

ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS EXAMINATION SECTION)

Common Recruitment Examination (CRE-AIIMS) for Pharmacist Grade II

AIIMS CRE Pharmacist Official Solved CBT Paper & Blueprint

Exam: AIIMS CRE Pharmacist Grade-II

Format: 100 MCQs (75 Domain + 25 General)

Pay Matrix: Level-5 (Rs. 29,200 - 92,300)

Negative Marking: 0.25 Mark per wrong answer

Q1 (Domain). In clinical hospital pharmacy, TDM (Therapeutic Drug Monitoring) is strictly required for:

- (A) Paracetamol
- (B) Lithium Carbonate
- (C) Amoxicillin
- (D) Cetirizine

Correct Answer: (B) Lithium Carbonate

Rationale: Lithium has an extremely narrow therapeutic range (0.6 - 1.2 mEq/L). Levels above 1.5 mEq/L produce toxic tremors, seizures, and renal toxicity.

Q2 (Domain). Total Parenteral Nutrition (TPN) bags must be compounded in an environment conforming to:

- (A) ISO Class 5 (Class 100) laminar airflow cabinet
- (B) ISO Class 8 general room
- (C) Open cleanroom table
- (D) Non-sterile laminar hood

Correct Answer: (A) ISO Class 5 (Class 100) laminar airflow cabinet

Rationale: High-risk sterile admixtures like TPN require Class 100 (ISO Class 5) aseptic conditions to prevent microbial septicemia.

Q3 (Domain). The biological half-life ($t_{1/2}$) of a drug undergoing first-order elimination is calculated by:

- (A) $t_{1/2} = 0.693 / K_{el}$
- (B) $t_{1/2} = K_{el} / 0.693$
- (C) $t_{1/2} = C_0 / 2K$
- (D) $t_{1/2} = V_d * K_{el}$

Correct Answer: (A) $t_{1/2} = 0.693 / K_{el}$

Rationale: In first-order kinetics, elimination rate is proportional to concentration, and half-life is constant given by $\ln(2)/K_{el} = 0.693/K_{el}$.