SEVENTH SEMESTER					
Theory / Practical / Sessional					
Subject Code	**Subject Name**	**Hours/ Week L/T**	**Credit Theory**	**University Marks**	**Internal Evaluation**
PCI7J001/ PCI7J002/ PCI7J005	Architecture & Town planning / Ground improvement Technique/ Soil Dynamics & Machine Foundation	3-0-0	3	100	50
PCI7J003/ PCI7J004	Environmental Impact Assessment/ Industrial Waste Management & Disposal	3-0-0	3	100	50
PCP7H007 / PCP7H008/ PCP7H009	Internet of Things (IOT)/ NanoScience&BioTechnology/ IntellectualPropertyRights(IPR)	3-0-0	3	100	50
PCP7H010 / PCP7H011/ PCP7H012	Soft Computing/ IntroductiontoManagement&Function/ MarketingManagement	3-0-0	3	100	50
PCP7H013 / PCP7H014 / PCP7H015	Entrepreneurship Development/ E-Commerce & ERP / Business Regulatory Framework	3-0-0	3	100	50
Total Credit/Marks (Theory)			15	750	
Practical					
PCI7N201	Seminar	0-0-2	2	-	100
PCI7N202	Minor Project	0-0-2	4	-	200
PCI7N203	Comprehensive Viva	0-0-1	2	-	100
Total Credit/Marks (Practical)			**08**	**400**	
Total Semester Credit/ Marks			**23**	**1150**	

Eighth Semester					
Sl. No.	**Subject Category**	**Subject Name**	**Credit**	**University Marks**	**Internal Marks**
Practical					
1	PCI8N201	Internship/ Major Project	10	-	500
Total Credit/Marks (Practical)			**10**	**500**	
Total Semester Credit/ Marks			**10**	**500**	

Module – I

Principles of architectural design –primary elements, form, space, organization, circulation, proportion and scale, ordering principles.
Functional planning of buildings: Planning, designing and construction, General building requirements, Permit and Inspection (as per the National building Code)
Module – II

Town Planning ; Evolution of towns : History and trends in town planning:-origin and growth, Historical development of town planning in ancient valley civilizations; Objects and necessary of town planning; Surveys and analysis of a town ; New Concepts in town planning : Garden city movement, Linear city and Satellite city concepts, Neighborhood Planning.
Module – III

Planning Principles, Practice and Techniques: Elements of City plan, Estimating future needs, Planning standards
Module – IV

Zoning:- its definition, procedure and districts, height and bulk zoning, F.A.R., Master Plan; Concepts of urban planning , design and landscaping.
Reference Books:

1. B. Gallion and S. Eisner, The Urban Pattern: City planning and Design - C B S publishers.
2. D. K. Francis Ching, Architectures: Form, Space and Order, John Wiley.
3. S. Eisner, A. B. Gallion and S. Eisner, The Urban Pattern: City planning and Design, JohnWiley.

PCI7J002 GROUND IMPROVEMENT TECHNIQUES 3-0-0

Module – I

Introduction, Necessity of ground improvement, selection of ground improvement techniques, stabilization ofexpansive soil.

Module-II

Dewatering, Well points-Vaccum / electro osmatic methods, Analysis of seepage, Two Dimensional Flow, heattreatment, ground freezing., Analysis and design of dewatering systems. Grouting types, Properties, Method of grouting, Ground selection and control.

Module – III

Compaction, Methods of compaction, Engineering properties of compacted soil, Field compaction and its control. dynamic compaction, Vibro flotation, Compaction piles, Consolidation, Sand drains, Preloading, Stone column, Construction methods, Merits and demerits of various techniques

Module – IV

Soil stabilization, Use of chemical additives, Reinforced earth, Concept, Materials, Application and design, Use of geo-synthetics and geo-cells in construction work.

Reference Books:

1. Grond improvement techniques by P.P.Raj, Laxmi Publications. 2.Foundation Design and Construction, M.J. Tomlinson

2. Foundation Engineering, G.A. Leonard, Tata McGraw Hill

3. Modern Geotechnical Engineering, Alam Singh, IBT Publishers

4.GeotechnicalEngineering.ShashKGulhati&ManojDatta,TataMc-GrawHil

PCI7J005 SOIL DYNAMICS & MACHINE FOUNDATION 3-0-0

Module – I

Introduction: Soil mechanics and soil dynamics, problems of dynamic loading on soil structure.
Theory of vibrations: Introduction, definitions, Single degree freedom system, Free and Forced vibrations with and without damping; transient response of single degree freedom system.

Module-II

Wave Propagation in Soil media: Wave propagation in an elastic homogeneous isotropic medium, Rayleigh, Shear and compression waves, waves inelastic half space and its equation.
Coefficient of elastic, uniform and non-uniform compression and shear, effect of vibration on the dissipative properties of soils, determination of dynamic properties of soil, Codal provisions.

Module-III

Dynamic loads, simple design procedures for foundations under reciprocating machines, machines producing impact loads, rotary type machines, Codal provision.

Module-IV

Vibration Isolation: Vibration Isolation Technique; Mechanical isolation, Foundation Isolation, isolation by location, isolation by barriers, active and passive isolation tests.

Reference Books:

1. Soil Dynamics and Machine Foundations, Swami Saran, Galgotia Publications Pvt Ltd.
2. Hand book on Machine Foundations, Srinivasulu.P. & Vaidyanathan.C. McGraw Hill Publications.
3. Soil Dynamics and Design Foundation, S.Prakash & V.K.Puri , McGraw Hill Publications.
4. Geotechnical Engineering, Shashi K Guhati & Manoj Datta, McGraw Hill Ltd.

PCI7J003 ENVIRONMENTAL IMPACT ASSESSMENT 3-0-0

Module I: Overview

Concept of environmental impact, Introduction to Environmental impact assessment(EIA) definitions, terminology and concepts; Evolution of EIA, EIA at project, Regional and policy levels; Impact of development on environment and Environmental Impact Assessment (EIA) and Environmental Impact; Statement (EIS), Objectives, Historical development, EIA capability and limitations, Legal provisions on EIA.

Module II: EIA Methods

Methods of EIA, Strengths, weaknesses and applicability, Appropriate methodology, Case studies.

Module III: EIA Procedures

Socio Economic Impact, Assessment of Impact on land, water and air, energy impact; Impact on flora and fauna;Mathematical models; public participation, Reports, Exchange of Information, Post Audit, Rapid andcomprehensive EIA.

Module IV: Quantitative Methods

Use the mathematical models in EIA, Water quality, air quality and noise; assumptions and limitations. Basic tenets ofGlobal Climate Models

Module V: Infrastructure Development Projects and Impacts

Case studies, highway, airport, dams, power plans, etc, Plan for mitigation of adverse impact on environment, optionsfor mitigation of impact on water, air and land, flora and fauna; Addressing the issues related to the project affectedpeople, climate impacts and EIA

Text Books:

1. Anjaneyalu,Y. (2002), Environmental Impact Assessment Methodologies, B.S. Publications, Hyderabad.
2. Canter R.L. (1991), Environmental Impact Assessment, McGraw Hill Inc., New Delhi.
3. B. M. Noble, Introduction to Environmental Impact Assessment: A Guide to Principles and Practice. Oxford University Press, USA, 2005.
4. J. Glasson, Introduction to Environmental Impact Assesment: Principles, and Procedures, Process, Practice and Prospects (The Natural and Built Environment Series), Routledge.

PCI7J004

INDUSTRIAL WASTE MANAGEMENT & DISPOSAL 3-0-0

Module I:

Industrial Pollution: Types of industries and industrial pollution, Characteristics of industrial wastes, Effects of industrial effluents on streams, sewer, land, sewage treatment plants and human health, Hazardous wastes, Environmental legislations related to prevention and control of industrial effluents and hazardous wastes, Pollution Control Boards.

Module II:

Waste Management Approach:Waste management approach, Waste Audit, Volume and strength reduction, Material and process modifications, Recycle, Reuse and by-product recovery, Applications.

Module III:

Industrial Waste Water Treatment: Sources, Quantification and characterization of effluent, Waste water treatment process, Primary and secondary treatment of waste water, Aerobic and anaerobic treatment processes, various reactor configurations.
Advanced Waste Water Treatment Processes: Fundamentals and mechanism of adsorption, adsorption isotherms, absorption, membrane separation and chemical oxidation processes andtheir design principles.

Module IV:

Case Studies of Industrial Pollution Control:Sources & their Characteristics, Waste water and air quality management in specific industries: Textiles, Tanneries, Distilleries, Refineries, Thermal power plants, Fertilizer plant, Steel plant, Pulp and paper, Sugar and dairies, Cement, Sponge iron industries.

Text Book:

1. M.N.Rao & A.K.Dutta (1995), Wastewater Treatment, Oxford IBH Publication.

2. Nelson, L. Nemerow (2000), Liquid Waste of Industry, Theories, Practices and Treatment, Addison-WesleyPublishing Company, London.

3. Wastewater treatment processes, Metcalf and Eddy, Tata McGraw hill

4. Environmental Engineering, Peavy and Rowe, Tata McGraw Hill

Reference books:

1. T.T.Shen, 1999, Industrial Pollution Prevention, Springer publications.

2. R.L.Stephenson & J.B.Blackburn Jr. (1998), Industrial Wastewater Systems Hand book, Lewis Publishers, NewYork.

3. Environmental Assessment Source book (1991), Vol.I, II & III., The World Bank, Washington, D.C.

4. Judith Petts (1999), Hand book of Environmental Impact Assessment, Vol.I & II, Blackwell Science.

PCP7H007 IOT 3-0-0

Course description and objectives:
Students will be explored to the interconnection and integration of the physical world and the cyber space. They are also able to design &develop IOT Devices.

Course Outcomes:

· Able to understand the application areas of IOT

· Able to realize the revolution of Internet in Mobile Devices, Cloud &Sensor Networks

· Able to understand building blocks of Internet of Things and characteristics.

Module I

Introduction & Concepts: Introduction to Internet of Things, Physical Design of IOT, Logical Design of IOT, IOT Enabling Technologies, IOT Levels.
Domain Specific IOTs: Home Automation, Cities, Environment, Energy, Retail, Logistics, Agriculture, Industry, Health & Life Style.

Module II

M2M & System Management with NETCONF-YANG: M2M, Difference between IOT and M2M, SDN and NFV for IOT, Software defined Networking, Network Function Virtualization, Need for IOT Systems Management, Simple Network Management Protocol, Limitations of SNMP, Network Operator Requirements, NETCONF, YANG, IOT Systems management with NETCONF-YANG.

Module III

Developing Internet of Things & Logical Design using Python: Introduction, IOT Design Methodology, Installing Python, Python Data Types & Data Structures, Control Flow, Functions, Modules, Packages, File Handling, Date/ Time Operations, Classes, Python Packages

Module IV

IOT Physical Devices & Endpoints: What is an IOT Device, Exemplary Device, Board, Linux on Raspberry Pi, Interfaces, and Programming& IOT Devices.

TEXT BOOKS:

1. VijayMadisetti, Arshdeep Bahga," Internet of ThingsA Hands-On-Approach",2014, ISBN:978 0996025515

REFERENCE BOOKS:

1. AdrianMcEwen, "Designing the Internet of Things", Wiley Publishers, 2013, ISBN:978-1-118-43062-0
2. Daniel Kellmereit, "The Silent Intelligence: The Internet of Things". 2013, ISBN:0989973700

PCP7H008 Nano Science & Biotechnology 3-0-0

Module -1(6 Hours)
Fundamental and process of fabrication

The world of small dimensions, Nanoscale Properties (Electrical, Optical, Chemical, Mechanical), Nanoscale visualization techniques , Electron microscopy (TEM, SEM, Cryo-SEM), Scanning probe microscopy (AFM, STM), Diffraction techniques (XRD,synchrotron),Top-down and Bottom-Up approach , nanoparticles (synthesis,properties and applications).

Module-2 (12 Hours)
Nano-Device and Components:

Structure of carbon nanotube, Classification and physical properties of CNT, Graphene: structure, synthesis and properties, Nanophotonis (Photonic crystal in one, two and three dimensions), Quantum dot, quantum wire, Nanofluidics: nanopores and Nano capillaries, Debye length, Nanomechanics (elastic, thermal and kinetic material properties).

Module-3 (10 Hours)
Quantum Electronics:

Coulomb blockade in nano capacitors and quantum dot circuits. Single Electron Transistor (SET), Quantum information and computing, Sprintonics devices and its classifications, Structural and optical properties of nanomaterials, Molecular Electronics, NEMS, Optical and Magnetic computer.

Module -4 (10 Hours)
Bio-Device and application

Bio-nanostructures (nanofibers, nanotubes, nanocellulose), Biological nanomachines Ribosomes, Photosynthesis systems,Near-field Bioimaging, Nanoparticles for optical diagnosticsand Targeted Therapy,Protein nanotechnology, DNA nanotechnology, Nano robot and its application, Nanocapsule, Nanosomes, Medibots, Artifiial pancreas, Artificial Muscle,Nanoclinic for Gene delivery and photodynamic therapy Nanoparticle in cancer, Bionanomotors.

ADDITIONAL MODULE (Terminal Examination-Internal) (05 hr)

Nanotechnology safety and the environment,Impact of nanotechnology on society and industry, Biosensors (fabrication, functionalization, applications), Current research on nanotechnology.

Books:

1. Rishal Singh, S.M. Gupta,Introduction to nanotechnologyOxford university press,(2016).
2. Paras N. Prasad, Nanophotonics, John Wiley & Sons, (2016).
3. C. M. Niemeyer, C. A. Mirkin, —Nanobiotechnology: Concepts, Applications and Perspectives, Wiley – VCH, (2004).
2. 4 T. Pradeep, —Nano: The Essentials, McGraw – Hill education, (2007).
4. Challa, S.S.R. Kumar, Josef Hormes, CarolaLeuschaer, Nanofabrication Towards Biomedical Applications, Techniques, Tools, Applications and Impact,

Wiley – VCH, (2005).

5. Nicholas A. Kotov, —Nanoparticle Assemblies and Superstructures, CRC, (2006).
6. David S Goodsell, “Bionanotechnology, John Wiley & Sons, (2004).

PCP7H009 IPR 3-0-0

Module I:

Introduction to Intellectual property: Introduction, types of intellectual property, international organizations, agencies and treaties, importance of intellectual property rights.

Trade Marks: Purpose and function of trade marks, acquisition of trade mark rights, protectable matter, selecting and evaluating trade mark, trade mark registration processes.

Module II:

Law of copy rights: Fundamental of copy right law, originality of material, rights of reproduction, rights to perform the work publicly, copy right ownership issues, copy right registration, notice of copy right, international copy right law.

Law of patents: Foundation of patent law, patent searching process, ownership rights and transfer

Module III:

Trade Secrets: Trade secrete law, determination of trade secrete status, liability for misappropriations of trade secrets, protection for submission, trade screte litigation.
Unfair competitiion: Misappropriation right of publicity, False advertising.

Module IV:

New development of intellectual property: new developments in trade mark law; copy right law, patent law, intellectual property audits.

International overview on intellectual property, international - trade mark law, copy right law, international patent law, international development in trade secrets law.

TEXT BOOKS & REFERENCES:

1. Intellectual property right, Deborah, E. Bouchoux, cengage learning.
2. Intellectual property right - Unleashing the knowledge economy, prabuddha ganguli, Tata Mc Graw Hill Publishing Company Ltd.

PCP7H010 SOFT COMPUTING 3-0-0

MODULE – I (8 hours)

Basic tools of soft Computing: Fuzzy logic, Neural Networks and Evolutionary Computing, Approximations of Multivariate functions, Non – linear Error surface and optimization.

MODULE – II (8 hours)

Fuzzy Logic Systems: Basics of fuzzy logic theory, Crisp and fuzzy sets; Basic set operations; Fuzzy relations, Composition of Fuzzy relations, Fuzzy inference, Zadeh's compositional rule of inference; Defuzzificaiton ; Fuzzy logic control; Mamdani and Takagi and Sugeno architectures. Applications to pattern recognition.

MODULE—III (16 hrs)

Neural networks: Single layer networks, Perceptron; Activation functions; Adalinc- its training and capabilities, weights learning, Multilayer perceptrons; error back propagation, generalized delta rule; Radial basis function networks and least square training algorithm, Kohenen self – organizing map and learning vector quantization networks; Recurrent neural networks, Simulated annealing neural networks; Adaptive neuro-fuzzy information; systems (ANFIS),

MODULE—IV (08 hrs)

Evolutionary Computing: Genetic algorithms: Basic concepts, encoding, fitness function, reproduction. Differences of GA and traditional optimization methods. Basic genetic, basic evolutionary programming concepts Applications, hybrid evolutionary algorithms.

Text Books

1) F. O. Karry and C. de Silva, "Soft Computing and Intelligent Systems Design – Theory, Tools and Applications". Pearson Education. (Printed in India).

Reference Books

1) J. S. R. Jang. C. T. SUN and E. Mizutani, "Neuro-fuzzy and soft-computing". PHI Pvt. Ltd., New Delhi.
2) Fredric M. Ham and Ivica Kostanic, "Principle of Neuro Computing for Science and Engineering", Tata McGraw Hill.
3) S. Haykins, "Neural networks: a comprehensive foundation". Pearson Education, India.
4) V. Keeman, "Learning and Soft computing", Pearson Education, India.
5) R. C. Eberhart and Y. Shi, "Computational Intelligence Concepts to Implementation". Morgan Kaufmann Publishers (Indian Reprint).

PCP7H011 INTRODUCTION TO MANAGEMENT AND FUNCTION 3-0-0

Module – I:Introduction

Introduction to Management: Concept, Definition, Functions; Levels of Management, Skills and Roles of a Manager; Management Process, School of Management thoughts: Pre-Scientific, Classical, Behavioral and Modern; Types of business organizations, merits and demerits, Public Organizations.

Module – II:Planning

Nature & Elements of Planning, Planning Types, Steps, MBO, MBE, Planning Premises.Decision making process,Decision Makingunder Risk and Uncertainty, Participation in Decision making, Creativity in decision making

Module – III:Organizing and Staffing

Formal and Informal, Line and Staff Relationship, Centralization Vs. Decentralization, Basic issues in Organizing, Work Specialization, Chain of Command, Delegation, Span of Management, Principles of organizing; Organization Structure for Departmentalization.

Module – IV: Directing and Controlling: Process, Standards and Bench Marking; Control techniques, Factors influencing control effectiveness, Co-ordination-Principles of Co-ordination; Inter- Dependence.

Reference Books

1. Management Theory & Practice; SubbaRao P &HimaBindu, HPH
2. Principles and Practices of Management – Kaul, Vikas
3. Management, Robbins, Coulter &Vohra, Pearson.
4. Management: Text and Cases-VSP Rao, Excel Books

PCP7H012 MARKETING MANAGEMENT 3-0-0

Objective of the Course: The course aims at introducing the basic concepts of marketing to the undergraduate students in engineering. The learning shall help the students in better designing, manufacturing and selling product/ service packages keeping competitive market, customers and cost in view.

Module – I (10 hours)

Marketing Management: Concept, Process, Functions and relevance in the current context. Marketing Environment: Elements of micro and macro environment Competition Analysis: Factors contributing to competition, porter's five forces model, Identifying and analyzing competitors. Marketing Planning : Exploring Opportunity, Product –market selection, Marketing Planning Process. Market Research and Information Systems: Research Process, The Internet and World Wide Web based Information collection and processing, Database, Data Warehouses and Data Mining, Global Market Research. Consumer Behavior: Factors influencing consumer behavior, consumer decision process. Organizational buying behavior.

Module II (10 hours)

Market Segmentation, Targeting and Positioning: Definition, Bases of segmenting consumer and Industrial markets. Target Market strategies: Market Positioning. Market Demand Forecasting: Key Terms, Forecasting Tools: Short term tools: Moving average and Exponential smoothing methods, Long-term forecasting Tools: Time series analysis, Econometrics methods, Qualitative tools : Buying Intention Survey, Sales Force Opinion and Delphi Techniques. Product Planning : Product Life Cycle, New Product Development Process, Branding Strategy, Positioning a Brand, Brand Equity, Packaging and Labeling, Product-mix and Product Line, Planned Obsolescence.

Module – III (10 hours)

Pricing Decision: Objectives and Factors influencing pricing, Pricing method and strategies. Integrated Marketing Communication(IMC)- Concept of IMC, the marketing communication process, Promotion Mix, elements of promotion mix, Direct marketing. Channels of Distributions: Types of intermediaries, functions of distribution channels, channel levels, Designing Distribution Channels, Physical Distribution, Supply Chain Management (Basic only). Trends in Marketing: Green Marketing, Customer Relationship Management, Emarketing, Rural Marketing and Service Marketing (concepts only)

Text Book:

1. Etzel , Walker ,Stanton and Pandit, Marketing, 14/e, Tata McGraw Hill.
2. Saxena, "Marketing Management" Tata McGraw Hill, 4/e.

Reference

1. Grewal, Levy, 'Marketing' Tata McGraw Hill, special Indian edition.
2. Karunakaran "Marketing Management", Himalaya Publishing House, 2010/e.
3. Kotler, Keller,Koshy and Jha, "Marketing Management", 13/e, Pearson Education.

PCP7H013 ENTREPRENEURESHIP DEVELOPMENT

Module-I

Entrepreneurship: Concept of entrepreneurship and intrapreneurship, Types of Entrepreneur, Nature and Importance, Entrepreneurial Traits and Skills, Entrepreneurial Motivation and Achievement, Entrepreneurial Personality

Module II

Entrepreneurial Environment, Identification of Opportunities, Converting Business Opportunities into reality. Start-ups and business incubation, Setting up a Small Enterprise. Issues relating to location, Environmental Problems and Environmental pollution Act, Industrial Policies and Regulations,

Module III

Need to know about Accounting, Working capital Management, Marketing Management, Human Resources Management, and Labour Laws. Organizational support services - Central and State Government, Incentives and Subsidies.

Module IV

Sickness of Small-Scale Industries, Causes and symptoms of sickness, cures of sickness, Role of Banks and Governments in reviving industries.

Reference Book:

1. Entrepreneurship Development and Management, Vasant Desai, HPH 2.Entrepreneurship Management, Bholanath Dutta, Excel Books

3 Entrepreneurial Development, Sangeeta Sharma, PHI

4.Entrepreneurship, Rajeev Roy, Oxford University Press

PCP7H014 E-Commerce & ERP

Module I

Overview of Electronic Commerce, Driving the Electronic Commerce Revolution, The Internet, Portals. Open Systems Inter Connection (OSI) Model, XML, Data Warehousing, Building own Website,InternetSecurity

Module II

E-Commerce and Internet, Electronic Market, Business to Business E-Commerce, Four C`s (Convergence, Collaborative Computing, Content Management and Call Center) , Wireless Application Protocol (WAP), Intranet and Extranets. Data Interchange (EDI), Electronic PaymentSystems,E-Security

Module-III

Overview of enterprise systems – Evolution - Risks and benefits - Fundamental technology - Issues to consider in planning designing and implementation of cross functional integrated ERP systems. Small, medium and large enterprise vendor solutions, BPR, and best business practices

- Business process Management, Functional modules.

Module IV

ERP IMPLEMENTATION: Planning Evaluation and selection of ERP systems, Implementation life cycle - ERP implementation, Methodology, Data Migration, Success and Failure factors of ERP Implementation. Extended ERP systems and ERP add-ons - CRM, SCM, Manufacturing prospective, Business analytics .

Reference Book:

1. E- Commerce and Enterprise Resource Planning ; CSV Murthy, HPH
2. Enterprise Resource Planning- Concepts and Practices ; V K Garg and N K Venkatkrishna, PHI
3. Enterprise Resource Planning; Alexix Leon ; TMH

PCP7H015 Business Regulatory Framework

Module – I

Overview of legal world, Law of Contract : Contract Act: Indian Contract Act, 1872, Agreement, Contract, Essentials of Contract (Offer & Acceptance, Consideration, Capacity of Parties, Free Consent, and Legality of Object), Performance and Discharge of Contract, Remedies for breach of contract, Quasi-Contract and Contingent Contract.

Module – II

Special Contracts: Contract of Agency: Mode of creating & revocation of Agency, Rights and Duties of Agents and Principals. Contract of Bailment (Rights and duties of Bailer and Bailee). Sales of Goods Act: Sale and agreement to sell, Condition and Warranty, Transfer of properties, Finder of Goods, Performance of Contract of sale, Unpaid seller and his rights.

Module- III

Consumer Protection Law: Consumers, Rights of Consumers, Redressal Machinery under the Act, Procedure of Complaint, Relief available to the consumers, Procedure of filing appeal, Powers of Redressal agencies, Unfair Trade Practices. Overview of Competition Act,

Module – IV

Company Law:Indian Companies Act 2013, Salient features and Classes of Company. Lifting of corporate veil, Procedure of Incorporation and Certificate of commencement of business, Memorandum and Articles of Association, Doctrine of ultra vires and Indoor Management, Management of Company: Qualification, Appointment of Directors, Company Meetings, Resolutions, Winding-up of Companies and their modes.

Reference:

1. Business Regulatory Framework–Mohapatra and Patra,HPH
2. Business Law – N D Kapoor, SChand
3. Business Law – Pathak, Tata Mc GrawHill
4. Legal frame work,Oxford.