

Code: 9R01803

B.Pharm IV Year II Semester (R09) Supplementary Examinations July 2018

**MEDICINAL CHEMISTRY – III**

(For 2009 (LC), 2010, 2011, 2012 regular &amp; 2011 (LC), 2012, 2013 lateral admitted batches only)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions  
All questions carry equal marks

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- 1 (a) Classify antihypertensive agents. Explain the mechanism of action & SAR  $\beta$  – Adrenergic blockers.  
(b) Write the synthesis of enalapril.
- 2 (a) Classify antiarrhythmic agents. Write the synthesis, mechanism of action of procainamide.  
(b) Classify diuretics. Write the SAR & synthesis of acetazolamide.
- 3 (a) How do various classes of antihyperlipidemic agents act? Write the synthetic route for clofibrate.  
(b) Explain the classification of oral antidiabetic agents with examples.  
(c) Write the synthesis of phenformin.
- 4 (a) Explain the terms “mild & strong analgesics”. Discuss the development of analgesics based on the structure of morphine.  
(b) Write the synthesis and uses of methadone.
- 5 (a) Classify antiviral drugs. Outline the synthesis and mechanism of action of any one drug.  
(b) Write the synthesis of sulfamethoxazole.  
(c) Classify antifungal agents. Explain the mechanism of action of “Azole” antifungal agents.
- 6 (a) Classify antileprotic agents. Give the synthesis, mechanism of action and uses of clofazimine.  
(b) Write the synthesis of: (i) Ethambutol. (ii) Metronidazole.
- 7 (a) Classify antimalarial agents with structural examples of each case. Outline the synthesis and mechanism of action of any one drug.  
(b) Classify anthelmintics and write the synthesis of albendazole.
- 8 (a) Write the classification of anticancer agents with examples. Explain in detail about alkylating agents.  
(b) Write the synthesis of methotrexate.  
(c) Write a note on vinca alkaloids.

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