



RB-1365-66
Final B. Pharm. Examination
April / May – 2010
PH-403 : Medicinal Chemistry - II

Time : 3 Hours]

[Total Marks : 70

RB-1365

Instructions :

(1)

<p>नीचे दशांशवैध निशानीवाणी विगतो उत्तरवही पर अवश्य लिखनी. Fillup strictly the details of signs on your answer book.</p> <p>Name of the Examination : Final B. Pharm.</p> <p>Name of the Subject : PH-403 : Medicinal Chemistry - 2</p> <p>Subject Code No. : <input type="text" value="1"/> <input type="text" value="3"/> <input type="text" value="6"/> <input type="text" value="5"/> Section No. (1, 2,.....): <input type="text" value="1"/></p>	<p>Seat No. :</p> <table border="1" style="width: 100%; height: 20px; border-collapse: collapse;"><tr><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td><td style="width: 15%;"></td></tr></table> <div style="border: 1px solid black; border-radius: 15px; height: 60px; margin-top: 10px; display: flex; align-items: center; justify-content: center; padding: 10px;">Student's Signature</div>						

- (2) Answer each section in a **separate** answer-book.
- (3) Tie and submit each section **separately**.
- (4) There are internal options and no extra question is to be attempted.

1 Attempt any **eleven**-six from (a) and five from (b) 11

(a) Give structure and chemical name of the following :
(any **six**)

- (i) Captopril
- (ii) Dilteazem
- (iii) Procaine
- (iv) Meprobamate
- (v) Chlordiazepoxide
- (vi) Prochlorperazine
- (vii) Guanethidine
- (viii) Metoprolol
- (ix) Theophylline

- (b) Give structure of the following : (any **five**)
- (i) a local anaesthetic also used in peptic ulcer
 - (ii) an analeptic used in barbiturate poisoning
 - (iii) a pyrazolidine-dione used as analgesic
 - (iv) a dibenzazepine type anticonvulsant
 - (v) a purine analogue used in gout
 - (vi) a chroman ring containing anticoagulant
 - (vii) an anthranilic acid derivative used as diuretic.

2 Attempt any **three** questions : **12**

- (a) Discuss SAR of local anaesthetics.
- (b) What are sedatives and hypnotics? Classify them with mechanism of action and structure from each class.
- (c) What is the difference in neuroleptics, thymoleptics, narcoleptics and analeptics? Classify thymoleptics with mechanism and structures from each class.
- (d) What is the difference in Parkinsonism and Parkinson's disease? Enumerate drugs used in them with structure and mechanism.

3 Attempt any **two** questions : **12**

- (a) Describe in brief hydrolytic reactions of drug metabolism. Give examples wherever necessary.
- (b) Discuss pharmaceutical applications of prodrugs.
- (c) What are diuretics, explain with their clinical applications. Classify them with mechanism and structures from each class.

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Name of the Examination :	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
<input type="text" value="Final B. Pharm."/>	<input type="text" value="Student's Signature"/>
Name of the Subject :	
<input type="text" value="PH-403 : Medicinal Chemistry - 2"/>	
Subject Code No. : <input type="text" value="1"/> <input type="text" value="3"/> <input type="text" value="6"/> <input type="text" value="6"/>	Section No. (1, 2,.....) : <input type="text" value="2"/>

- (2) Answer each section in a **separate** answer-book.
- (3) Tie and submit each section **separately**.
- (4) There are internal options and no extra question is to be attempted.

4 Write synthesis of any **five** of following drugs. 10

- a pyrimidine-trione used as anticonvulsant
- a phenothiazine used as antiemetic
- an anthranilic acid derivative used as analgesic
- an antihypertensive also used in anxiety
- a dibenzazepine type thymoleptic
- an α - β -unsaturated ketone used in diuretic
- a liquid-state drug used in lipidemic disorders.

5 Write short notes on any **five** with special emphasis on their medicinal chemistry. 15

- Vitamin A
- Ovulation inducing agents
- Progestins
- Narcotic antagonists
- Ca channel blockers
- Nucleotidomimetics
- Anticoagulants.

6 Attempt any **two** questions :

10

- (a) Discuss SAR of phenothiazines.
 - (b) Write structural and conformational requirements of glucocorticoids
 - (c) Enumerate types of diabetes with their causes. Classify antidiabetics giving mechanism of action and structures from each class.
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