



A Charutar Vidya Mandal's Institution
V.P. & R.P.T.P. SCIENCE COLLEGE (AUTONOMOUS)
(Grant-in-Aid)

Affiliated to Sardar Patel University
VALLABH VIDYANAGAR-388120

Master of Science (Semester 2) External Examination - 2026
COURSE CODE: PS02SEZOO01

TOXICOLOGY

Date: 28/03/2026, Saturday

Time: 10:45 AM TO 12:15 PM

Total marks: 25

Q-1 MULTIPLE CHOICE QUESTIONS: [ANSWER APPROPRIATE OPTIONS] [05]

1. WHICH TOXIN AMONG THE FOLLOWING HAS THE HIGHEST LD50 (Mg/Kg BODY WEIGHT) VALUE?
A] ETHANOL B] NICOTINE C] NAEL D] TETRODOTOXIN
2. _____ PROPERTY OF XENOBIOTICS ENABLES THEM TO BIND TO LIPID MEMBRANES.
A] HYDROPHILIC B] LIPOPHILIC C] POLAR D] IONIC
3. WHICH OF THE FOLLOWING PARAMETERS REPRESENTS THE EFFECTIVE CONCENTRATION PRODUCING 50% OF MAXIMAL BIOLOGICAL RESPONSE
A] EC50 B] LD50 C] NOEL D] IC50
4. FREE RADICALS CONTRIBUTE TO TOXICITY MAINLY THROUGH _____?
A] PROTEIN SYNTHESIS B] ATP PRODUCTION C] OXIDATIVE STRESS D] NUTRIENT ABSORPTION
5. WHICH METAL IS ASSOCIATED WITH KIDNEY DAMAGE AND BONE DEFORMITIES IN LONG-TERM EXPOSURE?
A] ARSENIC B] LEAD C] CADMIUM D] MERCURY

Q-2 WRITE IN DETAIL ABOUT DOSE-RESPONSE RELATIONSHIP AND DISCUSS ABOUT ITS EVALUATION [10]

OR

Q-2 EXPLAIN IN DETAIL ACUTE AND CHRONIC TOXICITY. DISCUSS ABOUT ROUTES OF ADMINISTRATION [10]

Q-3 DISCUSS TOXICITY, TRANSFORMATION, AND BIOCHEMICAL EFFECTS OF ANY TWO METAL TOXICANTS. [10]

OR

Q-3 DISCUSS CASES OF ECOTOXICOLOGY AT WORLD LEVEL. GIVE RELEVANT EXAMPLES OF IT. [10]