

# QUESTION BANK-CLINICAL PHARMACY-PHARM. D IV YEAR

## CHAPTER 1: DEFINITIONS, DEVELOPMENT AND SCOPE OF CLINICAL PHARMACY

WEIGHTAGE: 2

### 2 Marks Questions

1. Briefly differentiate the roles of Clinical, Community and Hospital Pharmacist.
2. Scope of Clinical Pharmacy in India
3. Mention the Milestones of Clinical Pharmacy
4. Mention the areas where the clinical pharmacy can be applied
5. List out the barriers hindering the clinical pharmacy development in India
6. Can Clinical Pharmacist give better Patient care? Justify?
7. Differentiate Hospital Pharmacy services and Clinical Pharmacy Services

## CHAPTER 2: INTRODUCTION TO DAILY ACTIVITIES OF A CLINICAL PHARMACIST

WEIGHTAGE: 10 +5+2 =17

### 10 Marks Questions

1. What is Drug Therapy Monitoring? Explain the concept of Medication Chart Review 2+7
2. Write the advantages and Disadvantages of Patient Counseling from Pharmacist and Patients point of view. Discuss the steps involved in Patient Counseling 4+6
3. a. Brief the steps involved in Medication chart Review 6+2+2  
b. Difference between Medication chart review and medication History Interview.  
c. Significance of Medication History interview
4. Write the Goals of DUE in Hospital setup? Explain Typical DUE cycle in detail 3+7
5. What the goals are of ward round participation by clinical Pharmacist? Describe the Types and significance of ward round participation
6. a. Brief the Process involved in Pharmacist intervention with health care professionals' b. Brief the Significance of Clinical review 7+3
7. Write the Goals of DUE in Hospital setup? Explain Typical DUE cycle in detail 3+7
8. What is Drug Therapy Review. Explain the components of Drug Therapy Review (2+8)
9. Explain the role of Clinical pharmacist in a) Quality assurance of Clinical Pharmacy services

- b) Clinical review 6+4
10. Discuss the protocol and Importance of Drug Utilization Evaluation (DUE) 10

### **5 Marks Questions**

1. What is mean by the term Quality assurance in clinical pharmacy? Explain in detail about the same.
2. Discuss the various types of Audits in Clinical Pharmacy service.
3. Discuss in brief about the steps involved in Medication history interview
4. Discuss the quality assurance for Patient counseling
5. Discuss the quality assurance for Drug Information queries
6. Justify how the medication history interview will helps in taking clinical decisions? Discuss in brief on the structure of Medication History interview

### **2 Marks Questions**

1. Distinguish DUE & DUR
2. Differentiate between qualitative and quantitative DUE studies
3. What is the significance of medication history interview?
4. Enumerate the barriers for effective patient counselling.
5. Write briefly on the use of various counselling aids.
6. Enlist sources of data for drug usage evaluation in hospitals
7. Define Post Marketing Surveillance
8. Define Dechallenge and Rechallenge
9. List out the Causality Assessment scales
10. How pharmacist can involve in Prevention of ADRs

## **CHAPTER 3: PATIENT DATA ANALYSIS**

**WEIGHTAGE: 2+2=4**

### **2 Marks Questions**

1. Write the full form of: a) GERD b) MCHC c) SGOT d) COPD
2. Write the full form of: a) HbA1c b) HS c) CRP d) SOS
3. Write the full form of: a) BBB b) ANC c) AFB d) EEG
4. Write the full form of: a) PFR b) ZES c) SJS d)CAD

5. Define the following: a) Otorhinolaryngology b) Otitis media
6. Structure of patient case history
7. Define the following: a) Cellulitis b) Dysplasia
8. What are the components of patient medication chart?
9. Define a) Cholecystectomy b) Rhabdomyolysis
10. Pharmacist's annotation in Case sheet
11. Components of Patient case History
12. Write the full form of: a) TIA b) TIBC

**CHAPTER 4: Clinical laboratory tests used in the evaluation of disease states, and interpretation of test results of some commonly ordered lab tests.**

**WEIGHTAGE: 5+2+2=9**

**5 Marks Questions**

1. Mention the different tests in the evaluation of hematological disorders. How would you differentiate microcytic and macrocytic anemia.
2. Explain the different hematological tests useful in classifying types of anemias along with the normal values.
3. Discuss the Clinical significance of serum electrolytes of Sodium, Potassium and Calcium
4. Discuss the importance of various thyroid function tests
5. Explain in brief about the various Pulmonary function tests
6. Describe how infectious organisms are diagnosed by laboratory tests
7. List and explain the various liver function tests
8. Discuss in brief on Cardiac Markers
9. Explain the different methods of microbial culture sensitivity tests
10. Clinical Implications of commonly ordered Renal Function tests.

**2 Marks Questions**

1. What is hyponatremia? List out the possible causes of hyponatremia.
2. What is the significance of a) BUN b) ESR?
3. What is the significance of test for Creatinine Kinase?
4. Explain how white blood cell count (WBC) and differential count (DC) are useful in diagnosing infections.
5. Clinical Implications for commonly ordered Renal Function tests.

6. Write the Cockcroft-Gault Equation
7. Write a note on SGOT,SGPT and their reference values
8. Application of Culture sensitivity tests
9. Clinical Implications of ECG
10. Significance of serum Magnesium and Phosphate
11. Normal values of MCV and MCHC
12. Name the 2 drugs altering serum Potassium levels
13. Normal values of Troponin & LDH
14. Name the 2 drugs altering serum Sodium levels
15. Normal values and significance of Bilirubin
16. Normal value and clinical significance of ALP,AST
17. Name the 2 drugs altering serum calcium levels.
18. Normal value and Serum Creatinine and BUN
19. Normal value of ESR and its clinical significance
20. Normal value of HbA1c and its significance

## **CHAPTER 5: Drug & Poison information**

**WEIGHTAGE: 5+2=7**

### **5 Marks Questions**

1. Write a note on Drug information center? Write the advantages and disadvantages of drug information resources with suitable examples.
2. Explain the role of DIC and its relationship with various healthcare professionals.
3. Discuss the various requirement for setting up of drug information center in detail
4. Discuss the requirement of Drug and poison Information centers in detail.
5. Explain the systematic approach in answering the drug information query
6. Explain in detail about the organization and information resources of poison information Centre.
7. Write in detail about the resources used in Drug information center.

8. Explain the differences between DIC and PIC
9. Critical Evaluation of Drug Information literatures
10. Preparation of written and verbal drug information query reports and documentation

### **2 Marks Questions**

1. Write four examples of primary drug information resources
2. Enumerate four Tertiary resources used in poison information Centre
3. Write four examples of secondary drug information resource.
4. Write four examples of tertiary drug information resource
5. Mention the various functions of DIC
6. Write the advantages and disadvantages of Primary resources
7. List out the skills required for drug information specialists
8. Draw the layout of DIC
9. Discuss in brief on the Material requirement for DIC & PIC
10. Discuss in brief on the staff requirement for DIC & PIC

## **CHAPTER 6: Pharmacovigilance**

### **WEIGHTAGE: 10**

### **10 Marks Questions**

1. Define and classify adverse drug reactions. Explain the predisposing factors of ADRs.
2. Define ADR. Discuss about WHO and Naranjo's scale
3. Differentiate ADR and ADE. Classify ADRs and add a note on the mechanism of action for the same.
4. Define Pharmacovigilance. Explain the mechanism of type "A" and type 'B' ADRs.
5. Write the role of pharmacist in Prevention, monitoring and management of ADRs.
6. Discuss the predisposing factors for ADRs?
7. Discuss in detail on voluntary reporting of ADRs. Give the reasons for ADRs under report?
8. Define and write the importance of Causality Assessment. Explain the WHO scale
9. Write in brief on the scope and aims of pharmacovigilance. Discuss on voluntary ADR reporting system in various countries

10. Discuss in detail on various methods of ADR monitoring

**CHAPTER 7: Communication skills, including patient counselling techniques, medication history interview, presentation of cases.**

**WEIGHTAGE: 2+2=4**

**2 Marks Questions**

1. Enumerate the barriers for effective communication.
2. Explain the importance of good communication skills for a clinical pharmacist
3. Enumerate the stages of verbal communication
4. Define Communication? Mention the various factors affecting the communication?
5. Explain the various types of Communication in hospital setup.
6. Discuss on Patient counseling technique
7. Structure of case Presentation
8. Examples of open ended and closed ended question
9. Patient information Leaflets
10. Describe on Non-verbal communication

**CHAPTER 8: Pharmaceutical care concepts**

**WEIGHTAGE: 5**

**5 Marks Questions**

1. Define pharmaceutical care. Explain the role of clinical pharmacist in pharmaceutical care
2. Define and explain pharmaceutical care.
3. Write a short note on SOAP format and FORM format
4. Explain briefly the concepts of pharmaceutical care
5. Explain Pharmaceutical care at Community Pharmacy Setup
6. Write note on Pharmaceutical care at Institutional setup
7. Explain the PRIME Format for Providing Pharmaceutical care
8. Explain Patient related outcomes in Pharmaceutical Care
9. Skills and materials required for providing pharmaceutical care

10. Write the principles of pharmaceutical care

## **CHAPTER 9: Critical evaluation of biomedical literature**

WEIGHTAGE: 5

### **5 Marks Questions**

1. Describe Critical evaluation of biomedical literature? How do you evaluate the biomedical literatures?
2. Explain how the primary research is evaluated?
3. Define critical evaluation of biomedical literature? How do you evaluate a primary research paper?
4. Explain on Critical evaluation of Biomedical literature
5. Explain in brief on Critical evaluation of primary and secondary research paper
6. Describe on various study designs
7. Discuss on Systematic review and Meta-analysis
8. Define the terms: a) Randomization b) Blinding c) Biomedical literature d) EBM e) cohort study
9. Explain cohort study and EBM studies.
10. Discuss On randomization in research design.

## **CHAPTER 10: Medication errors**

WEIGHTAGE: 5+2=7

### **5 Marks Questions**

1. Define Medication errors. Categorize the Medication errors with examples.
2. Classify Medication errors. What are the factors influencing the medication errors?
3. What are medication errors? Explain the role of pharmacist in prevention of medication errors
4. What are the different types of medication errors? Explain each with an Example
5. Classify Medication Error as per NCC-MERP.
6. Describe the causes of medication error
7. Role of pharmacist in the Prevention and Management of Medication error.
8. Write any five examples of Dispensing error which you have observed.
9. Write any five examples of Prescribing error which you have observed
10. Give 5 examples of look-alike and sound alike drugs.

## **2 Marks Questions**

1. Define medication Error and Medical error
2. Role of pharmacist in management of Medication error
3. Describe on COPE system
4. Give 2 examples of LASA drugs
5. Describe on administration errors
6. Safety measures for prescribing errors
7. Safety measures for administration errors
8. Structure of Medication error reporting form
9. Importance of Root cause Analysis in medication safety
10. How we can minimize the dispensing errors.