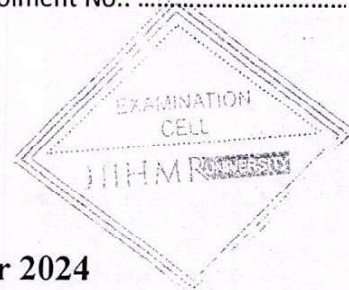


LIHMR UNIVERSITY
School of Pharmaceutical Management
MBA Pharmaceutical Management
Batch-16th (2024-2026)

Enrolment No.:



First Year, Term 1, End Term Examinations, December 2024

CC – 627 Pharmacology and Therapeutic Management

Time - 3 Hour

Maximum Marks: 50 (Minimum Marks: 20)

Instructions to students:

- This question paper contains 2 printed pages.
- Don't write anything on the Question Paper except your Enrolment No.

Part A

(Maximum Marks: 5)

Q1. Answer in one line / Choose the correct option / Fill in the blank, as applicable for the following (1 mark each):

- (a). Define pharmacokinetics and pharmacodynamics.
- (b). Oral administration of drugs is the fastest route of drug delivery.
 - (i) True
 - (ii) False
- (c). Which of the following is NOT an adverse drug effect?
 - (i) Nausea
 - (ii) Rash
 - (iii) Headache
 - (iv) Effectiveness
- (d). Calculate the dose of a drug if a 70 kg patient is prescribed 5 mg/kg body weight.
- (e). _____ drugs stimulate the cholinergic system in the body.

Part B

(Maximum Marks: 15)

Answer the following questions (5 mark each).

- Q2.** Describe the mechanism of action and therapeutic uses of antihypertensive medication.
- Q3.** Describe about Neurohumoral transmission and its use in various medication therapies.
- Q4.** Describe autacoids and classify anti histaminic drugs with examples and usages.

Part C

(Maximum Marks: 30)

Answer the following questions in detail (10 marks each).

- Q5. Describe the management for asthma.
- Q6. Describe about the management of angina pectoris.
- Q7. *"Pharmacological Product Profiles (PPP) are vital tools in assessing a drug's clinical and market potential. Using the details provided below, analyze and profile the drug 'Atorvastatin.' Additionally, evaluate its strategic positioning based on its pharmacokinetics, therapeutic value, and market dynamics. Suggest ways to enhance its market share post-patent expiry."*

(Drug Details: Tablet, 20 mg OD, Patent Expiry on November 30, 2011, used for the management of hyperlipidemia and prevention of cardiovascular events, Market Value: INR 25.4 billion, CAGR: 8%, Shelf Life: 5 years, Protein Binding: 98%, Metabolism: CYP 450, CYP 3A4, Half-life (t_{1/2}): 14 hours)

- (a). Define drug profiling and its role in pharmaceutical management.
- (b). Develop a PPP for "Atorvastatin"
- (c). Discuss the implications of a long half-life and high protein binding on dosing and therapeutic efficacy.
- (d). Analyze how patent expiry has likely impacted its market position and competition from generics.
- (e). Suggest strategies for sustaining market relevance, such as fixed-dose combinations, new indications, or patient-centric formulations (e.g., chewable tablets).

