

[Total No. of Questions - 4] [Total No. of Printed Pages - 2]
(2124)

1727

B. Pharmacy (Ayurveda) 3rd Semester Examination
Pharmacology-I (OS)
Paper-IV

Time : 3 Hours

Max. Marks : 90

The candidates shall limit their answers precisely within the answer-book (40 pages) issued to them and no supplementary/continuation sheet will be issued.

Note : Attempt all questions.

1. Answer any ten:

- (a) Define orphan drugs and orphan receptors.
- (b) What are limitations of oral route of administration?
- (c) Enlist various factors affecting absorption.
- (d) Give examples of at least five drugs bound to plasma proteins.
- (e) Give examples of prodrugs and their active metabolites (at least four).
- (f) Give uses of enzyme induction.
- (g) Define loading and maintenance dose.
- (h) Define affinity, intrinsic activity, inverse agonist and partial agonist.
- (i) Give location of histamine receptors.
- (j) What is triple response of histamine?
- (k) Differentiate tachyphylaxis and idiosyncrasy. (2×10=20)

[P.T.O.]

2. Attempt any two:
- (a) Discuss pharmacological actions and pathophysiological role of histamine. Give uses of H₁ antagonists.
 - (b) Give importance of transport across biological membranes in pharmacokinetic process. Mention influence of pH.
 - (c) Discuss various routes of excretion. Briefly mention kinetics of elimination. (2×12½=25)
3. Answer any two:
- (a) Comment on JAK-STAT pathway, ionchannel and enzyme linked receptors.
 - (b) Elaborate pharmacological consequences of combined effect of drugs.
 - (c) Write a detailed note on microsomal enzyme induction. (2×10=20)
4. Answer any five:
- (a) Discuss importance of bioavailability & bioequivalence.
 - (b) How plasma protein binding decides fate of a drug molecule?
 - (c) Differentiate competitive and non competitive enzyme inhibition.
 - (d) Discuss therapeutic index, therapeutic window and therapeutic efficacy.
 - (e) How body size and age modify drug action?
 - (f) Give mechanism of action of H₁ antihistamines in allergy disorders. (5×5=25)
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