

## **2<sup>nd</sup> SEMESTER**

### **BUSINESS COMMUNICATION IN ENGLISH**

**PH.2.1 THEORY**

**2 hours/week**

**Objectives:**

**The objectives are to prepare the student to**

- a) Produce written communication of different forms such as paragraph, report letter etc.
- b) Make notes/ Summarize from a given passage
- c) Organize Meetings, prepare agenda, draft resolutions and write minutes
- d) Make presentations and face interviews.
- e) Document sources and prepare bibliographies.
- f) The objectives of management oral communication, improving the facility of oral Communication. Both transmission and reception in six managerial situations such as.  
(i) Information sharing (ii) Conversation (iii) interview (iv) Committee (v) Negotiation  
(vii) Presentation

#### **UNIT -I**

##### **WRITING-I**

**(7 hours)**

- 1 Paragraph writing – topic sentence, cohesion and coherence – sentence linkers (so, however etc.)
2. Preparation of a business report – writing a business proposal – format, length, structure

#### **UNIT -II**

##### **WRITING-II**

**(7 hours)**

3. Preparing notes – writing business letters and E-Mail messages
4. Documentation: References, notes and bibliographies

#### **UNIT -III**

- 6-7. Study of fibres
- 8-9. Study of pharmaceutical aids.
- 10-16. Microscopic studies of seven selected crude drugs and their powders mentioned in theory and their chemical tests.

## **HOSPITAL PHARMACY**

**PH 2.9            THEORY**

**3 hours/week**

### **UNIT-I**

1. **Organization and Structure:** Organization of a hospital and hospital pharmacy, responsibilities of a hospital pharmacist, Pharmacy and Therapeutic Committee, budget preparation and implementation.
2. **Hospital Formulary:** Contents, preparation and revision of hospital formulary.

### **UNIT-II**

3. **Drug Store Management and Inventory Control:** (a) Organization of drug store, Types of materials stocked, storage conditions. (b) Purchase and Inventory Control principles, purchase procedures, Purchase order, Procurement and stocking.
4. **Drug distribution System in Hospitals:** (a) Outpatient dispensing, methods adopted. (b) Dispensing of drugs to in-patients. Types of drug distribution systems. Changing policy, labeling.

### **UNIT-III**

5. **Central Sterile Supply Unit and their Management:** Types of materials for sterilization, packing of materials prior to sterilization, sterilization equipments, Supply of sterile materials.
6. **Manufacture of Sterile and Nonsterile Products:** Policy making of manufacturable items, demand and costing, personnel requirements, manufacturing practice, master formula card, production control, manufacturing records.
7. **Surgical Products:** Definition, Primary wound dressing, absorbents, surgical cotton, surgical gauzes, bandages, adhesive tape, protective cellulosic hemostatics, dressings, absorbable and nonabsorbable sutures, ligatures and catguts.

### **UNIT-IV**

8. **Drug Information Services:** Sources' of information on drugs, disease, treatment schedule, procurement of information, computerized services (e.g. MEDLINE), retrieval of information, medication error.

9. **Records and Reports:** Prescription filling, drug profile, patient medication profile, cases on drug interaction and adverse reactions, idiosyncratic cases etc.

**RECOMMENDED BOOKS:**

1. Hassan William E., Hospital Pharmacy (Lea & Febiger, Philadelphia)
2. Nand P., Khar R.K., Text book of Hospital & Clinical Pharmacy (Birla publication, Delhi)
3. Dandiya P.C. & Mathur M., A text book of Hospital & Clinical Pharmacy. (Vallabh Prakashan, Delhi)

**PHARMACEUTICAL CHEMISTRY –II**  
**(Organic chemistry-I)**

**PH. 2.10 THEORY**

**3 hours/week**

**UNIT-I**

Bohr' atomic structure, Atomic and Molecular orbital concepts, Quantum numbers, Chemical bonding: Ionic bond, Covalent bonds, Coordinate covalent bonds, Type of covalent bonds, Tetravalency of carbon, Hybridization:  $sp^3$ ,  $sp^2$ ,  $sp$ . Bond energy, Bond length, Bond angle, Electronegativity, Polarity in Covalent bonds, Hydrogen bonding.

I.U.P.A.C. Nomenclature of Organic compounds.

**UNIT-II**

**Organic Reactions and their Mechanisms:**

Reaction mechanism, Electron Displacement Effects: Inductive Effect, Mesomeric Effect, Electromeric Effect, Hyperconjugative Effect. Homolytic bond fission, Heterolytic bond fission. Structure and Stability of: Carbonium ions, Carbanion ions and Free radicals. Attacking Reagents: Electrophilic reagents, Nucleophilic reagents.

Brief Concept of Organic reactions: Substitution reactions, Addition reactions, Elimination reaction and Rearrangement reactions.

**UNIT-III**

**Alkanes:** Nomenclature, General methods of preparation, physical properties, combustion, Free radical substitution reactions (Chain reaction: halogenation.)

**Cycloalkanes:** Nomenclature, General methods of preparation, Chemical reactions, Relative stabilities: Bayer strain theory, Sachse-Mohr concept of strainless rings. Conformational analysis of cyclohexane.

**Alkenes:** Nomenclature, general methods of preparation, Electrophilic addition reactions, Markovnikov rule, Antimarkovnikov rule, Catalytic hydrogenation, Oxidation, Combustion.

Brief introduction to alkadienes, Diel's Alder reaction.

**Alkynes:** Nomenclature, general methods of preparation, Electronegativity of  $sp$ -hybridized carbon and acidity of acetylene, Substitution and Addition reactions.

**UNIT-IV**

