challenges of Multi Modal Transport System, Multi Model Transport Technology. Multi Modal Transport Documents. Difference between Multimodal and Intermodal.</li> </ul>		
2	MULTI MODAL TRANSPORT SYSTEM IN INDIA		
	<ul> <li>Various Modes of Transport. Intermodal systems – road/rail/sea; sea/air; road/air; road/rail, sea/road.</li> <li>Inland Container Depot (ICD) . Container Freight Station (CFS) Terminals, Roll-on/Roll-Off Service,</li> <li>Development of multi modal transport system in Indian - Metro Rails, Light Rail Transit (LRT), Sub-Urban Trains, Ring Rail and Monorails, Bus Rapid Transit Systems, Bullet Trains. City Transport. Inland Waterways.</li> </ul>		
3	REGULATORY REFORMS IN MULTIMODAL TRANSPORT		
	<ul> <li>Multimodal Transport of Goods Act- 1993,</li> <li>Private Freight Terminals (PFT) Policy,</li> <li>Draft Coastal Shipping Policy, Cabotage Policy,</li> <li>Policy to permit Operators to move container trains on Indian Railways,</li> <li>Foreign Direct Investment Regulatory Reforms.</li> </ul>		
4	GLOBAL PERSPECTIVE OF MULTIMODAL TRANSPORT		
	<ul> <li>Intermodal in- India, China, Gulf, Europe, Australia, America.</li> <li>Comparison between the above mentioned countries.</li> </ul>		

### 4.3.6 Surveys in Transport

SN	Modules	No. of Lectures
1	Introduction	15
2	Data collection and Processing	15
3	Data analysis and Interpretation	15
4	Advanced techniques in Report Writing	15
	Total	60

SN	Modules/ Units		
1	Introduction		
	Meaning of Survey. Types of Surveys. Instrument of Surveys.		
	Introduction to business research methods: Meaning and objectives of research		
	• Types of research –a)Pure, Basic and Fundamental b) Applied, c) Empirical d)		
	Scientific & Social e) Historical f) Exploratory g) Descriptive h)Causal		
	Concepts in Research: Variables, Qualitative and Quantitative Research		
	Stages in research process.		
	Characteristics of Good Research		
	Hypothesis- Meaning, Nature, Significance, Types of Hypothesis, Sources.		
	Research design – Meaning, Definition, Need and Importance, Steps in		
	research design, Essentials of a good research design, Areas / Scope of		
	research design and Types- Descriptive, Exploratory and causal.		
	• Sampling – a) meaning of sample and sampling, b) methods of sampling-		
	concept- unit, element, frame, universe, errors.		
2	Data collection and Processing		
	Data collection and Processing: : Types of data and sources – Primary and		
	Secondary data sources		
	Methods of collection of primary data		
	a) Observation- i) structured and unstructured, ii) disguised and undisguised,		
	iii)mechanical observations ( use of gadgets)		
	b) Experimental i) Field ii) Laboratory		
	c) Interview – i) Personal Interview ii) focused group, iii) in-depth interviews -		
	Method,		
	d) Survey – Telephonic survey, Mail, E-mail, Internet survey, Social media,		
	and Media listening.		
	e) Survey instrument – i) Questionnaire designing. ii) Types of questions-		
	a)structured/ close ended and b)unstructured/ open ended, c) Dichotomous, d)  Multiple		
	Choice Questions.		
	f) Scaling techniques		
3			
3	Data analysis and Interpretation		

- Data analysis and Interpretation types of data- nominal, ordinal, internal ,ratio. Measurement Sales.
- Processing of data
  - i) Editing field and office editing,
  - ii) coding meaning and essentials,
  - iii) Transcription. tabulation note
- Analysis of data- Meaning, Purpose, types.
- Interpretation of data- Essentials, importance and Significance of processing data
- Multivariate analysis concept only
- Testing of hypothesis concept and problems –
   i) chi square test, ii) Z and t-test (for large and small sample) iii) P-test.

### 4 Advanced techniques in Report Writing

- Report writing i) Meaning, importance, functions of reports, essential of a
  good report, content of report, steps in writing a report, types of reports,
- Footnotes and Bibliography
- Ethics and research
- Objectivity, Confidentiality and anonymity in Research
- Plagiarism

### 4.3.7 Business Economics-II

SN	Modules	No. of Lectures
1	Introduction to Transport Economics	15
2	Demand and Supply of Transport	15
3	Pricing of Transport	15
4	Growth and Development	15
	Total	60

SN	Modules/ Units			
1	Introduction to Transport Economics			
	Meaning and Emergence of Transport Economics – Economic characteristics of			
	transport – Transport infrastructure investment and economic productivity –Trad			
	and transport strategy- The multiplier impacts of a transport investment-Concepts			
	and case studies of price elasticity, income elasticity, cross elasticity and service			
	elasticity of demand.			
2	Demand and Supply of Transport			
	Demand for Transport- Transport as a derived demand - The notion of transport			
	demand curve- Determinants of transport demand - Demand function: marginal			
	benefits – Transport supply curve- Equilibrium with negative feed-back system –			
	Disequilibrium with positive feedback system - Demand and budgets in			
	transportation.			
	• The Supply of Transport – Concepts and source of supply of transport – Fixed			
	and variable costs — Specific, joint and common costs – Economies of scale and			
	scope - Externalities – Supply function: marginal costs.			
3	Pricing of Transport			
	• The principles of pricing - Marginal cost pricing - Price discrimination -			
	Geographical pricing- Indirect pricing- The problem of the peak- Second best			
	situations- Transport subsidies.			
4	Growth and Development			
	Transport and economic activity - Economics of sustainable transport in India -			
	Theory of Transportation: Charles Horton Cooley – Trends in growth and			
	development of transport – Transport reforms: transportation with smart cities.			

SN	Reference Books		
1	Production and Quality Management		
	Production and Operations Management: R. Paneerselvam		
	Production (Operations) Management: L.C. Jhamb		
	K. Ashwathappa and K .Shridhar Bhatt ; Production and Operations management		
	Productivity Management: Concepts and Techniques, Sawhney S.C., Tata		
	McGraw Hill		
	Srinivas Gondhalekar and Uday Salunkhe, "Productivity Techniques", Himalaya		
	Publishing House		
2	Customs Procedure and Cargo Handling		
	Custom Manual		
	Handbook of procedure –DGFT.		
	Working paper of planning commission		
	Cargo handling manual		
3	Transport Project Management		
	Project Management a managerial approach – Jack R. Meredith, Samuel J.		
	Mantel.		
	Mcgraw Hill Project managment.		
	PMBOK Guide		
	Project Management Methodology Guidelines- Chandler, Arizona.		
	Project Management a systematic approach- Harold Kerzner.		
4	Transport Environment Management		
	• Energy, Transport and the Environment by Oliver Inderwildi and David King		
	(Eds.)		

•	Globalisation,	Transport and	Environment,	O.E.C.D.
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- Handbook of Transport and Environment, by David A. Hensher and Kenneth J.
   Button
- Central Pollution Control Board, Annual Reports
- International Energy Agency (IEA) Reports on World Energy Outlook
- United Nations Environment Programme (UNEP) Reports
- Transport, the Environment and Sustainable Development, David Bannister,
   Kenneth John Button, Kenneth Button
- Unsustainable Transport: City Transport in the New Century, David Bannister
- Environmental Transport Processes, Bruce C. Logan
- Air Transport and the Environment, Ben Daley
- The Environmental Impact of Railways, T. G. Carpenter
- Environmental Problems Caused by Railways, Charlie Higgins
- Environmental External Costs of Transport, Rainer Friederich, Peter Bickel

### 5 Managerial Skill Development

- Essentials of Management Koontz H & W McGraw Hill, New York
- Principles of Management Ramaswamy Himalaya, Mumbai
- Management Concept and Practice Hannagain T McMillan, Delhi
- Basic Managerial Skills for All McGrath, E.H. Prentice Hall of India
- Management-Text & Cases VSP Rao Excel Books, Delhi Assessment Pattern
- Essentials of Management Massie Joseph Prentice Hall of India
- Management: Principles & Guidelines Thomas N. Duening & John Ivancevich Biztantra
- Management Concepts and OB P.S.Rao & N.V.Shah Ajab Pustakalaya
- Management Concepts and Strategies J S Chandran Vikas Publishing House
- principles Of Management Tripathi P.C. Tata McGraw Hill

### 6 Information technology in transport – I

- ICT for transport, Edward Elgar publishing
- ICT and future of transport- Ericsson, Pantheon Books
- Innovative ICT Application in transport and logistics Mark Goh and Kym Fraser
- E- Commerce An Indian Perspective, P.T. Joseph

	E- Commerce and the digital economy, Michael J Shaw
7 Se	ervice Marketing
	Valarie A. Zeithmal &Mary Jo Bitner, Service Marketing, Tata McgrawHill, 6t Edition  Christoper Lovelock, JochenWirtz, Jayanta Chatterjee, Service Marketing People Technology, Strategy – A South Asian Perspective, Pearson Education, 7t Edition  Ramneek Kapoor, Justin Paul &Biplab Halder, Services Marketing-Concept And Practices, McgrawHill, 2011  Harsh V.Verma, Services Marketing Text &Cases, Pearson Education, 2n Edition  K. Ram Mohan Rao, Services Marketing, Pearson Education, 2nd Edition, 2011  C. Bhattacharjee, Service Sector Management, Jaico Publishing House, Mumba 2008  Govind Apte, Services Marketing, Oxford Press, 2004
0 117	
8 W • •	Essentials of Inventory Management- R Bhargava, Cybertech Publications.  John J. Coyle, Edward J. Bardi and C. John Langley Jr., 2003, The Management of Business Logistics, A Supply Chain Perspective, Thomson  Kee-Hung Lai and Edwin T.C. Cheng, 2006, Just-in-time Logistics A Introduction, McGraw Hill [ISBN: 007 - 125583 - 4]  Paul R. Murrhy Jr. and Donald F. Wood, 2004, Contemporary Logistics, Prentic Hall.  Ronald H. Ballou, 2004, Business Logistics / Supply Chain Management, Prentic Hall.  Inventory Control and Management- Willey, Donald Waters. Essentials of Inventory Management- R Bhargava, Cybertech Publications.

9	Transport law
	Multimodal transport law- marian hoeks.
	Transport law in india- talat Fatima.
	• Carriage of goods by sea,land and air- unimodal and muti modal transport in 21st
	century- baris soyer and Andrew tettenborn.
	Road traffic law
	Road traffic act

SN	Reference Books		
1	Procurement management		
	Purchasing and supply chain management- Thomas publication by Monczka,		
	Trent, Hand field		
	Purchasing and material management- p. gopalkrishnan		
	Purchasing and material management- N.K.Nair		
	Material management and purchasing- Dean SAmmer.		
2	Management Accounting		
	KhannaPandey& Ahuja: Practical costing, Sultan Chand		
	K.S.Thakur: Cost Accounting , New century book house pvt. Ltd.		
	Jain and Narang: Cost Accounting, Kalyani Publishers		
	S. N Maheshwari: Cost accounting, Mahaveer Publishers		
	Horngreen : Cost accounting – A Managerial emphasis, Prentice Hall		
	• Lectures on Costing by Swaminathan: S. Chand and Company (P) Ltd., New		
	Delhi		
	Cost Accounting by C.S. Rayudu, Tata Mc. Graw Hill and Co. Ltd., Mumbai		
	Cost Accounting by JawaharLal and SeemaSrivastava, Tata Mc. Graw Hill and		
	Co. Ltd.Mumbai		
	Cost Accounting by Ravi M. Kishore, Taxmann Ltd., New Delhi		
	Principles and Practices of Cost Accounting by N.K. Prasad, Book Syndicate Pvt.		
	Ltd., Calcutta		
	• Cost Accounting Theory and Practice by B.K. Bhar, Tata Mc. Graw Hill and Co.		
	Ltd., Mumbai		
	Cost Accounting Principles and Practice by M.N. Arora, Vikas Publishing House		
	Pvt. Ltd., New Delhi		
	Advanced Cost and Management Accounting: Problems and Solutions by V.K.		
	Saxena and C.D. Vashist, S. Chand and Company (P) Ltd., New Delhi		

- Cost Accounting by S.P. Jain and K.L. Narang, Kalyani Publishers, Ludhiana
- Modern Cost and Management Accounting by M. Hanif, Tata McGraw Hill Education Pvt. Ltd., New Delhi

### 3 Transportation, Containerization and Distribution

- Containerization, Logistics Management and foreign trade- Indian perspective –
   Shipra Publication, Namita Pandey
- The Docker Book: Containerisation is the new virtulisation, James Turrbuh
- Intermodal Transportation and containerization, Hofstra.edu
- Transportation management: Imperatives and best practices, S Jaya, Krishna,
   ICFAI, University Press, 2007
- Management of Transportation Bardi Edward J, Cengage Learning
- Dr. K V Hariharan, Containerization, Multimodal transport and infrastructure developmeny in Indi, Shroff publishers
- Lee C Y Neng Q, Handbook of Ocean Container transport logistics Making global supply chain effective, Springer, 2015
- Kapoor Satish K and Kaushal Purv, Basics of Distribution Management: A logistical approach, Prentice hall of India
- D. K. Agarwal, Distribution and logistics Managemnt: A Strategic Marketing Approach, Macmillan Publishers India
- The Handbook of Logistics and Distribution Management: Understanding the Supply Chain Paperback Import, 3 Jan 2014
- By Alan, Phil Croucher, Dr Peter Baker, The Handbook of Logistics and Distribution Management
- A Nag, Sales and distribution Management, Mcgraw hill, 2013
- Krishna K Havaldar, Vasant M. Cavale, sales and Distribution Management-Text
   &Cases, Mcgraw Hill Education, 2011
- Dr. Matin Khan, Sales and Distribution Management, Excel Books, 1st Edition.

### 4 Taxation and Transport

- Direct tax manual Taxmann
- Direct tax law –Bangar
- Indirect tax law- Taxmann
- Indirect tax manual Bangar

- Singhania VK & Singhania K, Direct Taxes Laws and practices, Taxmann
- Ahuja direct taxes

### 5 Health& Safety and Facility Management

- Phil Hughes & Ed Ferrett (2010). International Health and Safety at Work. Routledge Publisher.
- Faciltiy Management Handbook 3rd Edition- Cotts, David G.; Roper, Kathy O.; Payant, Richard P.
- Faciltiy Design and Management Handbook- Eric Teicholz
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### No. UG/20 of 2018-19

### CIRCULAR:-

Attention of the Principals of the affiliated Colleges and Directors of the recognized Institutions in Commerce & Management Faculty is invited to this office Circular No.UG/120 of 2016-17, dated 27<sup>th</sup> October, 2016 relating to syllabus of Bachelor of Commerce (B.Com.) degree course.

They are informed that the recommendations made by the Ad-hoc Board of Studies in Trade, Transport Industries at its meeting held on 28<sup>th</sup> February, 2018 have been accepted by the Academic Council at its meeting held on 5<sup>th</sup> May, 2018 vide item No. 4.47 and that in accordance therewith, the revised syllabus as per the (CBCS) for the T.Y.B.Com. (Transport Management) (Sem. V & VI), has been brought into force with effect from the academic year 2018-19, accordingly. (The same is available on the University's website www.mu.ac.in).

MUMBAI – 400 032

To June, 2

(Dr. Dinesh Kamble)
I/c REGISTRAR

The Principals of the affiliated Colleges and Directors of the recognized Institutions in Commerce & Management Faculty. (Circular No. UG/334 of 2017-18 dated 9<sup>th</sup> January, 2018.)

### A.C./4.47/05/05/2018

No. UG/20 -A of 2018

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MUMBAI-400 032 14th June, 2018

Copy forwarded with Compliments for information to:-

- 1) The I/c Dean, Faculty of Commerce & Management,
- 2) The Chairman, Ad-hoc Board of Studies in Trade, Transport Industries,
- 3) The Director, Board of Examinations and Evaluation,
- 4) The Director, Board of Students Development,
- 5) The Professor-cum-Director, Institute of Distance and Open Learning (IDOL),
- 6) The Co-Ordinator, University Computerization Centre,

(Dr. Dinesh Kamble)
I/c REGISTRAR

ull and

### University of Mumbai



Revised Syllabus
and
Question Paper Pattern
of Courses of
B.Com. (Transport Management)
Programme at
Third Year
Semester V and VI

Under Choice Based Credit, Grading and Semester System

(To be implemented from Academic Year 2018-2019)

Board of Studies-in - Trade Transport & Industry

University of Mumbai

### B.Com. (Transport Management) Programme Under Choice Based Credit, Grading and Semester System

T.Y.B.Com. (Transport Management)

(To be implemented from Academic Year 2018-2019)

No. of Courses	Semester V	Credits	No. of Courses	Semester VI	Credits
1	Elective Courses (EC)		1	Elective Courses (EC)	
1,2,3	*Any four courses from the	12	1,2,3	**Any four courses from the	12
&4	following list of the courses		&4	following list of the courses	
2	Core Course (CC)		2	Core Course (CC)	
5	Port Operations and	04	5	Transport Policy and	04
	Management			Documentation	
6	Maritime Transport and	04	6	Project on Research Work	04
	Economics				
Total Credits					

✓ **Note:** Project work is considered as a special course involving application of knowledge in solving/analyzing/exploring a real life situation/ difficult problem. Project work would be of 04 credits each. A project work may be undertaken in any area of Elective Courses/ Study Area

*List of Elective Courses for Semester V (Any Four)		**List of Elective Courses for Semester VI (Any Four)					
01	Human Resource Management and Industrial Relations	01	International Trade and Transport				
02	Transport Costing and Pricing	02	Fleet Operations and Management				
03	Transport Insurance and Risk Management	03	Analytical Modeling in Transport				
04	Strategic Management	04	Reengineering and Turnaround Management				
05	Ethics and Public Relations in Transport	05	Tourism Management				
06	Transport Planning (Urban, Rural, Public, Mass)	06	Community Development Project				
Note	Note: Course selected in Semester V will continue in Semester VI						

# B.Com. (Transport Management) Programme Under Choice Based Credit, Grading and Semester System Course Structure

(To be implemented from Academic Year 2018-2019)

### **Semester V**

No. of Courses	Semester V	Credits
1	Elective Courses (EC)	
1,2,3 & 4	*Any four courses from the following list of the courses	12
2	Core Course (CC)	
5	Port Operations and Management	04
6	Maritime Transport and Economics	04
	Total Credits	20

	*List of Elective Courses for Semester V (Any Four)	
01	Human Resource Management and Industrial Relations	
02	Transport Costing and Pricing	
03	Transport Insurance and Risk Management	
04	Strategic Management	
05	Ethics and Public Relations in Transport	
06	Transport Planning (Urban, Rural, Public, Mass)	

## 1. Elective Courses (EC)

## 1. Human Resource Management & Industrial Relation

Sr. No.	Modules	No. of Lectures
01	Introduction	15
02	Recruitment and Selection	10
03	Performance Appraisal	15
04	Participate Management Industrial Relation	20
	Total	60

Sr. No.	Modules / Units	
1	Introduction	
	<ul> <li>Definition, features, scope of HRM, personnel management Evolution of HRM / trends in HRM, Challenges before the HR manager, Role of HR manager, Traits / characteristics of the workforce personnel manual</li> <li>HRP- Definition, Process of HRP along with brief coverage of personnel demand and supply forecasting techniques, Factors affecting HRP</li> <li>Concepts: HRIS, VRS, Outsourcing, pink slip/termination / retrenchment / downsizing / separation, Contracting and sub-contracting, Promotions and transfers.</li> </ul>	
2	Recruitment and Selection Process	
	<ul> <li>Job analysis – definition, methods of collecting job data, merits and demerits / limitations         Job design – definition, factors affecting job design, approaches to job design         Job evaluation – definition, methods of job evaluation</li> <li>Recruitment – definition, sources of recruitment, merit and demerits         Selection – definition, process of selection, types of selection tests, types of         interviews         Induction / orientation – definition, methods, process</li> <li>Placement, Training and Development - Definition of training and         development, Methods of training managers, Process / procedure of         conducting training program, Advantages of Training &amp; development</li> </ul>	
3	Performance Appraisal and Career Planning	
	<ul> <li>Performance Appraisal - Definition of performance appraisal, Methods of appraisal for managers – traditional and modern, Process / procedure of conducting performance appraisal, Advantages of performance appraisal, Limitations of appraisal</li> <li>Compensation Management - Definition of compensation, Components of salary / salary slip, Fringe benefits – definition and types</li> <li>Career Planning and Development - Definition of career planning and career development, Process / procedure of career planning, Career stages / career life cycle, Essentials to make career planning successful, Career counseling. Employee retention techniques, Succession planning.</li> </ul>	
4	Participative Management and Industrial Relation	
	<ul> <li>Participative Management - Definition of Participative Management, Levels of participation, Factors essential for successful participative management, Forms of participation.</li> <li>Industrial Relations: Definition of industrial relations, Features of industrial relations, Importance of industrial relations, Approaches to industrial relations, Parties to industrial relations</li> <li>Trade Unions - Definition of trade union, Features of trade unions in India.</li> <li>Industrial Disputes - Causes, Types, Dispute settlement mechanism, Employee grievances.</li> <li>Labour laws - Trade Union Act 1962, Minimum Wages Act 1948, Factories Act 1948, Workman Compensation Act 1923, Child Labour Act 1986, Sexual Harassment At Workplace Act 2013.</li> </ul>	

## 1. Elective Courses (EC)

## 2. Transport Costing & Pricing

Sr. No.	Modules	No. of Lectures
01	Service Costing	15
02	Contract Costing	10
03	Job Costing	15
04	Budgeting	20
	Total	60

Sr. No.	Modules / Units	
1	Service Costing	
	Service and Operating Costing	
2	Contract Costing	
	Contract Costing	
3	Job Costing	
	Job, Process and Batch Costing	
4	Budgeting	
	<ul><li>Budget and Budgetary Control , Cash Budget, Fixed and Flexible Budget</li><li>Working Capital Management</li></ul>	

## 1. Elective Courses (EC)

## 3. Transport Insurance & Risk Management

Sr. No.	Modules	No. of Lectures
01	Introduction to Insurance	15
02	Types of Insurance	15
03	Introduction to Risk Management	15
04	ERM	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction to Insurance	
	<ul> <li>Introduction: Meaning of Insurance, Concept and Evolution, Types of Insurance, Parties to Insurance, Rights and Obligations of Parties involved in Insurance, Contract of Insurance, Terminology used in Insurance business, Products of Insurance, Principles of Insurance, Surrender Nomination and Assignment Policies, Practices of Insurance: (Premium, Bonus, Plans, Annuities)</li> <li>IRDAI- functions, role, protection to policy holders, dispute resolution mechanism</li> <li>Claims Handling – Insurance claims – Risks – Reinsurance – Demurrage – claim producers and Documentation – Right of subrogation.</li> </ul>	
2	Types of Insurance	
	<ul> <li>Fire Insurance: Basic Principles, Add on cover, Special policy, fire Hazardous and Prevention, erstwhile- tariffs rules and rates, Documents, undertaking, claims- legal, procedural aspect, consequential loss, special policies and overseas practices.</li> <li>Marine Insurance: basic, fundamental principles, underwriting, cargo insurance, coverage, types of cover, hull insurance, marine claims, marine recoveries, role of bankers, loss prevention, re insurance, maritime frauds.</li> <li>Motor Insurance: introduction, marketing, types of motor vehicles, documents and policies, underwriting, insurance claim, applications, consumer delight, third party insurance, procedure for filling and depending, quantum fixation, fraud management.</li> <li>Aviation Insurance: Introduction, Aviation Insurance Covers, Underwriting-general aviation, underwriting airlines, aviation laws, aviation claims, aviation finance.</li> <li>Miscellaneous Insurance: Legal Liability Insurance, Machinery Insurance, Personal Accident Insurance, Reinsurance.</li> </ul>	
3	Introduction to Risk Management	
	<ul> <li>Definition of Risk , Risk Management Definition ,Meaning, Relationship between Uncertainty and Risk, Degree of Risk, Types of risk- Market Risk, liquidity Risk, Exchange risk, Credit Risk, Systematic Risk, Unsystematic Risk, Political Risk, Commercial Risk, Inflation Risk.</li> <li>Managing Risk</li> <li>Risk Management Tools</li> <li>Risk Management Process</li> <li>Role of Risk Management</li> <li>Rules of Risk Management</li> </ul>	
4	ERM	
	<ul> <li>Enterprise Risk Management , ERM Framework, ERM Process, SWOT Analysis, Sample Risk Register</li> <li>Risk Assurance- purpose , Sources of Risk Assurance, Challenges of Risk Assurance.</li> <li>FOREX Risk</li> </ul>	



## 1. Elective Courses (EC)

## 4. Strategic Management

Sr. No.	Modules	No. of Lectures
01	Business Policy	15
02	Strategy Formulation	15
03	Strategic Implementation, Evaluation and Control	15
04	Strategic Evaluation and Control	15
	Total	60

Sr. No.	Modules / Units	
1	Business Policy	
	<ul> <li>Business: Meaning, Scope of Business, Forms of Business</li> <li>Business Policy-Meaning, Nature, Importance</li> <li>Strategy-Meaning, Definition</li> <li>Strategic Management-Meaning, Definition, Importance, Strategic management</li> <li>Process &amp; Levels of Strategy and Concept and importance of Strategic Business Units(SBU's)</li> <li>Strategic Intent – Mission, Vision, Goals, Objective, Plans</li> </ul>	
2	Strategy Formulation	
	<ul> <li>Environment Analysis and Scanning (SWOT, PEST, ETOP Analysis)</li> <li>Corporate Level Strategy (Stability, Growth, Retrenchment, Integration and Internationalization)</li> <li>Business Level Strategy (Cost Leadership, Differentiation, Focus)</li> <li>Functional Level Strategy (R &amp; D, HR, Finance, Marketing, Production)</li> <li>Corporate Governance and Corporate Social Responsibility</li> </ul>	
3	Strategic Implementation, Evaluation and Control	
	<ul> <li>Models of Strategy making.</li> <li>Strategic Analysis &amp; Choices &amp; Implementation: BCG Matrix, GE 9 Cell, Porter 5 Forces, 7S Frame Work</li> <li>Implementation: Meaning, Steps and implementation at Project, Process, Structural, Behavioral, Functional level.</li> </ul>	
4	Strategic Evaluation and Control	
	<ul> <li>Strategic Evaluation &amp; Control – Meaning, Steps of Evaluation &amp; Techniques of Control</li> <li>Synergy: Concept, Types, evaluation of Synergy. Synergy as a Component of Strategy &amp; its Relevance.</li> <li>Change Management – Elementary Concept</li> </ul>	

## 1. Elective Courses (EC)

## 5. Ethics and Public Relations in Transport

Sr. No.	Modules	No. of Lectures
01	Introduction to Ethics and Business Ethics	15
02	Corporate Governance and CSR	15
03	Public Relations	15
04	Media Relations, Employee and Crisis Communication, Blogging	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction to Ethics and Business Ethics	
	<ul> <li>Introduction to Ethics: Meaning, Features, Concept of Ethics, Evolution of Ethics, Nature of Ethics- Personal, Professional, Managerial Importance of Ethics, Objectives, Scope, Types – Transactional, Participatory and Recognition, Ethical Values</li> </ul>	
	<ul> <li>Business Ethics: Meaning, Objectives, Purpose and Scope of Business Ethics         Towards Society and Stakeholders, Role of Government in Ensuring Business         Ethics Principles of Business Ethics, 3 Cs of Business Ethics – Compliance,         Contribution and Consequences, 4 V model of Ethical Leadership, Myths about         Business Ethics, Ethical Performance in Businesses in India, Ethical Dilemma,         Ethical issues in transportation, Solutions to ethical issues in transport and         logistics sector.</li> </ul>	
2	Corporate Governance and CSR	
2	<ul> <li>Corporate Governance: Concept, Need for Corporate Governance • Significance of Ethics in Corporate Governance, Principles of Corporate Governance, Benefits of Good Governance, Issues in Corporate Governance • Theories- Agency Theory, Shareholder Theory, Stakeholder Theory and Stewardship Theory • Corporate Governance in India, Emerging Trends in Corporate Governance, Models of Corporate Governance, Insider Trading, 4 P's in corporate Governance, Whistle Blowing</li> <li>CSR: Meaning of CSR, Types of Social Responsibility • Aspects of CSR-Responsibility, Accountability, Sustainability and Social Contract • Need for CSR</li> <li>CSR Principles and Strategies • Issues in CSR • Social Accounting • Ethical Issues in International Business Practices • Recent Guidelines in CSR • Future of CSR</li> </ul>	
3	Public Relations	
	<ul> <li>Fundamental of Public Relations:         <ul> <li>Introduction, Meaning, Essentials of Public Relations, Objectives of Public Relations, Scope of Public Relations, Significance of Public Relations in Transport and Logistics Tracing Growth of Public Relations, Reasons for Emerging International Public Relations</li> </ul> </li> <li>Public Relations Environment:         <ul> <li>Introduction, Social and Cultural Issues, Economic Issues, Political Issues, Legal Issues, Technological Issues, Ecological Issues</li> </ul> </li> <li>Theories used in Public Relations:         <ul> <li>Systems Theory, Situational Theory, Social Exchange Theory, Diffusion Theory</li> </ul> </li> <li>Mass Media Laws: Defamation, Invasion of Privacy, Copyright Act, Digital</li> </ul>	
	Piracy, RTI	

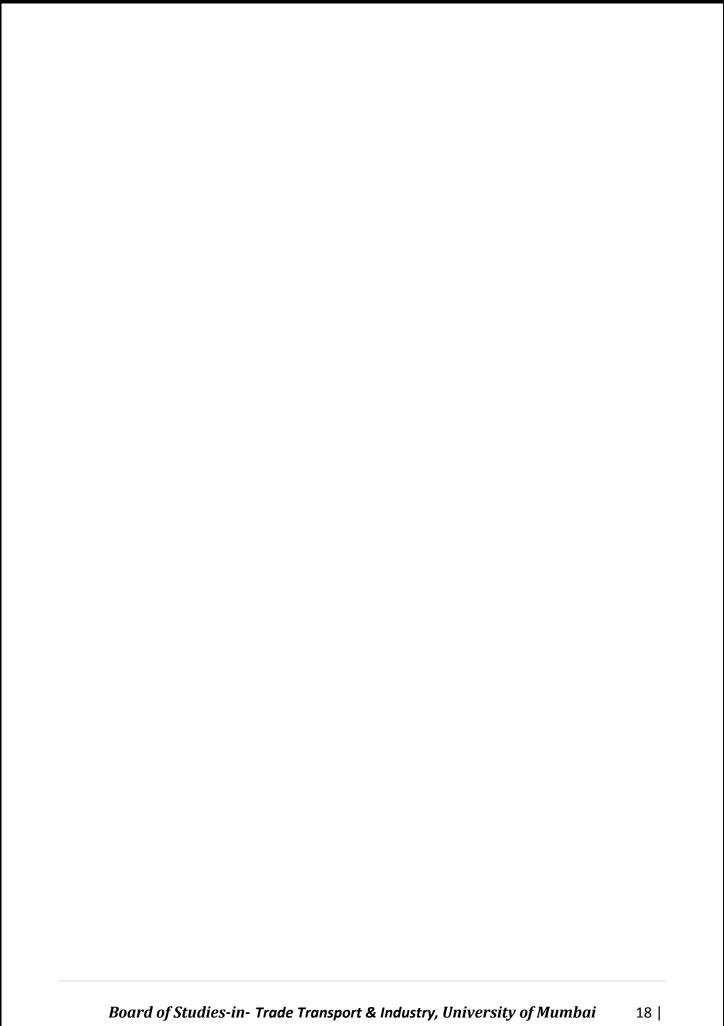
Media Relations, Employee and Crisis Communication, Blogging  Media Relations:
Media Relations:
Introduction, Importance of Media Relations, Sources of Media Information, Building Effective Media Relations, Principles of Good Media Relations, Press Conference, Press Release  Employee Communication: Introduction, Sources of Employee Communications, Organizing Employee Communications, Benefits of Good Employee Communications, Steps in Implementing An Effective Employee Communications Programme, Role of Management in Employee Communications  Crisis Communication: Introduction, Impact of Crisis, Role of Communication in Crisis, Guidelines for Handling Crisis, Trust Building  Blogging Introduction, Defining Corporate Blogging, Characteristics of a Blog, Types of Blogs, Role of Blogs, Making a Business Blog  PR and Social Media( Twitter, Facebook, Instagram etc)

## 1. Elective Courses (EC)

## 6. Transport Planning

Sr. No.	Modules	No. of Lectures
01	Introduction	15
02	Evaluation of Urban and Rural Transportation Systems	15
03	Management of Transportation System and Disaster Management in Transportation	15
04	Regional Transport System and Environment	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction	
	<ul> <li>Public Transport – Meaning, Advantages, Disadvantages, Need, Types- Airline, Bus, Train, Personal rapid transit, mass transit, Cable propelled transit, Ferry, Auto rickshaws and other, problems and challenges of public transport, Issues in public transport, factors and properties determining quality public transport,</li> <li>Privatization of India's public transport sector, public transport and private transport – relationship and comparison, Integrated transport infrastructure approach in public transport, Status of public transport in India, comparative analysis of different public transport modes</li> <li>Smart City Concept</li> <li>Mass Transit</li> </ul>	
2	Evaluation of Urban and Rural Transportation systems	
	<ul> <li>Planning process: Steps in planning process- plans, levels, objectives, content and data requirement- regional plan, master plan, detail development plan, development control regulation, zoning regulation; Fundamentals of demand &amp; supply sides of transportation.</li> <li>Infrastructure and management, transportation systems and their types, design and operating characteristics, urban road hierarchy planning, rural transportation issues, criteria for road and junction improvements,</li> <li>Transportation survey and studies importance in planning: Study area definitions, surveys and their types, sampling methods, survey techniques and other Traffic and transportation surveys, programming and scheduling, processing of travel data, analysis and interpretation of traffic studies</li> </ul>	
3	Management of Transportation system and disaster management in transportation	
	<ul> <li>Existing organizational and legal framework, traffic and environmental management techniques.</li> <li>Management techniques, review of existing traffic management schemes. Framework for evaluation of system.</li> <li>Causes of disaster on Construction sites: Natural and human made hazards. Foresee possible risks and preparedness. Principals of Emergency Management: Comprehensive, progressive, risk driven, integrated, collaborative, coordinated, flexible, professional. Safety precautions and standards in work environment.</li> </ul>	
4	Regional Transport System and Environment	
	<ul> <li>Importance of accessibility in regional transport planning. Role of road, rail, air and water transport systems. Regional transport systems, planning road network, planning for micro regions.</li> <li>Transport and Environment: Traffic noise, factors affecting noise, noise abatement measures, standards. Air pollution standards, traffic safety, accident reporting and recording systems. Factors affecting road safety, transport planning for target groups, children, adults handicapped and women. Norms and guidelines for highway landscape, street lighting types, standards and design considerations, transport and environment.</li> </ul>	



## 2. Core Courses (CC)

## 1. Port Operations Management

Sr. No.	Modules	No. of Lectures
01	Introduction to Port	15
02	Port Organization, Operations and Management	15
03	Port Safety and Security	15
04	Cargo Handling and Custom Procedure	15
	Total	60

values, Port Services and Facilities, Challenges and Opportunities in Port Sector, Port Users and Stakeholders and their needs, Statutory Bodies governing port (National and International), Port Authority, Port Ownership Management Model.  • Port Infrastructure: Port Structure, Port Layout, Port location (relevance or location to both vessel transit time and port rotation) dependency of port location on hinterland and geographical resources  • Port planning: Terminal planning, Capacity planning (no of berths, size and length, relationship between berth occupancy, service time and wasting time berth throughput) Role of traffic in planning, Analysis of demand factors capacity calculation,  • Role of port/ Importance of Port: In economic development, in trading patterns of nations, in national and international trade, in maritime logistics and modal shift.  • Terminals: Types of terminals, terminal operators, position and places in terminals, privatization of terminals, window system in terminal.  • Ships: Types (according to cargo needs and trade routes), effect of port time on ship speed, influence of port development on ship development.  2 Port Organization, Operations and Management  • Port Organization, Operations and Management  • Port Operations and Management: Capacity management, information flow between port, users and authority, marine operations(dredging, navigatior aids and conservancy)  • Port logistics: Port and Logistics, Port and supply chain,, recent trends in logistics, inter modality and landside port logistics, Integrating port with globa supply chain  • Port Enance: Port Costing, Port Pricing Private sector participation in finance Tariff rates, Pricing strategy, Port Investment  • Port Development and Maintenance: History, Factors affecting development of port, factors affecting performance of port, port restructuring in India, effect of globalization on port choice, recent trends in port.  3 Port Safety and Security  • Port security and safety: Types of Risk and Uncertainties, Risk and saf	Sr. No.	Modules / Units	
values, Port Services and Facilities, Challenges and Opportunities in Port Sector, Port Users and Stakeholders and their needs, Statutory Bodies governing port (National and International), Port Authority, Port Ownership Management Model.  • Port Infrastructure: Port Structure, Port Layout, Port location (relevance or location to both vessel transit time and port rotation) dependency of port location on hinterland and geographical resources  • Port planning: Terminal planning, Capacity planning (no of berths, size and length, relationship between berth occupancy, service time and wasting time berth throughput) Role of traffic in planning, Analysis of demand factors capacity calculation,  • Role of port/ Importance of Port: In economic development, in trading patterns of nations, in national and international trade, in maritime logistics and modal shift.  • Terminals: Types of terminals, terminal operators, position and places in terminals, privatization of terminals, window system in terminal.  • Ships: Types (according to cargo needs and trade routes), effect of port time on ship speed, influence of port development on ship development.  Port Organization, Operations and Management  • Port Organization, Operations and Management  • Port Operations and Management: Capacity management, information flow between port, users and authority, marine operations(dredging, navigation aids and conservancy)  • Port logistics: Port and Logistics, Port and supply chain, recent trends in logistics, inter modality and landside port logistics, Integrating port with globa supply chain  • Port Finance: Port Costing, Port Pricing Private sector participation in finance Tariff rates, Pricing strategy, Port Investment  • Port Development and Maintenance: History, Factors affecting development of port, factors affecting performance of port, port restructuring in India, effect of globalization on port choice, recent trends in port.  • Port security and safety: Types of Risk and Uncertainties, Risk and safety Indicators, Valuing Port S	1	Introduction to Port	
<ul> <li>Ships: Types (according to cargo needs and trade routes), effect of port time on ship speed, influence of port development on ship development.</li> <li>Port Organization, Operations and Management</li> <li>Port organization structure: Organization Structure of Major ports of India how activities are organized to operate effectively and efficiently.</li> <li>Port Operations and Management: Capacity management, information flow between port, users and authority, marine operations(dredging, navigation aids and conservancy)</li> <li>Port logistics: Port and Logistics, Port and supply chain,, recent trends in logistics, inter modality and landside port logistics, Integrating port with global supply chain</li> <li>Port Finance: Port Costing, Port Pricing Private sector participation in finance Tariff rates, Pricing strategy, Port Investment</li> <li>Port Development and Maintenance: History, Factors affecting development of port, factors affecting performance of port, port restructuring in India, effect of globalization on port choice, recent trends in port.</li> <li>Port Safety and Security</li> <li>Port security and safety: Types of Risk and Uncertainties, Risk and safety Indicators, Valuing Port Safety, Threats to Port, Risk Approach and economic evaluation.</li> <li>Port competition and marketing: Features and elements of Port Competition Port Promotion, Port Marketing.</li> <li>Port Health and marine safety: IMO, Port Health Bill, Environmental principles and procedures in port.</li> </ul>		<ul> <li>Port, Harbor: Meaning, Features of Port, Functions of Port, Types of Port, Port values, Port Services and Facilities, Challenges and Opportunities in Port Sector, Port Users and Stakeholders and their needs, Statutory Bodies governing port (National and International), Port Authority, Port Ownership Management Model.</li> <li>Port Infrastructure: Port Structure, Port Layout, Port location (relevance of location to both vessel transit time and port rotation) dependency of port location on hinterland and geographical resources</li> <li>Port planning: Terminal planning, Capacity planning (no of berths, size and length, relationship between berth occupancy, service time and wasting time, berth throughput) Role of traffic in planning, Analysis of demand factors, capacity calculation,</li> <li>Role of port/ Importance of Port: In economic development, in trading patterns of nations, in national and international trade, in maritime logistics and modal shift.</li> <li>Terminals: Types of terminals, terminal operators, position and places in</li> </ul>	
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<ul> <li>Port security and safety: Types of Risk and Uncertainties, Risk and safety Indicators, Valuing Port Safety, Threats to Port, Risk Approach and economic evaluation.</li> <li>Port competition and marketing: Features and elements of Port Competition Port Promotion, Port Marketing.</li> <li>Port Health and marine safety: IMO, Port Health Bill, Environmental principles and procedures in port.</li> </ul>		<ul> <li>Port Operations and Management: Capacity management, information flow between port, users and authority, marine operations(dredging, navigation aids and conservancy)</li> <li>Port logistics: Port and Logistics, Port and supply chain,, recent trends in logistics, inter modality and landside port logistics, Integrating port with global supply chain</li> <li>Port Finance: Port Costing, Port Pricing Private sector participation in finance, Tariff rates, Pricing strategy, Port Investment</li> <li>Port Development and Maintenance: History, Factors affecting development of port, factors affecting performance of port, port restructuring in India, effect of globalization on port choice, recent trends in port.</li> </ul>	
<ul> <li>Indicators, Valuing Port Safety, Threats to Port, Risk Approach and economic evaluation.</li> <li>Port competition and marketing: Features and elements of Port Competition Port Promotion, Port Marketing.</li> <li>Port Health and marine safety: IMO, Port Health Bill, Environmental principles and procedures in port.</li> </ul>	3		
v/s technology, Role of Various personnel at Port, ITF, ILO, Carrier options in		<ul> <li>Indicators, Valuing Port Safety, Threats to Port, Risk Approach and economic evaluation.</li> <li>Port competition and marketing: Features and elements of Port Competition, Port Promotion, Port Marketing.</li> <li>Port Health and marine safety: IMO, Port Health Bill, Environmental principles and procedures in port.</li> </ul>	

	Port congestion: meaning, reasons, steps to avoid.	
Sr. No.	Modules / Units	
4	Cargo Handling and Custom Procedure	
	<ul> <li>Cargo handling: Types, management of cargo operations, cargo handling process(stowage, storage, release and transportation), hazardous cargo, associated basic needs of 5 commodities- (fertilizers, oil, ore, coal, grain), speed and cargo handling time in port, cargo booking in India, role of various authorities in cargo procedure, cargo rates and charges.</li> <li>Custom procedure: Impact of custom procedure, Custom procedure for home consumption, role of customs, Procedure for clearance of import and export goods, import export restrictions and prohibitions, , transshipment of cargo, import/ export through post, re import and re export, custom clearance - seaport, airport, ICD</li> <li>Global seaborne trade: trade routes</li> </ul>	

## 2. Core Courses (CC)

## 2. Maritime Transport & Economics

Sr. No.	Modules	No. of Lectures
01	Introduction to Maritime Economics	15
02	Financing Ship and Flagging Policies	15
03	Bulk Cargo and General Cargo	15
04	Economics of Shipbuilding and Scraping	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction to Maritime economics	
	<ul> <li>The economic organization of the shipping market: economic role of the shipping industry, World merchant fleet, Shipping cycles and shipping risk, Characteristics of shipping market cycles, The frequency of shipping cycles, The freight market, The sale and purchase market, The new building market, The demolition (recycling) market.</li> <li>Supply, demand &amp; freight rates: The shipping market model, the demand for sea transport, the supply of sea transport, the freight rate mechanism. Costs, Revenue and financial performance: Cash flow and the art of survival, The cost of running ships, The capital cost and financial performance, the revenue calculating computing the cash flow, price of vessel, Monopoly environment, Role of competition. Determinants of maritime transport cost.</li> </ul>	
2	Financing Ship and Flagging Policies	
	<ul> <li>Financing Ships and shipping companies: Ship finance and shipping economics, how ships have been financed in the past, The world financial system and types of finance, Financing ships with equity, Financing ships with debt, finance for new building, Leasing ships. The return on investment in shipping.</li> <li>Flagging policy and decisions: flag state and ship registration practices, shipping management practices and uses of BIMCO Shipman and CREWMAN. Design and development of safety management systems in maritime organizations using ISM code. Legislation: Hague Visby Rules. The Hamburg Rules. The economic principles of maritime trade, Maritime Contracts, Management of Maritime Contracts- on board administration, Documentation and procedure</li> </ul>	
3	Bulk Cargo and General Cargo	
	<ul> <li>Bulk cargo and the economics of bulk shipping: The commercial origins of bulk shipping, The bulk trades, The 'transport system' concept, Handling bulk cargoes, Liquid bulk cargoes, The five major dry bulks, The minor bulk trades, Refrigerated cargo, The vehicle trade</li> <li>The general cargo and the economics of liner shipping: Introduction, The origins of the liner services, Economic principle of liner operation, Liner conference and their regulation, The components of liner service costs, The liner service cash flow model, Liner price, The demand for liner services, The liner shipping routes, The liner fleet, The economics of ships and ship designs.</li> <li>Containerization and the economics of container shipping</li> </ul>	
4	Economics of Shipbuilding and Scrapping	
	• The economics of shipbuilding and scrapping: Role of the merchant shipbuilding and scrapping industries, Regional structure of the world shipbuilding, shipbuilding market cycles, The economic principles, The shipbuilding production process, shipbuilding costs and competitiveness, The ship breaking industry, The international labour maritime market, The Indian legislation in maritime transport. The role and function of UNO and other international organizations (IMO, ILO, UNCTAD, WHO) in the maritime context.	



#### Reference Books

#### Reference Books

#### **Elective Courses (EC)**

#### 1. Human Resource Management and Industrial Relationship

- Human Resources and Personnel management text and cases 4th edition K. Aswathappa
- A strategic approach to Human Resources Management Jayashree Sadri, Sorabh Sadri
- Personnel management Mamoria
- Principles of Personnel Management Edwin B. Flippo
- Excellence through HRD M. Nair and T.V. Rao
- Handbook of Human Resource management Practice Michael Armstrong
- Human Resource management Gary Dessler
- Human resource management Saiyadain
- Planning and Managing Human Resources- William J Rothwell and H.C. Kazanas

#### 2. Transport Costing and Pricing

- KhannaPandey& Ahuja: Practical costing, Sultan Chand
- K.S.Thakur: Cost Accounting, New century book house pvt. Ltd.
- Jain and Narang: Cost Accountong, Kalyani Publishers
- S. N Maheshwari: Cost accounting , Mahaveer Publishers
- Horngreen: Cost accounting A Managerial emphasis, Prentice Hall
- Lectures on Costing by Swaminathan: S. Chand and Company (P) Ltd., New Delhi
- Cost Accounting by C.S. Rayudu, Tata Mc. Graw Hill and Co. Ltd., Mumbai
- Cost Accounting by JawaharLal and SeemaSrivastava, Tata Mc. Graw Hill and Co. Ltd.Mumbai
- Cost Accounting by Ravi M. Kishore, Taxmann Ltd., New Delhi
- Principles and Practices of Cost Accounting by N.K. Prasad, Book Syndicate Pvt. Ltd., Calcutta
- Cost Accounting Theory and Practice by B.K. Bhar, Tata Mc. Graw Hill and Co. Ltd., Mumbai
- Cost Accounting Principles & Practice by M.N. Arora, Vikas Publishing House Pvt. Ltd., New Delhi
- Advanced Cost and Management Accounting: Problems and Solutions by V.K. Saxena and C.D. Vashist, S. Chand and Company (P) Ltd., New Delhi
- Cost Accounting by S.P. Jain and K.L. Narang, Kalyani Publishers, Ludhiana

#### 3. Transport Insurance and Risk Management

- Fundamentals of risk and insurance by Emmett Vaughan and Therese Vaughan
- General Insurance Guide Dr. L.P.Gupta, 2016
- The business for insurance Ronald Perm Company
- Marine Insurance: its principles and practice by Tempelman (Qureshi press)

#### 4. Strategic Management

- Kazmi Azhar, Business Policy & Strategic Management, Tata McGraw Hill.
- P.K. Ghosh: Business Policy, Strategy, Planning and Management
- Christensen, Andrews Dower: Business Policy- Text and Cases
- William F. Gkycj: Business Policy Strategy Formation and Management Action

• Bongee and Colonan: Concept of Corporate Strategy.

#### Reference Books

#### 5. Ethics and Public Relations in Transport

- Ethics in Public Relations, PR in Practice Series, Patricia J Parsons
- Practical Consultancy Ethics, David Yardley
- Planning and Managing Public Relations Campaigns, A Strategic Approach, Anne Gregory
- Effective Public Relations and Media Strategy Paperback 2013, by Reddi C.V.N (Author)
- Public Relations in Practice, Anne Gregory
- International Public Relations

#### 6. Transport Planning (Urban, Rural, Public, Mass)

- Vuchic, V.R., Urban Transit: Operations, Planning, and Economics, John Wiley and Sons (2005).
- Transportation Research Board, Transit Capacity and Quality of Service Manual, Transit Cooperative Research Program (TCRP) Report 100, 2nd Edition, 2001.
- Vuchic, V.R., Urban Transit: Systems and Technology, John Wiley and Sons (2007).
- Ceder, A., Public Transit Planning and Operation: Theory, Modeling, and Practice, ButterworthHeinemann (2007).
- Urban transportation Planning, Operation and Management, S. Ponnuswamy.
- Urban mass transportation planning, A Black, 1995, Mc Graw Hill Publication
- Urban transportation Planning A decision oriented approach , M.D. Meyer, E J Miller
- Urban Transportation Planning, Meyer Michael and Eric Miller, Mc Graw Hill, 2001.
- Urban Transport Environment and Equity; the case for developing countries by Eduardo A Vasconcellos
- Transport Management by Mohinder Singh

#### Core Course (CC)

#### 1. Port Operations and Management

- Port Operation Planning and Logistics: Khalid Bichou
- Port Management an Operations: By Patrick
- Elements of Port Operations and Management: Branch Alan
- Ports and Terminals: H. Ligteringen , H. Velsink

#### 2. Maritime Transport and economics

- International Economics (2nd edition)
- Principle of Economics (3rd edition) N. Gregory Mantiw
- Miltiades Chachdrads, International Economics Mc. Graw Hill International edition
- Maritime Economics Martin Stopford
- Maritime Economics Alan Branch
- The hand book of maritime economics and business Taylor and Francis
- Caraiani G., Serescu, M, Maritime transport, Luxima Lex Publishing House, Bucharest.
- Popa C, Maritime Economics, Course notes, Mircea cel batran, Naval academy Publishing house, Constanta, 2007
- Popa C, Maritime Economics, Course notes, Mircea cel batran, Naval academy Publishing house, Constanta, 2008
- Maritime Transportation Safety, Management and Risk Analysis Svein Kristiansen



## B.Com. (Transport Management) Programme Under Choice Based Credit, Grading and Semester System Course Structure

(To be implemented from Academic Year 2018-2019)

## **Semester VI**

No. of Courses	Semester VI	Credits
1	Elective Courses (EC)	
1,2,3 & 4	**Any four courses from the following list of the courses	12
2	Core Course (CC)	
5	Transport Policy and Documentation	04
3	✓ Project Work	
6	Project Report on Research Work	04
	Total Credits	20

	**List of Elective Courses for Semester VI (Any Four)		
01	International Trade and Transport		
02	Fleet Operations and Management		
03	Analytical Modeling in Transport		
04	Reengineering and Turnaround Management		
05	Tourism Management		
06	Community Development Project		

## 1. Elective Courses (EC)

## 1. International Trade & Transport

Sr. No.	Modules	No. of Lectures
01	Introduction to Trade	15
02	International Business Environment	15
03	Role of MNC's and Trade Blocks	15
04	Foreign Trade Policy	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction to Trade	
	<ul> <li>Meaning of Trade, Definition, features, Scope, Need &amp; Importance of Trade.</li> <li>Domestic and International trade- Characteristics, Benefits and Challenge of International Trade, Domestic V/s International Trade</li> <li>Strategies for going global (Internal and external growth strategies)</li> <li>Recent trends in world trade, leading players in world trade.</li> <li>International Trade theories- Absolute cost advantage, comparative cost theory.</li> </ul>	
2	International Business Environment	
	<ul> <li>International business environment- internal and external.</li> <li>International transport modes.</li> <li>Modes of entry in international markets.</li> <li>Modes of payment in international trade.</li> <li>International transport documentation.</li> </ul>	
3	Role of MNC and Trade Blocs	
	<ul> <li>Role of MNC's in international trade- meaning, features, advantages, disadvantages of MNC</li> <li>TNC's.</li> <li>Trade Agreements- classification</li> <li>Trading Blocks- Advantages, disadvantages, role in international trade.</li> <li>Major trade blocs- EU, ASEAN, NAFTA, SAFTA, SAARC.</li> <li>Tariff and non-tariff barriers - meaning, types, advantages, disadvantages.</li> <li>Incoterms.</li> <li>Role of International Institution- GATT, WTO, Important Agreements Of WTO and IMF, IBRD</li> </ul>	
4	Foreign Trade Policy	
	<ul> <li>India's foreign trade- history by independence, Comparison of India's exports and imports.</li> <li>Directions of India's foreign trade - India's major trading pattern.</li> <li>Trade policy of India- Development during planning period ,Import substitution and Export promotion, Recent changes in trade policy</li> <li>Balance of Trade and Balance of Payment</li> <li>Financing of India's foreign trade - Role of EXIM bank and other financial institutions, Schemes for promoting international trade.</li> <li>Role of government in promoting international trade - EOU, SEZ, etc.</li> <li>FDI - Meaning , Positive and negative implications</li> <li>Export-import procedure, Export finance, procedure in export financing, procedure in export shipping, bank formalities, export risk insurance, export benefits and incentives, export documentation, service export.</li> </ul>	

## 1. Elective Courses (EC)

## 2. Fleet Operations & Management

Sr. No.	Modules	No. of Lectures
01	Introduction	15
02	Budgeting and Costing Fleets	15
03	Fleet Operations and Functions	15
04	Fleet Management	15
	Total	60

Sr. No.	Modules / Units	
1	Introduction	
	<ul> <li>Introduction to fleet management - Meaning, define, functions, Need, History and Evolution, Types of fleet management- In house, outsourced, Advantages, Disadvantage &amp; Role, Parties for fleet management, Disciplines in fleet management, summarized operations in various modes, Recent Trends in Fleet,</li> <li>Potential and challenges of Fleet operation in India</li> </ul>	
2	Budgeting & Costing of Fleets	
	<ul> <li>Budgeting and cost – cost factors in fleets, causes, magnitude &amp; variabilities, key cost variables, Whole life cost, ways to reduce fleet cost.</li> <li>Vehicle selection &amp;acquisition, Methods of supply, Strength &amp; weaknesses.</li> <li>Operational options – Purchase, factors affecting procurement, Leasing, Contract hire for vehicles, vehicle financing</li> <li>Fuel – Choice, cost, control [Alternative fuel types], Safety, Reliability, Durability.</li> <li>Managing HR in fleets – Staffing issues, Important of Managing total crew, Fulfilling future requirement</li> <li>Careers in Fleet Management</li> <li>Fleet forecasting</li> </ul>	
3	Fleet Operations and Functions	
	<ul> <li>Functions – vehicle maintenance, vehicle telematics, vehicle tracking, Driver management, speed management, fuel management, Health &amp; Safety Management</li> <li>Fleet administration, monitoring and report, Maintenance &amp; repairs relationship to time &amp; mileage, Maintenance expenditure, Maintenance planning, Controlling maintenance expenditure, Warranty optimization, unplanned repair Maintenance, Organize emergency work, Vehicle maintenance system, cost of service.</li> <li>Insurance &amp; Accident – Risk Management, Insurance cover, Types of cover, Driver training</li> <li>Disposals – Methods, Advantages, Disadvantages, optimization, depreciation cost, predicting residual value, Replacement cycle.</li> <li>ALG Residual Model for Computation of residual value</li> </ul>	
4	Fleet Management	
	<ul> <li>Introduction to computer (IT) in fleet management</li> <li>Environment – Green fleet issue, Minimising the effects of fleet on environment, fuel types &amp; technology, Travel places &amp; alternative working methods.</li> <li>Grey fleet operations &amp; management,</li> <li>Current issue &amp; sources of Information, Identifying the need of business &amp; ensuring the fleet matches those needs.</li> <li>Fleet Card</li> <li>Strategies on Fleet management business</li> </ul>	

Fleet Audit		

## 1. Elective Courses (EC)

## 3. Analytical Modeling

Sr. No.	Modules	No. of Lectures
01	Introduction to OR and Linear Programming	15
02	Transportation & Assignment Models	15
03	Network Analysis, Simulations Models, Queuing Models	15
04	Decision Theory And Decision Tree	15
	Total	60

<ul> <li>Operation Research – Introduction, Models, Areas of Application. Linear Programming (L.P.): Mathematical Formulation of L.P. problem.</li> <li>Graphical Method. Simplex Method – Concept of slack, surplus &amp; artificial variables. Manual solutions of L.P.P. upto 3 iterations. Minimization &amp; Maximization Problems.</li> <li>Special Cases – (i) Alternative optima (ii) Unbounded solutions &amp; (iii) Infeasible</li> </ul>		
<ul> <li>Programming (L.P.): Mathematical Formulation of L.P. problem.</li> <li>Graphical Method. Simplex Method – Concept of slack, surplus &amp; artificial variables. Manual solutions of L.P.P. upto 3 iterations. Minimization &amp; Maximization Problems.</li> </ul>		
solutions to be shown graphically & also by simplex method.		
Transportation and Assignment Problems		
<ul> <li>Definition of the transportation model. Balanced / Unbalanced, Minimization / Maximization. Determination of the initial basic feasible solution using (i) North-West Corner Rule (ii) Least cost method &amp; (iii) Vogel's approximation method for balanced &amp; unbalanced transportation problems. Optimality Test &amp; obtaining of optimal solution. (Considering per unit transportation cost)</li> <li>Assignment Problem – Hungarian method.</li> <li>Statement of Transportation &amp; Assignment Problems as L.P. Problems.</li> </ul>		
Network Analysis, Simulation Model and Queuing Models		
<ul> <li>Construction of Network – Rules &amp; Precautions.</li> <li>C.P.M. &amp; P.E.R.T. Networks. Obtaining of Critical Path. Time estimates for activities. Probability of completion of project. Determination of floats (total, free, independent &amp; interfering) Crashing of Simple Networks.</li> <li>Simulation Models</li> <li>Queuing Models – Waiting Line Theory – Meaning, Concept used, Elements of Queuing system – Basic Structure of Queuing models – Single Channel, Multichannel queuing models - Limitations of queuing theory.</li> </ul>		
Decision Theory and Decision Tree		
<ul> <li>Decision Environments – risk &amp; uncertainty, Payoff table, Regret table.</li> <li>Decision making under uncertainty</li> <li>Maximin &amp; Maximax criteria</li> <li>Minimax Regret criterion</li> <li>Laplace criterion</li> <li>Hurwicz criterion</li> <li>Expected Monetary Value criterion.</li> <li>Expected Value of Perfect Information (E.V.P. I.)</li> <li>Expected Opportunity Loss (E.O.L.).</li> <li>Decision Tree, Simple examples</li> <li>Game Theory</li> <li>Replacement Theory</li> </ul>		

## 1. Elective Courses (EC)

## 4. Reengineering & Turnaround Management

Sr. No.	Modules	No. of Lectures
01	The Nature, Significance of Business Process Re-engineering	15
02	Implementation Problems, Issues, Scope and Trends of BPR	15
03	Turnaround	15
04	Operations Management	15
	Total	60

Sr. No.	Modules / Units
1	The Nature, Significance of Business Process Reengineering
	<ul> <li>Introduction to Business Process</li> <li>Core Business Processes</li> <li>Need for Process Redesign</li> <li>Underlying Premises</li> <li>Redesign of Business Processes</li> <li>Generic Business Processes to be Redesign</li> </ul>
2	Implementation Problems, Issues, Scope and Trends of BPR
	<ul> <li>Requirements for BPR Implementation</li> <li>Principles of Re-engineering</li> <li>Use of Consultants in BPR</li> <li>Reengineering Team</li> <li>Activity Mapping for BPR</li> <li>Bench marking for BPR</li> <li>Problems and Issues in Implementing BPR</li> <li>Developmental Trends in BPR</li> <li>Appraisal of BPR</li> <li>Ensuring the results of BPR</li> <li>Outcome and Achievement of Reengineering</li> <li>Effects of Liberalization</li> <li>BPR in Indian Context</li> </ul>
3	Example of BPR Companies in India  Turnaround
	<ul> <li>Introduction to Turnaround         Definition, Reasons that lead to turnaround, Effects of competition Industrial sickness Turnaround Package, Meaning, Definition, Importance, Features, Implications of turnaround.     </li> <li>Industrial Sickness         Meaning and Reasons for Sickness, Symptoms, Various Attempts to Overcome Sickness by Stakeholders, Role of BIFR in Sick Industries     </li> <li>Turnaround Strategies         TQM, Selling of Sick Unit (Only Concept)     </li> </ul>
4	Operations Management
	<ul> <li>Introduction: Meaning, scope, nature, importance, functions, , production v/s operation, characteristics of modern operation, recent trends in operation management, manufacturing and service operation, system view process, role and function of operation manager.</li> <li>Operation Planning: Resource arrangement planning, Manufacturing resource planning, Enterprise resource planning.</li> <li>Process planning</li> <li>Design and selection</li> </ul>
	<ul><li>Work system design</li><li>Economics of maintenance and spare management</li></ul>

### 1. Elective Courses (EC)

## 5. Tourism Management

Sr. No.	Modules	No. of Lectures
01	Introduction	15
02	4 A's of Tourism	15
03	Tourism Pricing and Costing	15
04	Destination Planning and Development	15
	Total	60

Sr. No.	Modules / Units
1	Introduction
	<ul> <li>Meaning of Tourism and Tourist, Features, Purpose, Importance, Evolution, Effects, Impacts of Tourism, Classification of Tourism, Types of Tourism.</li> <li>Components of Tourism Industry</li> <li>Emerging Sector of Tourism</li> <li>Thrust areas of Tourism, Challenges of Tourism</li> <li>Tourism Planning- Meaning, Process, Levels</li> <li>Tourism Demand and Supply: Factors affecting tourism demand and supply</li> </ul>
2	4 A's of Tourism
	<ul> <li>Attractions- Meaning, Typology, Managing Attraction for tourist, Peters Inventory of Tourist</li> <li>Accommodation: Meaning, Typology.</li> <li>Accessibility: Meaning, Transportation system for tourism, contribution of railways, waterways and airways to tourism.</li> <li>Amenities: Meaning, Amenities and facilities at destination</li> <li>Tourism Marketing: Meaning, Importance, Problems.</li> <li>Market Segmentation- Need, Bases.</li> <li>Tourist typology- Cohen and Plog</li> <li>Product- Meaning, Destination life cycle, factors for destination selection.</li> <li>Itinerary-Meaning, Types, Steps to prepare an itinerary, Tools</li> <li>Ticketing procedure- booking and confirmation, terms and conditions- payment cancellation, refund, no show</li> </ul>
	Reservations- Meaning, Sources, Modes.
3	Tourism Pricing and Costing
	<ul> <li>Tourism Pricing and Costing: Meaning, factors, types of pricing policies/strategies, Components of Cost- Fixed and Variable, Tour Cost Sheet, Direct and Indirect, Costing Procedure for Domestic and Foreign tourist, Calculation of tour pricing.</li> <li>Tourism Place: Meaning, factors influencing tourism distribution, tourism distribution system, middlemen in tourism industry, GDS,CRS.</li> <li>Tourism Agent and Tour Operator- Meaning, Functions, types, travel agency operations.</li> <li>Tourism Promotion Mix: Tourism Advertising, Tourism publicity, Tourism PR, Tourism sales promotion techniques, Personnel Selling in tourism (skills required), Direct Marketing, Web Marketing.</li> <li>People Mix- Types of people in Tourism</li> <li>Process &amp; Physical evidence in tourism.</li> </ul>
4	Destination Planning and Development
	<ul> <li>Elements of Tourism Destination, Destination image, Destination branding.</li> <li>India as a tourist Destination- Tourism resources in India, Marketing Campaigns to promote India as Tourist Destination.</li> <li>Travel Documentation and Formalities: Passport &amp; types, Visa &amp; types, Health Regulations, Currency Regulations, Custom formality, Baggage rules, Travel Insurance, FTT.</li> <li>Role of Various Tourism Organization: WTO,ICAO, IATA, PATA, UFTAA, TAAI, IATO, ITDC, STDC, FHRAI, , Ministry of Tourism,</li> </ul>

- Tourism policy of India, International Agreements to Promote Tourism.
- Global tourism Market Overview

# Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester VI with effect from the Academic Year 2018-2019

# 1. Elective Courses (EC)

# **6. Community Development Project**

# Modules at a Glance

Sr. No.	Modules	No. of Lectures
01	Introduction	15
02	Basics of Urban Community Development	10
03	Administrative and Policy arrangements for urban development	15
04	Problems and concepts of Urban Life	20
	Total	60

Sr. No.	Modules / Units
1	Introduction
	<ul> <li>Community development-concept, definition, meaning, need, history, principles, objectives and scope. Rural development-concept, definition, meaning, need, objectives and scope.</li> <li>Understanding urbanization and urban growth in India - definition and characteristics of urban areas, town, city, metropolis, suburbs, satellite towns, the relevance of urban ecology, urban sociology and environmental psychology for urban community development practice. The demographic and land use pattern in urban areas- social area analysis.</li> <li>Development: Concepts, Theories, Dimensions and Strategies (include development theories)</li> </ul>
2	Basics of Urban Community Development
	<ul> <li>Urban community development - meaning and scope. Urban development programs in India.</li> <li>Review of Indian experience in urban development with reference to town planning, slum</li> <li>Clearance and improvement. IDSMD (integrated development of Small and Medium Towns etc).</li> </ul>
3	Administrative and Policy Arrangements for Urban Development
	<ul> <li>Administrative and policy arrangements for urban development with reference to municipalities,</li> <li>Corporations, metropolitan development authorities, housing and slum clearance boards.</li> <li>Constitution-73rd amendment and its relevance to urban community development.</li> </ul>
4	Problems and Prospects of Urban Life
	<ul> <li>Concept of Region. Types of Regions -functional and formal region. Techniques of regions</li> <li>Delimitation. Regionalization in India. Physiographic, Economic, Linguistic. Classification and</li> <li>Hierarchy of regions. The Concept of Rural - Urban Continuum.</li> </ul>

# Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester VI with effect from the Academic Year 2018-2019

# 2. Core Course (CC)

# 1. Transport Policy and Documentation

# Modules at a Glance

Sr. No.	Modules	No. of Lectures
01	Introduction	15
02	Types of Documents	15
03	Introduction to Policy & types	15
04	Institutional Frameworks	15
	Total	60

Sr. No.	Modules / Units
1	Introduction
	<ul> <li>Meaning, types, requirements of various documents, which document to be used when, steps involved in preparing documents, Do's and Don'ts while preparing documents, different types of documents required in different modes of transport.</li> <li>Export Documentation/Import Documentation: Commercial Documents, Auxiliary Commercial Documents, Regulatory Documents, Documents Related to Goods, Documents during time of payments, Documents related to inspection, Documents required during clearance, IEC Number, ECGC,RCMC.</li> </ul>
2	Types of Documents
	<ul> <li>Seaport Documents (in case of claims, inspection, check post, clearance and deposit of goods)</li> <li>Airport Documents (in case of air freight document, claims, inspection, check post, clearance and deposit of goods)</li> <li>Shipping Documents, Inbound and Outbound transport Documents, Custom clearance documentary requirement.</li> <li>Documents used in interstate movement of goods and vehicles (through road and through railway)</li> </ul>
3	Introduction to Policy and Types
	<ul> <li>Basic concepts of policy, strategy and tactics, fundamentals of transport policy,</li> <li>Theoretical and historical perspectives; Principles of transport policy making at local, national and international level.</li> <li>Transport Sector Policies: National urban transport policy (NUTP); , National Transport Development Policy of India, Urban bus service provision policies, MRTS policies, NMT policies, Logistics and freight sector policies; PPP in transport sector, Civil Aviation Policy, Inland water Transport Policy, Multi Modal Transport Policy, and Maritime Policy, Environmental Policy relating to Transportation, Climate and transport Policy, Integrated Transport Policy</li> </ul>
4	Institutional Framework
	<ul> <li>Institutional Frameworks: Institutional authorities in Roads, Road transport, Railways, Civil Aviation, Ports and Shipping (Ministry of Road Transport and Highway, Airport Authority of India, Ministry of Railways, Shipping Corporation of India, Maharashtra State Road Transport Corporation)</li> <li>Metro Rail Corporations, State Road Transport Undertakings, City Bus Undertakings; Urban Transport set up in Municipal Authorities, local bodies etc; Special Purpose Vehicles (SPV's),</li> </ul>

# Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester VI with effect from the Academic Year 2018-2019

# Reference Books

## Reference Books

# **Elective Courses (EC)**

#### 1. International Trade and Transport

- International Trade and Transport- Karl. W. Steinlinga.
- The Handbook of International Trade-Jim Sherlock & Jonathan Reuvid, The Institute of Export.
- Internationals Trade: Theory and Policy- Saylor.
- International Trade: Theory and Policy- Paul Krugman, Marc Meltiz.
- Handbook of IT- Michael Z Brooke, Peter J Burkley.
- An Guide to International Trade and Export Management- CA Viendra Pamechar

#### 2. Fleet Operations and Management

- Analytical fleet maintenance management 3rd edition John. E. Dolce
- Fleet Management John. E. Dolce
- Dynamic fleet Management Zeimpekis
- Fleet managers guide to vehicle specification and procedures John. E. Dolce
- John Duke Fleet management , Mc. Graw Hill

## 3. Analytical Modeling in Transport

- Operations Research An introduction 6th Edition, Taha H.A., Hall of India
- Operations Research Techniques for Management 7th Edition, Kapoor V.K., Sultan Chand & Sons
- Operations Research 9th Edition, Kantiswarup, Gupta P.K. & Sultan Chand & Sons Manmohan
- Operations Research 8th Edition, Sharma S.D., Kedarnath, Ramnath & Company
- Operations Research 2nd Edition, Bronson R, Shaum's Outline Series
- Quantitative Techniques in Management 3rd Edition , Vora N.D., Tata McGraw Hill co.
- Principles & Application 3rd Ed, Shreenath L.S., PERT & CPM, Affiliated East-West Press Pvt. Ltd.
- Principles of Operations Research 2nd Edition, Wagener H.M., Prentice Hall of India
- Operations Research Methods & Problems 1st Edition, Sasieni M, Yaspan A & John Wiley & Sons Friedman L
- Operations Research, Natrajan Balasubramani, Tamilarasi, Pearson Education
- Linear Programming, G. Hadley, Narosa Book Distributors Private Ltd
- Quantitative Techniques(For Managerial Decisions VOLI), L.C. Jhamb, Everest Publishing House, Pune
- Linear Programming, Paul Loomba, Tata McGraw Hill Publishing Co. Ltd.
- Operations Research Edition 2008, Aditham B. Rao, Jaico Publishing House, Mumbai,

### 4. Reengineering and Turnaround Management

- Operations Management by Albert Porter
- Operations Management and SM by ICAI
- Redesigning the Business Process by Waman S. Jawdekar
- Business Process Re-Engineering: Myth & reality by Colin Coulson Thomas
- Reengineering and Reinventing the enterprise by P.N. Rastogi

Practical Business Re-Engineering by Nick Obolensky

## Reference Books

#### 5. Tourism Management

- Toursim Development Problems and Prospectus by P B Patil
- Travel and Tourism by Marwah, Ganguly and Shetty
- Tourism and Hospitality Industry by Sudhir Andrews
- Basics of Tourism Management by Suddhendu Narayan Misra and Sapan Kumar Sadual

#### **6. Community Development Project**

- K.C. Sivaramakrishnan, A. Kundu and B.N. Singh Handbook of Urbanisation in India by, 2007, Oxford University Press, New Delhi.
- Rao VLS Prakasa Urbanization in India, Concept Pubishing Company, New Delhi
- R Ramachandran, Urbanization and Urban Systems in India By , Oxford University Press
- Urban social geography: an introduction Paul L. Knox, Steven Pinch
- Urbainization and Governance in India by Hust, Evelin & Mann, Michael(Eds), Place of Pubilication, New Delhi, 2005
- Pillai P Gopinadhan , Rural Development in India, Pointer Publishers, New Delhi
- Behera, M. C, Globalising Rural Development, Sage Pubns
- Singh Katar Rural Development, sage pubns pvt ltd
- Lea, D.A.M. and Srivastava, R.K., Rural Development and the state: Contradiction and Dilemmas in Development countries, Methun: London, 1983
- Roy, Ramasahray and Srivastava, R.K. Dialogues on Development, Sage Publication London, 1986
- Singh, K., Rural Development: Principles, Policies and Management, New Delhi, Sage Publication, 1986
- Desai, Vasant, Rural Development (Vol 1 & 4), Himalaya Publishing House, Bombay, 1988
- Misra, R.P., Rural Development (Vol 1&5), Concept Pubilshing Company, New Delhi, 1985
- Chandra, Subhash, Social Participation in Urban Neighbourhoods, National Publishing House, New Delhi, 1977
- Kasambi Meera, Urbanisation and Urban Development in India I CSSR, New Delhi, 1994
- Chandrashekhara, C.S. and Deva Raj (eds.) Urban Perspectives -2000, Nation Institute of Urban Affairs, New Delhi, 1978

#### Core Course (CC)

#### 1. Transport Policy and Documentation

- http://planningcommission.nic.in/reports/genrep/NTDPC Vol 01.pdf
- The Transport System and Transport Policy AN INTRODUCTION by Bert van Wee Delft Jan Anne Annema, David Banister.
- http://www.undp.org/content/dam/undp/documents/procurement/documents/UNDP-Shipping-Guide.pdf
- http://www.airindia.in/new-documents-to-carry.htm
- https://www.goatsontheroad.com/travel-planning-beginners-airport-tips-advice/
- Foreign Trade, Transportation Procedure and Documentation by KSJ and AVJ
- Export and Import Management by Justin Paul and Rajiv Aserkar
- https://trade.ec.europa.eu/tradehelp/documents-customs-clearance
- http://www.charteredonline.in/2017/04/eway-bill-documents-required-for-transit-gst.html
- https://www.roadwaysindia.com/documents\_required.php
- https://ecargo.in/knowledge/interstate-documents

http://l	nowtoexportim	port.com/Docu	ments-require	ed-for-import-	customs-clear	rance-159.asp>	(

# University of Mumbai



# B.Com. (Transport Management) Programme Guidelines for Project Work at Third Year Semester VI

Under Choice Based Credit, Grading and Semester System

(To be implemented from Academic Year 2018-2019)

**Board of Studies-in-Transport Management** 

# Introduction

Inclusion of project work in the course curriculum of the B.Com. (Transport Management) programme is one of the ambitious aspects in the programme structure. The main objective of inclusion of project work is to inculcate the element of research analyse and scientific temperament challenging the potential of learner as regards to his/ her eager to enquire and ability to interpret particular aspect of the study. It is expected that the guiding teacher should undertake the counselling sessions and make the awareness among the learners about the methodology of formulation, preparation and evaluation pattern of the project work.

- There are two modes of preparation of project work
  - 1. Project work based on research methodology in the study area
  - 2. Project work based on internship in the study area

# **Guidelines for preparation of Project Work**

# 1. General guidelines for preparation of project work based on Research Methodology

- The project topic may be undertaken in any area of Elective Courses.
- Each of the learner has to undertake a Project individually under the supervision of a teacher-guide.
- The learner shall decide the topic and title which should be specific, clear and with definite scope in consultation with the teacher-guide concerned.
- University/college shall allot a guiding teacher for guidance to the students based on her / his specialization.
- The project report shall be prepared as per the broad guidelines given below:
  - Font type: Times New Roman
  - Font size: 12-For content, 14-for Title
  - Line Space : 1.5-for content and 1-for in table work
  - Paper Size: A4
  - Margin: in Left-1.5, Up-Down-Right-1
  - The Project Report shall be bounded.
  - The project report should be 80 to 100 pages

# **Format**

1<sup>st</sup> page (Main Page)

Title of the problem of the Project

A Project Submitted to

University of Mumbai for partial completion of the degree of

Bachelor in Commerce (Transport Management)

Under the Faculty of Commerce

 $\mathbf{B}\mathbf{y}$ 

Name of the Learner

**Under the Guidance of** 

Name of the Guiding Teacher

Name and address of the College

Month and Year

2<sup>nd</sup> Page

This page to be repeated on 2<sup>nd</sup> page (i.e. inside after main page)

# **Index**

Chapter No. 1 Title of the Chapter Page No.

(sub point 1.1, 1.1.1, .... And so on)

Chapter No. 2 Title of the Chapter

Chapter No. 3 Title of the Chapter

Chapter No. 4 Title of the Chapter

Chapter No. 5 Title of the Chapter

List of tables, if any, with page numbers.

List of Graphs, if any, with page numbers.

List of Appendix, if any, with page numbers.

**Abbreviations used:** 

# Structure to be followed to maintain the uniformity in formulation and presentation of Project Work

(Model Structure of the Project Work)

## • Chapter No. 1: Introduction

In this chapter Selection and relevance of the problem, historical background of the problem, brief profile of the study area, definition/s of related aspects, characteristics, different concepts pertaining to the problem etc can be incorporated by the learner.

### • Chapter No. 2: Research Methodology

This chapter will include Objectives, Hypothesis, Scope of the study, limitations of the study, significance of the study, Selection of the problem, Sample size, Data collection, Tabulation of data, Techniques and tools to be used, etc can be incorporated by the learner.

### • Chapter No. 3: Literature Review

This chapter will provide information about studies done on the respective issue. This would specify how the study undertaken is relevant and contribute for value addition in information/ knowledge/ application of study area which ultimately helps the learner to undertake further study on same issue.

## • Chapter No. 4: Data Analysis, Interpretation and Presentation

This chapter is the core part of the study. The analysis pertaining to collected data will be done by the learner. The application of selected tools or techniques will be used to arrive at findings. In this, table of information's, presentation of graphs etc. can be provided with interpretation by the learner.

### • Chapter No. 5: Conclusions and Suggestions

In this chapter of project work, findings of work will be covered and suggestion will be enlisted to validate the objectives and hypotheses.

Note: If required more chapters of data analysis can be added.

- Bibliography
- Appendix

# On separate page

# Name and address of the college

# Certificate

•	
This is to certify that Ms/Mr	has worked
and duly completed her/his Project Work	for the degree of Bachelor in Commerce
(Transport Management) under the Fa	culty of Commerce in the subject of
	and her/his project is entitled,
"Title of	f the Project" under
my supervision.	
I further certify that the entire work has be	een done by the learner under my guidance
and that no part of it has been submitted pr	eviously for any Degree or Diploma of any
University.	
It is her/ his own work and facts rep	ported by her/his personal findings and
investigations.	
Seed of the	Name and Signature of
(Seal of the College	Guiding Teacher
	-
_	
Date of submission:	

# On separate page

# Declaration by learner

I the undersigned Miss / Mrhere by,
declare that the work embodied in this project work titled "
Title of the Project ",
forms my own contribution to the research work carried out under the guidance of
Name of the guiding teacher is a result of my own research work and has
not been previously submitted to any other University for any other Degree/ Diploma
to this or any other University.
Wherever reference has been made to previous works of others, it has been clearly
indicated as such and included in the bibliography.
I, here by further declare that all information of this document has been obtained and
presented in accordance with academic rules and ethical conduct.
Name and Signature of the learner
Certified by
Name and signature of the Guiding Teacher

#### On separate page

# Acknowledgment

(Model structure of the acknowledgement)

To list who all have helped me is difficult because they are so numerous and the depth is so enormous.

I would like to acknowledge the following as being idealistic channels and fresh dimensions in the completion of this project.

I take this opportunity to thank the **University of Mumbai** for giving me chance to

I would like to thank my **Principal**, \_\_\_\_\_\_for providing the necessary facilities required for completion of this project.

do this project.

I take this opportunity to thank our **Coordinator**\_\_\_\_\_\_, for her moral support and guidance.

I would also like to express my sincere gratitude towards my project guide

whose guidance and care made the project successful.

I would like to thank my **College Library**, for having provided various reference books and magazines related to my project.

Lastly, I would like to thank each and every person who directly or indirectly helped me in the completion of the project especially **my Parents and Peers** who supported me throughout my project.

# 2. Guidelines for Internship based project work

- Minimum 20 days/ 100 hours of Internship with an Organisation/ NGO/ Charitable Organisation/ Private firm.
- The theme of the internship should be based on any study area of the elective courses
- Experience Certificate is Mandatory
- A project report has to be brief in content and must include the following aspects:

#### **Executive Summary:**

A bird's eye view of your entire presentation has to be precisely offered under this category.

#### Introduction on the Company:

A Concise representation of company/ organization defining its scope, products/ services and its SWOT analysis.

## Statement and Objectives:

The mission and vision of the organization need to be stated enshrining its broad strategies.

# Your Role in the Organisation during the internship:

The key aspects handled, the department under which you were deployed and brief summary report duly acknowledged by the reporting head.

#### Challenges:

The challenges confronted while churning out theoretical knowledge into practical world.

#### Conclusion:

A brief overview of your experience and suggestions to bridge the gap between theory and practice.

- The project report based on internship shall be prepared as per the broad guidelines given below:
  - Font type: Times New Roman
  - Font size: 12-For content, 14-for Title
  - Line Space : 1.5-for content and 1-for in table work
  - Paper Size: A4
  - Margin: in Left-1.5, Up-Down-Right-1
  - The Project Report shall be bounded.
  - The project report should be of minimum 50 pages

# Evaluation pattern of the project work

The Project Report shall be evaluated in two stages viz.			
• Evaluation of Project Report (Bound Copy)	60 Marks		
<ul> <li>Introduction and other areas covered</li> </ul>	20 Marks		
<ul> <li>Research Methodology, Presentation, Analysis and interpretation of data</li> </ul>	30 Marks		
<ul> <li>Conclusion &amp; Recommendations</li> </ul>	10 Marks		
Conduct of Viva-voce	40 Marks		
<ul> <li>In the course of Viva-voce, the questions may be asked such as importance / relevance of the study, objective of the study, methodology of the study/ mode of Enquiry (question responses)</li> </ul>	10 Marks		
<ul> <li>Ability to explain the analysis, findings, concluding observations, recommendation, limitations of the Study</li> </ul>	20 Marks		
Overall Impression (including Communication Skill)	10 Marks		

#### Note:

• The guiding teacher along with the external evaluator appointed by the University/
College for the evaluation of project shall conduct the viva-voce examination as per the
evaluation pattern

# **Passing Standard**

- Minimum of Grade E in the project component
- In case of failing in the project work, the same project can be revised for ATKT examination.
- Absence of student for viva voce: If any student fails to appear for the viva voce on the
  date and time fixed by the department such student shall appear for the viva voce on the
  date and time fixed by the Department, such student shall appear for the viva voce only
  along with students of the next batch.

# Revised Syllabus of Courses of B.Com. (Transport Management) Programme at Semester V and VI

# with effect from the Academic Year 2018-2019

# Scheme of Evaluation

The performance of the learners will be evaluated in two Components. One component will be the Internal Assessment component carrying 25% marks and the second component will be the Semester-wise End Examination component carrying 75% marks. The allocation of marks for the Internal Assessment and Semester End Examinations will be as shown below:-

#### A) Internal Assessment: 25 %

# Question Paper Pattern (Internal Assessment- Courses without Practical Courses)

Sr. No.	Particular	Marks
1	One class test (20 Marks)	
	Match the Column/ Fill in the Blanks/ Multiple Choice Questions	05 Marks
	(½ Mark each)	
	Answer in One or Two Lines (Concept based Questions)	05 Marks
	(01 Mark each)	
	Answer in Brief (Attempt Any Two of the Three)	10 Marks
	(05 Marks each)	
2	Active participation in routine class instructional deliveries and	05 Marks
	overall conduct as a responsible learner, mannerism and	
	articulation and exhibit of leadership qualities in organizing	
	related academic activities	

#### B) Semester End Examination: 75 %

- i) Duration: The examination shall be of 2 ½ Hours duration
- ii) Theory question paper pattern
  - There shall be five questions each of 15 marks.
  - All questions shall be compulsory with internal choice within the questions.
  - Question may be subdivided into sub-questions a, b, c... and the allocation of marks depends on the weightage of the topic.

(Detail question paper pattern has been given separately)

# Passing Standard

The learners to pass a course shall have to obtain a minimum of 40% marks in aggregate for each course where the course consists of Internal Assessment and Semester End Examination. The learners shall obtain minimum of 40% marks (i.e. 10 out of 25) in the Internal Assessment and 40% marks in Semester End Examination (i.e. 30 Out of 75) separately, to pass the course and minimum of Grade E to pass a particular semester A

learner will be said to have passed the course if the learner passes the Internal Assessment and Semester End Examination together.

# Question Paper Pattern (Practical Courses)

Maximum Marks: 75

Questions to be set: 05

Duration: 2 1/2 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

Question No	Particular	Marks
Q-1	Objective Questions  A. Sub Questions to be asked 10 and to be answered any 08  B. Sub Questions to be asked 10 and to be answered any 07  (*Multiple choice / True or False / Match the columns/Fill in the blanks)	15 Marks
Q-2	Full Length Practical Question  OR	15 Marks
Q-2	Full Length Practical Question	15 Marks
Q-3	Full Length Practical Question  OR	15 Marks
Q-3	Full Length Practical Question	15 Marks
Q-4	Full Length Practical Question  OR	15 Marks
Q-4	Full Length Practical Question	15 Marks
Q-5	A) Theory questions B) Theory questions  OR	08 Marks 07 Marks
Q-5	Short Notes To be asked 05 To be answered 03	15 Marks

#### Note:

Practical question of 15 marks may be divided into two sub questions of 7/8 and 10/5Marks. If the topic demands, instead of practical questions, appropriate theory question may be asked.

# Question Paper Pattern (Theoretical Courses)

Maximum Marks: 75

Questions to be set: 05

Duration: 2 1/2 Hrs.

All Questions are Compulsory Carrying 15 Marks each.

Question	Particular	Marks
No		
Q-1	Objective Questions	15 Marks
	A) Sub Questions to be asked 10 and to be answered any 08	
	B) Sub Questions to be asked 10 and to be answered any 07	
	(*Multiple choice / True or False / Match the columns/Fill in the blanks)	
Q-2	Full Length Question	15 Marks
	OR	
Q-2	Full Length Question	15 Marks
Q-3	Full Length Question	15 Marks
	OR	
Q-3	Full Length Question	15 Marks
Q-4	Full Length Question	15 Marks
	OR	
Q-4	Full Length Question	15 Marks
Q-5	A) Theory questions	08 Marks
	B) Theory questions	07 Marks
	OR	
Q-5	Short Notes	15 Marks
	To be asked 05	
	To be answered 03	

## Note:

Theory question of 15 marks may be divided into two sub questions of 7/8 and 10/5Marks.

