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 <u>vide</u> 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 <u>vide</u> 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 (<u>www.mu.ac.in</u>) and that the same has been brought into force with effect from the academic year 2016-17.

MUMBAI - 400 032 27 October, 2016 To,

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 2

27-October, 2016

6/10/10

(Dr.M.A. Khan)

REGISTRAR

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.

26/10/11

(Dr.M.A. Khan) REGISTRAR PTO..

Board of Studies-in-Trade, Transport and Industry, University of Mumbai 1 | P a g e

AC 24-06-2016 Item No. 4.75

Aniversity 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

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

	(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	2 Ability Enhancement Courses (AEC)		2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulso Course (AECC)	ory	2A	Ability Enhancement Compulsory Course (AECC)	
4	Business Communication-I	03	4	Business Communication-II	03
2B	*Skill Enhancement Courses (Sl	EC)	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	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

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

*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)

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 (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

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

*List of Discipline Related Elective(DRE) Courses for Semester III (Any Three)		*List of Discipline Related Elective(DRE) Courses 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)

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	s 20 Total Credits			20

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

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

Aniversity 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)

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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 Teal-2010-2017)					
No. of	Semester I	Credits	No. of	Semester II	Credits
Courses			Courses		
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	2 Ability Enhancement Courses (AEC)		2	Ability Enhancement Courses (AEC)	
2A	Ability Enhancement Compulso	ory	2A	Ability Enhancement Compuls	ory
ZA	Course (AECC)		24	Course (AECC)	
4	Business Communication-I	03	4	Business Communication-II	03
2B	*Skill Enhancement Courses (SE	EC)	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	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

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

*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

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Note: Course selected in Semester I will continue in Semester II

B.Com. (Transport Management)

Under Choice Based Credit, Grading and Semester System Course Structure

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

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

Semester I

	*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			

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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
	 Transportation- meaning, features, importance, functions, role, operational characteristics of transport, development of transport in India. Transport functions and systems. Challenges faced by Indian transport system. Impact of Transportation Modes of transport- air, water, land and others Means of transportation in India - Traditional Public road transport, Urban rail transport, Other local transport, Long distance transport, Aviation, Ports & shipping, Waterways, Pipelines, Utility vehicle, Heavy hauler, BRTS Elements and components of transport. Transport Units Multi- Modal Transport.
2	Transport Planning
	 Transportation planning- Importance Methods, Steps, Interventions, Policy instrument transportation planning process, metropolitan planning Comprehensive Transport Planning- Factors required for planning process (Issues, Current Practices, and future recommendations), comparing conventional and comprehensive planning, Best practices in comprehensive planning. Integrated public transport planning. System Approach to transportation planning. Transportation Principles & participants Transport Forecasting.
3	Transport Services, Costing and Performance
	 Transportation Services- Terminal Services- Consolidation, dispersion, shipment services, vehicle services, interchange, loading and unloading, weighing, tracing, expediting. Line Haul Services- reconsignment, diversion, pulling, stopping in transit, transit privilege Transportation Documentation- domestic and international. Transportation costing and pricing- concepts, key cost driver, modal rate development, current issues and practices. Transportation performance analysis- symptoms of poor transportation management, main key performance indicators. Performance by transport mode.

Sr. No.	Modules/ Units	
4	Administration and Control	
4	 Administration and Control Organization in transport sector - National and International levels , Functions and Role. Indian road network - Problems classification, Institutional framework, Rural road transport program, Road maintenance Urban public transport in India- Current status, Recent development, Responsibility of government & public agency, Future scenario, Urban public transport modes, Issue in urban transport Strategies for urban transport in India. Transport Regulations- Need, Importance and Benefits, Areas of Regulation – economic, physical and social. Routing and Scheduling- Importance, benefits and problems of route planning and scheduling, principles of effective routing and scheduling. Land use forecast. Transportation problems- Issues, Goals & Objectives , Evaluation, Stakeholders 	
	input, Environment, Smart growth & sustainability, Energy, Technology, Economic & financial issues and other	
	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, Freeways Highways, International Highways, State Highways, District Roads, Village Roads, Border 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 Globa		
	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 of	
	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 Telegram	
	to 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:	
	7 0	
	Parts, Structure, Layouts—Full Block, Modified Block, Semi - Block Principles of	

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	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	
	 Listening Comprehension 	
	 Remedial Teaching 	
	 Speaking Skills: Presenting a News Item, Dialogue and Speeches 	
	 Paragraph Writing: Preparation of the first draft, Revision and Self – Editing, 	
	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
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 gender; 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	
	 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. Genesis, Aims, Objectives of NCC & NCC Song Organisation & Training Incentives & Benefits Religions, Culture, Traditions and Customs of India National Integration: Importance and Necessity Freedom Struggle 	
2	Drill: Foot Drill	
	 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. General and Words of Command Attention, Stand at Ease and Stand Easy, Turning and Inclining at the Halt Sizing, Forming Up in Three Ranks and Numbering, Open and Close Order March and Dressing Saluting at the Halt, Getting On Parade, Dismissing and Falling Out Marching, Length of Pace and Time of Marching in Quick Time and Halt, Slow March and Halt Turning on the March and Wheeling. Saluting on the March. Formation of squad and Squad Drill. 	
3	Adventure Training, Environment Awareness and Conservation	
	 Adventure Training Desired outcome: The students will overcome fear & inculcate within them the sense of adventure , sportsmanship , espirit-d-corp and develop confidence , courage , determination, diligence and quest for excellence. Any Two such as – Obstacle course, Slithering, Trekking, Cycling, Rock Climbing, Para Sailing, Sailing, Scuba Diving etc Environment Awareness and Conservation Desired outcome: The student will be aware of the conservation of natural resources and protection of environment. Natural Resources – Conservation and Management Water Conservation and Rainwater Harvesting 	

Sr. No.	Modules / Units	
4	Personality Development and Leadership	
	 Desired outcome: The student will develop an all-round personality with adequate leadership traits to deal / contribute effectively in life. Introduction to Personality Development Factors Influencing /Shaping Personality: Physical, Social, Physiological, Philosophical and Psychological Self Awareness Know yourself/ Insight Change Your Mind Set Communication Skills: Group Discussion / Lecturettes (Public Speaking) Leadership Traits Types of Leadership 	
5	Specialized Subject: Army Or Navy Or Air	
	 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 	
	Navy	
	 A. Naval orientation and service subjects History of the Indian Navy-Pre and Post Independence, Gallantry award winners Organization of Navy- NHQ, Commands, Fleets, Ships and shore establishments Types of Warships and their role Organization of Army and Air Force- Operational and Training commands Ranks of Officers and Sailors, Equivalent Ranks in the Three Services B. Ship and Boat Modelling 	

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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
	AIR
	A. General Service Knowledge
	Development of Aviation
	History of IAF
	B. Principles of Flight
	Introduction
	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. No.	Modules	No. of 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,	

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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

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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 – different 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 EffectivePresentationEffective use of OHPEffective use of TransparenciesHow 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-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		
	 Disaster Management: Desired outcome: The student shall gain basic information about civil defence organisation / NDMA & shall provide assistance to civil administration in various types of emergencies during natural / manmade disasters Civil Defence Organisation and Its Duties/ NDMA Types of Emergencies/ Natural Disaster Assistance during Natural / Other Calamities: Flood / Cyclone/ Earth Quake/ Accident etc. 'Avan' model of NCC 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. Civic Responsibilities 		
	Causes & Prevention of HIV/AIDS; Role of Youth		
2	Health and Hygiene		
	 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. Structure and Functioning of the Human Body Hygiene and Sanitation (Personal and Food Hygiene) Infectious & Contagious Diseases & Their Prevention 		
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		
	 Desired outcome: The student shall have basic knowledge of weapons and their use and handling. Characteristics of a Rifle / Rifle Ammunition and its Fire Power Stripping, Assembling, Care and Cleaning and Sight Setting of .22 rifle Stripping, Assembling, Care and Cleaning of 7.62mm SLR 		

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	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		
5			
	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. Map reading		
	 Introduction to types of Maps and Conventional signs Sector and Crid system 		
	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 Turner of remotioned breakling strength, storying, maintenance and 		
	 Types of ropes and breaking strength- stowing, maintenance and 		
	securing of ropes		
	 Practical Bends and Hitches: Reef Knot, Half hitch, Clove Hitch, Rolling Litche Timber Uitche Dave Line, Dave d Turn and Turn half hitch and Dave 		
	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
	 Aircraft Particulars (Type specific)
	D. Aero modelling
	 History of Aero modelling
	 Materials used in Aero modelling
	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		
3	Route Assignment Analysis and Highway CapacityChoice of Routes, Factors Affecting Route Choice, Methods of Route Assignment,		
3			
3	Choice of Routes, Factors Affecting Route Choice, Methods of Route Assignment,		
3	Choice of Routes, Factors Affecting Route Choice, Methods of Route Assignment, Capacity Restraint Assignment Techniques, Highway capacity: Its importance in		
3	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		
3	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		
	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		
	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 Traffic Signal Design		

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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- 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			

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overall cond	uct as a responsible	learner,	mannerism and	
articulation	and exhibit of leaders	hip qualitie	es in organizing	
related acade	mic activities articulation	on and exhi	bit of leadership	
qualities in or	ganizing related academ	ic 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 ½ 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 questionsB) Theory questionsOR	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.

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Question Paper Pattern (Theoretical Courses)

Maximum Marks: 75

Questions to be set: 05

Duration: 2 ½ 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 questionsB) Theory questionsOR	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.