

BIO ASSAYS & TOXICOLOGY

Time: 3 hours

Max. Marks: 70

Question Paper Consists of **Part-A** and **Part-B**
 Answering the question in **Part-A** is Compulsory,
 Three Questions should be answered from **Part-B**

PART-A

1. (a) Define bioassay. Write the principle involved in bioassay.
- (b) Write short notes on tetanus and its prevention.
- (c) Write short notes on xenobiotics.
- (d) Write short notes on acute oral toxicity.
- (e) Explain the general principles of toxicology in the treatment of poisoning.
- (f) Write short notes on acute pesticide intoxication.

[4+3+4+3+4+4]

PART-B

2. (a) Write the importance of bioassay.
(b) Elucidate the Methods of Bioassay for Agonists. [4+12]
3. (a) Explain the principles and procedures involved in bioassays of Insulin.
(b) How is posterior pituitary extract standardised for “oxytocic” activity? [10+6]
4. (a) Write a brief note on scope, principles, mechanisms and risk assessment in toxicology.
(b) Write short notes on toxicokinetics. [10+6]
5. (a) Write the methods to determine LD₅₀.
(b) Define carcinogenicity. Explain the mechanisms of action of chemical carcinogens. [6+10]
6. (a) Write the Signs, symptoms, treatment of acute and chronic poisoning of heavy metals.
(b) Explain the toxic responses of liver. [7+9]
7. (a) Discuss the toxic effects of plants and its treatment strategies.
(b) What are the harmful effects of solvents? [10+6]
