

2021

PHYSIOLOGY — HONOURS

Paper : DSE-B-4

(Toxicology and Pharmacology)

Full Marks : 50

The figures in the margin indicate full marks.

*Candidates are required to give their answers in their own words
as far as practicable.*

Group - A

1. Answer **any five** questions : 2×5
- (a) What is the difference between NOEL and LOEL?
 - (b) What do you mean by 'therapeutic index'?
 - (c) What is drug toxicity?
 - (d) What is half life of a drug?
 - (e) What is the difference between drug and toxin?
 - (f) What is pro-drug? Give one example.
 - (g) What is meant by pharmacokinetics?
 - (h) What is drug accumulation?

Group - B

2. Write short notes on **any two** from the following : 5×2
- (a) Dose-response curve
 - (b) First pass effect and drug bio-availability
 - (c) General mechanism of action of neuromuscular blocking agents
 - (d) Comparative account of sedatives and hypnotics.

Group - C

Answer **any three** questions from the following.

3. (a) What is ED₅₀ of drug?
- (b) What do you understand by desensitization of drug receptors?

Please Turn Over

- (c) Distinguish between an agonist and antagonist.
- (d) What is meant by drug clearance? 2+2+3+3
4. What are anaesthetics? What are the different stages of anaesthesia? State the mechanism of action of general anaesthetics. 2+4+4
5. What are diuretics? Classify diuretics with example and state the site of action for each type. 2+(4+4)
6. (a) What do you mean by antianginal drug?
(b) How do calcium channel blockers act in angina?
(c) Describe the mechanism of action of an adrenoceptor agonist and an antagonist. 2+3+(2½+2½)
7. (a) Write a brief note on the importance of Pharmacology in the study of Physiological processes.
(b) What are orphan drugs?
(c) State the uses of Clonidine and Nitroglycerine. 4+2+(2+2)
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