



SB-1173

Final Year B. Pharm. Examination

March / April – 2011

PH - 403 : Medicinal Chemistry - II

Time : 3 Hours]

[Total Marks : 70

Instructions :

(1)

नीचे दर्शाविए निशानीवाणी विगतो उत्तरवही पर अवश्य लपवी. Fillup strictly the details of signs on your answer book.	Seat No. :
Name of the Examination :	<input type="text"/>
<input type="text" value="Final Year B. Pharm."/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="PH - 403 : Medicinal Chemistry - 2"/>	<input type="text"/>
Subject Code No. : <input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="7"/> <input type="text" value="3"/>	Section No. (1, 2,.....) : <input type="text" value="1&2"/>
Student's Signature	

(2) Attempt and tie each section in **separate** answer books.

(3) Each section carries **35** marks.

SECTION - I

- 1 (a) Give name and structure of a drug with following characteristics (any **five**) 5
- (i) Liquid sedative
 - (ii) Neuroleptics antihypertensive
 - (iii) Oral anabolic steroid
 - (iv) Analeptic
 - (v) α_2 stimulant antihypertensive
 - (vi) Narcotic antagonist
 - (vii) Used in hypertensive crisis.
- (b) Give structure and chemical name of following drugs : (any **six**) 6
- (i) Meprobamate
 - (ii) Phenylbutazone
 - (iii) Caffiene
 - (iv) Allopurinol
 - (v) Probenecid
 - (vi) Prochlorperazine
 - (vii) Chlorthalidone
 - (viii) Acetazolamide.

- 2** Attempt any **three** questions : **12**
- (a) Discuss structural features of thyroid hormones with respect to their activity.
 - (b) What are neuroleptics ? Write their mechanism classifying them.
 - (c) Explain how structures of all opioids closely resemble each other discussing their activity.
 - (d) How do general and local anesthetics differ from each other ? Classify local anesthetics with structures.
 - (e) What are ovulation inducers ? Write in brief about estrogens.

- 3** Attempt any **two** questions : **12**
- (a) Describe giving examples oxidative reactions of drug metabolism involving C-O and C-S systems.
 - (b) Describe reductive type reactions of drug metabolism giving examples.
 - (c) Classify diuretics giving mechanism of action and also give structures from each class.

SECTION II

- 4** Write synthesis of following : (any **five**) **10**
- (a) Methadone
 - (b) Diclofenac
 - (c) Carbamazepine
 - (d) Haloperidol
 - (e) Hydralazine
 - (f) Guanethidine
 - (g) Hydrochlorothiazide.
- 5** Write short notes on : (any **five**) **15**
- (a) CNS stimulants
 - (b) Insulin
 - (c) Glucocorticoids
 - (d) Coronary Vasodilators
 - (e) Peptidomimetics and nucleotidomimetics
 - (f) Vitamins A and C
 - (g) Coloring and flavouring agents.
- 6** Attempt any **two** questions : **10**
- (a) Discuss application of prodrugs in drug targeting
 - (b) Discuss SAR and phenothiazines
 - (c) Discuss SAR of benzothiadiazines.