

GUJARAT TECHNOLOGICAL UNIVERSITY
B.PHARM - SEMESTER- 7 EXAMINATION – SUMMER-2024

Subject Code:BP703TT**Date: 04/05/2024****Subject Name: Pharmacy Practice****Time: 02.30 p.m. to 5.30 p.m.****Total Marks: 80****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

- Q.1** (a) Explain following: (i) Automatic stop order (ii) Investigational medicines (iii) Withdrawal reaction **06**
- (b) Explain organization and structure of retail and whole sale drug store. **05**
- (c) Describe goals and objectives of ward round participation. Explain importance of Medication Chart Review. **05**
- Q.2** (a) Explain the procedure for purchasing of drugs. Explain the purpose of process of tendering. **06**
- (b) Define hospital. Give detailed classification of hospital. **05**
- (c) Define hospital formulary. Discuss the process of preparation and revision of hospital formulary. **05**
- Q.3** (a) Define patient counselling. Discuss steps involved in patient counselling. **06**
- (b) Discuss organization and functions of Pharmacy and therapeutic committee. **05**
- (c) Write a note on different legal requirements of establishment of community pharmacy. **05**
- Q.4** (a) Explain objectives of Drug Information Centre. Classify sources of drug information. State advantages and disadvantages of primary sources of information. **06**
- (b) Write alphabetical classification of Adverse Drug Reactions. Compare and contrast between type A (Augmented) and type B (Bizzare) adverse drug reactions. **05**
- (c) Explain the code of ethics for community pharmacist. **05**
- Q.5** (a) Explain the concept of clinical pharmacy. Describe functions and responsibilities of clinical pharmacist. **06**
- (b) Discuss role of pharmacist in sales of over the counter medications. **05**
- (c) Mrs Sharma is a 35 year old woman with 3 teenage daughters. She & her husband have been using a low dose combined oral contraceptive (COC) for many years as their contraceptive of choice. After sustaining a head injury from motorcycle accident. Mrs Sharma is prescribed carbamazepine to prevent seizure. The doctor asks the clinical pharmacist to advice on the contraception management for her & her husband. The clinical Pharmacist advices on using a high estrogen containing COC for her. State the reason for revised regimen suggested by the clinical pharmacist. Discuss type and mechanism of underlying drug interaction(s), if any. **05**
- Q. 6** (a) Enlist techniques of inventory control. Discuss ABC analysis and Economic Order Quantity (EOQ) in brief. **06**
- (b) Define budget. Enlist divisions of Budget. Explain budget preparation & implementation in hospital pharmacy. **05**
- (c) What is Medication history interview? Enlist commonly recorded information in the medication history interview. List out tools used to enhance medication adherence. **05**

- Q.7 (a)** A 74-year old obese female patient with a history of asthma and heart failure was admitted to hospital complaining of increased shortness of breath. Her medical history also included type 2 diabetes, osteoporosis, hypertension and osteoarthritis. On admission, she was diagnosed with an exacerbation of asthma and heart failure, and was started on: **08**

Hydrocortisone IV 50 mg qid
Salbutamol via nebulizer 2.5 mg 4 hourly
Furosemide 80 mg IV daily

About 12-days after admission, she was observed to be confused and her temperature spiked to 38.4 °C. Urine culture identified *Pseudomonas aeruginosa*, and gentamicin 320 mg IV once daily was prescribed. Therapeutic Drug Monitoring (TDM) was requested on the third day of therapy and her gentamicin concentration was 3.0 mg/L.

Questions:

- (i) Is TDM indicated in this patient? Explain briefly.
 - (ii) If yes, when should the first TDM measurement be made?
 - (iii) What information should be supplied on TDM request form?
 - (iv) Enlist clinical factors need to be considered when interpreting the TDM result.
- (b)** An 18-year old male medical student had the complaints of loss of appetite (anorexia), nausea, headache and malaise. On clinical examination, his liver was found to be slightly enlarged. He was passing pale coloured stools but dark coloured urine. The data of his laboratory investigations are as follows. **04**

Parameter (serum) range	Subject	Reference range
Bilirubin (total) (van den Bergh reaction)	8 mg/dl (Biphasic)	0.2-1 mg/dl (Negative)
Conjugated bilirubin	4.5 mg/dl	<0.4 mg/dl
Unconjugated bilirubin	3.5 mg/dl	<0.6 mg/dl
Alanine transaminase	170 IU/l	5-40 IU/l
Aspartate transaminase	80 IU/l	5-40 IU/l
Alkaline phosphatase	20 KAU/dl	3-13 KAU/dl

Diagnose the illness with justification.

- (c)** Give brief overview of points to be considered for patient counselling of patients having following characteristics: **04**
- (i) A 25 year old patient suffering from active pulmonary tuberculosis
 - (ii) A 22 year old patient suffering from chronic asthma predominantly characterized by nocturnal attacks
