



(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 150613

Roll No.

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B.Pharm.

(SEM VI) THEORY EXAMINATION, 2014-15
PHARMACEUTICAL CHEMISTRY-VI
(MEDICINAL CHEMISTRY-II)

Time : 3 Hours]

[Total Marks : 80

1 Answer **any two** of the following: **8×2=16**

- (a) What is a pharmacophore? Write the methods to discover and optimize a pharmacophore.
- (b) What is drug design? What are its different types and explain computer aided drug design (CADD).
- (c) Define QSAR, Write in detail about Hanch analysis and Hammett equation.

2 Answer **any four** of the following: **4×4=16**

- (a) Write about chemistry and positive inotropic effect of cardiac glycosides.
- (b) Give the synthesis and SAR of Propranolol hydrochloride.

- (c) Give the synthesis and SAR of Nifedipine.
- (d) Give the synthesis and mechanism of action of Warfarin sodium.
- (e) Classify Anti-Hypertensive drugs with suitable examples.

3 Answer **any two** of the following: **8×2=16**

- (a) Write in detail the SAR of H₁ antagonist quoting necessary examples where applicable.
- (b) Write the detailed synthesis and uses of Ranitidine and Fomepizole
- (c) Give the synthesis and mechanism of action of **any two**:
 - (i) Methotrexate
 - (ii) 6-Mercaptopurine
 - (iii) 5-Fluorouracil

4 Answer **any two** of the following: **8×2=16**

- (a) Explain the mechanism of action and SAR of Sulfonamides.
- (b) Discuss the synthesis and uses of Sulphamethoxazole and Nalidixic acid.
- (c) Classify NSAIDs with suitable examples and structures.

- (d) Discuss the synthesis and uses of Mefenamic acid and Diclofenac sodium.
- (e) Discuss the mechanism of action of NSAIDs.

5 Answer **any four** of the following: **4×4=16**

- (a) Give the classification and uses of diuretics with suitable examples.
 - (b) Give the synthesis and mechanism of action of Acetazolomide.
 - (c) Give the SAR of Thiazide diuretics and synthesis of Chlorthiazide,
 - (d) Write the mechanism of action of potassium sparing diuretics.
 - (e) Classify diagnostic aid. Give the synthesis of iopanoic acid.
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