Unit – I Industrial Jurisprudence
Industrial jurisprudence – an overview, principles of industrial jurisprudence, constitutional aspects of industrial jurisprudence.

Unit – II Laws on Working Conditions
The factories act, 1948; the mines act, 1952; the shop & establishment law; the plantation labor act, 1959; the contract labor (regulation and abolition act, 1970); the child labor (prohibition and regulation act, 1986)

Unit – III Laws on Industrial Relations
The trade union act, 1926; the industrial dispute act, 1947; the industrial employment (standing order) act, 1946; domestic enquiry

Unit – IV Lawson Wages
The minimum wages act, 1948; the payment of wages act, 1936; the payment of bonus act, 1965; the equal remuneration act, 1976

Unit – V Law on Social Security
The workmen’s compensation act, 1923; the employees’ state insurance act, 1948; the maternity benefit act, 1961; the employees’ provident fund and miscellaneous provisions act, 1952; the payment of gratuity act, 1972
UNIT-I: **Business Policy – An Introduction:**


An Overview of Strategic Management, Nature of strategic decision making, Patterns of strategic behavior, Process of strategic management.

UNIT-II: **Competitive Advantage:**

External environment, Porter’s five forces model, Globalization and Industry structure, National context and Competitive advantage resources, Capabilities and Competencies. Low cost and differentiation, Generic building blocks of competitive advantage, Distinctive competencies, Resources and capabilities, Durability of competitive advantage, Avoiding failures and sustaining competitive advantage.

UNIT-III: **Strategy Formulation:**

Environmental Appraisal – Components, Environmental scanning and Appraisal.

Organizational Appraisal – Organisation capability factors, Organisation appraisal.

Strategic alternatives, Strategic choice and SWOT analysis.

UNIT-IV: **Strategy Implementation:**

Project and procedural implementation.

Structural Implementation – Structural considerations, Structures, Organisation design and change.


Behavioral Implementation – Leadership, Corporate culture, Personal values and Business ethics.

UNIT-V: **Strategy Evaluation and Other Strategic Issues:**

Strategic Control – Basic types of control, Operational Control – Process of evaluation, Techniques of evaluation and control, Role of organization system, Other Strategic Issues: Managing Technology and Innovation, Entrepreneurial ventures and small business, Non profit organizations.
Unit – I Compensation – Concept & Context
Role of compensation & reward in organization, economic & behavioral issues in compensation, framework of compensation policy.

Unit – II Compensation Structure & Differentials
Pay packet compensation, institutional mechanism for wage determination, job evaluation & internal equity, external equities and pay surveys.

Unit - III Key Reward System Incentives & Pay Restructuring
Design & performance lined reward system, incentives for blue & white collars, bonus, profit sharing & stock options, allowances & benefits, downsizing & voluntary retirement schemes.

Unit – IV Emerging Issues & Trends
Tax planning, comparative international compensation, overview of future trends in compensation management.

Unit – V Legal Framework of Wage & Salary Administration
Wage concept, definition of wage under various labor legislation, laws relating to payment of wage & lones, regulation of minimum wages & equal remuneration, laws relating to retirement benefits.
Unit – I Introduction
Manufacturing planning and control system, sales and operations planning, manufacturing resource planning, making the production plan.

Unit – II Production scheduling
Introduction to production plan, developing master production schedule, production activity control. Bills of material, material requirements planning process.

Unit – III Sourcing decisions & Purchasing Process
Importance of purchasing, sourcing decision, in sourcing and outsourcing, sourcing strategies, purchasing process.

Unit – IV Logistics
Warehouse management, physical control & security, inventory record accuracy, transportation, warehousing, packaging, material handling, multi warehouse systems.

Unit – V JIT
Just in time philosophy, just in time environment, lean production system. Introduction to Toyota production system.
Unit - I  **International Marketing : An Overview** – Nature, scope, challenges, Development of Global Marketing, Major, Participants in International Marketing, Factor affecting, Importance of International Marketing, Balance of Payment Vs Balance of Trade, Theories of International Trade: Adam Smith (Comparative Cost) & Recardo (Comparative Advantage).

Unit – II  **Scanning International Marketing Environment.**

Unit – III  **International Marketing Strategies.**

Unit – IV  **Export and Import Management** –
**Export Management** – Export promotion (objectives, Incentives, Production assistance, Marketing assistance, Import facilities to exporters), Export financing (Sources of Funds), Role of Export houses, Export procedure and documentation.
**Import Management** – The Import process, Types of Importers, Impact procedure and documentation.

Unit – V  **International Economics Institutions** –
**Regional Economic Integrations** – Free trade areas, Custom Unions, Common Markets, Monetary Unions, The global economy.
**Economic Institutions** – IMF, IBRD or World Bank, ECM or EEC, GATT and WTO.
**Note** – Cases and presentation should be organized in the classes throughout the session and should be asked in the semester examinations.

**Suggested Readings:**
2. F.Cherunilam : International Business
3. Jeannet and Hennessey : Global Marketing Strategies
CSM-403 HRM  EMPLOYMENT RELATIONS

Unit – I Concept, framework of Employment Relation
Concept, scope & approaches to industrial relations, evaluation of industrial relation & current developments, constitutional & legal framework industrial relations.

Unit – II Trade Unionism
Trade union development & functions, trade union structure & recognitions, managing trade unions, managing unionism

Unit - III Collective Bargaining
Nature & context of collective bargaining, negotiation skills, issues & skills in collective bargaining

Unit – IV Employer – Employee Relations
Regulatory mechanism in industrial relations, dealing with unions & associations, industrial democracy, grievance handling & discipline, conciliation, arbitrations & adjudication

Unit – V Employee Involvement
Evolution, structure & process, design & dynamics of participative forums, strategies for implementing participation
Unit - I Introduction
Objectives of SCM, Development Chain, attributes of SCM, evolution of SCM, key issues in SCM.

Unit – II Inventory Management & Risk pooling
Basic Inventory Models – Economic order quantity, Economic batch quantity – Reorder point – Safety stock, risk pooling, centralized vs. decentralized system, strategies in inventory management.

Unit – III Network Planning
Network design – data collection, data aggregation, transportation rates, warehouse costs, warehouse capacities, warehouse locations, service level requirements, future demand.
Inventory positioning – Strategic safety stock, integrating inventory positioning and network design.

Resource Allocation

Unit – IV Supply Contracts
Types of contracts, contracts for make to stock/make to order supply chains, contracts with asymmetric information, contracts for non strategic components.

Unit - V Supply Chain Integration: Value of information for SCM, the bullwhip effect, push, pull and push – pull system, impact of lead time, demand driven strategies, impact of Internet on the supply chain strategies.

Unit – VI Distribution Strategies: Direct shipment distribution, intermediate inventory storage point strategies, transshipment.
UNIT – I

Petrochemicals: Constituents of Petroleum, Processing or Refining, Petrochemicals, Feedstock’s, Petrochemicals from methane, ethylene, propylene, butylenes and cyclic ring. Manufacture of petrochemical by chemical conversion.

UNIT – II


UNIT – III

Soaps and detergents: Cleaning agents, Soaps, manufacture of soaps, Glycerin, Methods of production of glycerin, Detergents, manufacture of various kinds of detergents, cleaning action of soaps and detergents, Use Pattern, Soapanification value, Acid values, Iodine value, Titer, Rosin value, Total fatty matter.

UNIT – IV


UNIT – V

CSM 404 (B)  MEDICINAL CHEMISTRY – III

UNIT-I

Drugs acting on CNS:

(a) Introduction, site and mechanism of action of some neurotransmitters
NA, Dopamine, 5H.T., acetyl choline, GABA, Histamine.
(b) **General and Local anaesthetics.** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Ether, Halothane, Nitrous Oxide, Chloroform, Thiopentone sodium, Ketamine hydrochloride, Lignocaine hydrochloride, cinchocaine, phenacainie HCl, Ethyl- p-amino benzoate.

UNIT-II

(a) **Sedatives and hypnotics:** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Barbiturates (Barbiton, Phenobarbital, Allobarbital, Thiopental sodium), Benzodiazepines (Diazepan, buspirone) and alcoholic hypnotics (Ethyl Alcohol, methylparafynol, Ethchlorvynol)
(b) **Tranquilizers or Antianxiety Agents:** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Reserpine, Chlorpromazine, Haloperidol, Benzodiazepines.

UNIT-III

(a) **Anticonvulsants and Antiepileptic drugs:** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Phenobarbital, Phenytoin Sodium, Trimethadione, Phensuximide, Primidone.
(b) **CNS stimulants:** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Caffeine, Theophylline, Doxapram, Coca.
(c) **Hallucinogens:** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Lysergic acids, Diethylamide, $\Delta^9$ Tetrahydrocannabinol.

UNIT-IV

(a) **Antiseptic and Disinfectants:** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Potassium permangmate, Hydrogen peroxide, Chlorhexidine, Cetrimide, ethanol, formaldehyde, glutaraldehyde, silver nitrate, silver sulfadiazine, gentian violet, acriflavin.
(b) **Ectoparasiticides:** Classification, pharmacology, mode of action, adverse effects, synthesis and structure activity relationship of Benzyl benzoate, Lindane.
(c) **Principles of Toxicology and General Treatment of Poisoning**
UNIT – V

DRUG DESIGN

a) A rational approach: Analogues and prodrugs, concepts of lead, factors governing drug design, rational approach of drug design, research and development strategies, tailoring of drugs.

b) Physical – Chemical factors and biological activities: Physical properties, factor governing ability of drugs to reach active site, dissociation constants, isoterism and bio-isoterism.

Unit – III

Glass & Ceramic Industries

(a) Glass Industries: Introduction, Composition & Raw material types and manufacturer of glasses.
(b) Ceramic Industries: Introduction, Uses, Raw material types and manufacture of different ceramics, a brief account of refractories.

Unit – IV

Lime, Gypsum, Plaster of Paris, Alumina, Hydrochloric and Sulphuric acid, Fluosilic, Bromine and Iodine.

Unit – V

Water and water treatment: Water and water treatment sources, characteristics of water, impurities present in water, industrial water requirement and softening method (lime soda method, zeolite and ion-exchange method). Boiler trouble, causes and remedies, municipal water and its treatment, water analysis (determination of hardness by complexometry, alkalinity, chlorides, B.O.D, C.O.D., residual chlorine)
CSM 405 (A)  INDUSTRIAL CHEMICALS

Unit – I
(a) Manufacturing of Zeolites, raw material used, uses of zeolite as catalyst in isomerization, dehydration and dehydroxylation. Zeolites as builder in detergents.
(b) Chemicals derived from ethylene: Isopropyl alcohol, acrylate, vinyl ester, vinyl chloride.

Unit – II
Chlor alkali industrial products: Caustic soda and chlorine, sodium carbonate, sodium bicarbonate.
Phosphorus chemicals: Phosphorus, phosphoric acid, ammonium. Phosphate, super phosphete.
Synthetic Nitrogen Products: Ammonia, nitric acid, amm. nitrate, ammonium sulphate.

Unit – III
Glass & Ceramic Industries
(a) Glass Industries: Introduction, Composition & Raw material types and manufacturer of glasses.
(b) Ceramic Industries: Introduction, Uses, Raw materials types and manufacture of different ceramics. A brief account of refectories.

Unit – IV
Lime, Gypsum, Plaster of Paris, Alumina, Hydrochloric and Sulfuric acid, Fluorine, Bromine and Iodine.

Unit – V
Water and water treatment: Water and water treatment sources, characteristics of water, impurities present in water. Industrial water requirement and softening method (lime soda method, zeolite and ion-exchange method), Boiler trouble, causes and remedies. municipal water and its treatment, water analysis (determination of hardness by complexometry, alkalinity, chlorides. B.O.D, C.O.D., residual chlorine)
CSM-405 (B)  CLINICAL PATHOLOGY & DIAGNOSTIC TECHNIQUES

Unit – I

Collection and handling of blood, RBC Counting, WBC (total & DLC) Counting, Platelets structure function and counting, Hemoglobin structure & Function, ESR, PCV

Unit – II

Urine examination – Composition, Sample collection, Preservation, Physical examination, Chemical examination & Microscopic examination of urine.

Unit – III

General description, Collection, Preservation, Physical examination, Chemical examination & Microscopic examination of stool, Sputum & Semen.

Unit – IV

Inflammation, regeneration & healing Primary union & Secondary union, vascular disorders – congestion, Ischaemia, Haemorrhage, Thrombosis & Infarction cyanosis.

Unit – V

Metabolic disorder – Jaundice (Physiological and Pathological Jaundice)
Hepatolenticular degeneration (Wilson’s disease)
Brief idea about Biopsy
Principles of autopsy (postmortem)