



SB-1163-A_B

Third Year B. Pharm. Examination

March / April - 2011

PH-303 : Medicinal Chemistry - I : Paper - II

Time : 3 Hours]

[Total Marks : 70

Instruction :

नीचे दशांशके निशानीवाणी विगतो उत्तरवही पर अवश्य लिखनी. Fillup strictly the details of signs on your answer book.	Seat No. :
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="T. Y. B. PHARM."/>	<div style="border: 1px solid black; border-radius: 15px; padding: 10px; width: fit-content; margin: 0 auto;">Student's Signature</div>
Name of the Subject :	
<input type="text" value="PH-303 : MEDICINAL CHEMISTRY - 1 : PAPER - 2"/>	
Subject Code No. : <input type="text" value="1"/> <input type="text" value="1"/> <input type="text" value="6"/> <input type="text" value="3"/>	Section No. (1, 2,.....) : <input type="text" value="1&2"/>

SECTION I

- 1 Draw the structure of following drugs and give their chemical name : (any six) 12
- (a) Pyrazinamide
 - (b) Isoprenaline
 - (c) Penicillin V
 - (d) Dapsone
 - (e) Primaquine
 - (f) Triprolidine
 - (g) Cemitidine
 - (h) Ciprofloxacin
- 2 Answer the following (any three) 12
- (a) Classify parasympatholytic agents and explain one example from each class.
 - (b) Classify antineoplastic agent and give example with structure for each class.

- (c) Classify antifungal agents and describe drugs interfering with metabolic processes.
- (d) Enlist eicosanoids and describe chemistry of prostaglandins.
- (e) Describe drugs acting on different stages of malarial life cycle.

3 Answer the following (any **two**) **11**

- (a) Give the chemistry and SAR of tetracycline.
- (b) Enlist different physiochemical parameters used in QSAR explaining parameters from each class and highlight their importance in drug discovery process.
- (c) Describe different steps involved in viral replication with drugs acting on each stage of replication process.

SECTION II

4 Name the ring system present in the structure and mechanism of action of following drugs (any **five**) **10**

- (a) Isoniazid
- (b) Fluconazole
- (c) Methotrexate
- (d) Quinine
- (e) Ampicillin
- (f) Promethazine
- (g) Zidovudine

5 Answer the following (any **four**) **10**

- (a) Write the SAR of Cholinomimetic drugs.
- (b) Classify Quinolones and describe the mechanism of action of it.

- (c) Classify Anti-ulcer agents and explain one example from each class.
- (d) Explain the chemistry of Penicillin.
- (e) Classify antitubercular drugs and explain second line agents.
- (f) Describe the SAR of H₂ receptor antagonistic drugs.

6 Outline the synthesis and give IUPAC name of the following : (any **five**) **15**

- (a) Sulphamethoxazole
 - (b) Chloramphenicol
 - (c) Omeprazole
 - (d) Dicyclomine
 - (e) Pyridostigmine
 - (f) Chloroquine
 - (g) Ethambutol.
-