

Total No. of Questions : 09

M.Sc. (Chemistry) (2015 to 2017) (Sem.-3)

MEDICINAL CHEMISTRY

Subject Code : MSCH-312

Paper ID : [72626]

Time : 3 Hrs.

Max. Marks : 100

INSTRUCTION TO CANDIDATES :

1. Candidate is required to attempt 5 (FIVE) questions in ALL.
2. Attempt ONE question each from SECTION A, B, C and D.
3. Section E is compulsory. All questions carry EQUAL marks.

SECTION-A

1. a) What are antibacterial compounds? Explain mechanism of action of antibacterials.
b) What are penicillins? Classify penicillins according to their spectrum of antimicrobial activity. Describe general chemistry of penicillins. (8+12)
2. a) What are DNA polymerase inhibitors? Explain giving suitable examples.
b) Explain the chemistry of the following :
i) Amprenavir ii) Retrovir
c) Write note on the following :
i) Acyclovir ii) Ziduvudine (6+8+6)

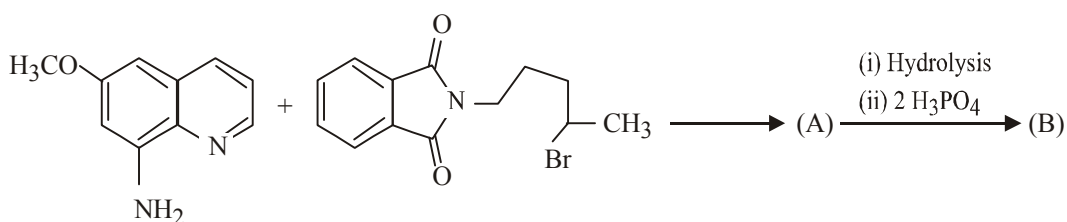
SECTION-B

3.
 - a) What are anti-malarial drugs? How are these classified? Give suitable examples in each category.
 - b) What are Cinchona alkaloids? Describe the chemistry of Cinchona alkaloids.
 - c) What are sulfonamides? Explain the chemistry of sulfonamides. (6+7+7)
4.
 - a) Explain the synthesis of the following drugs :

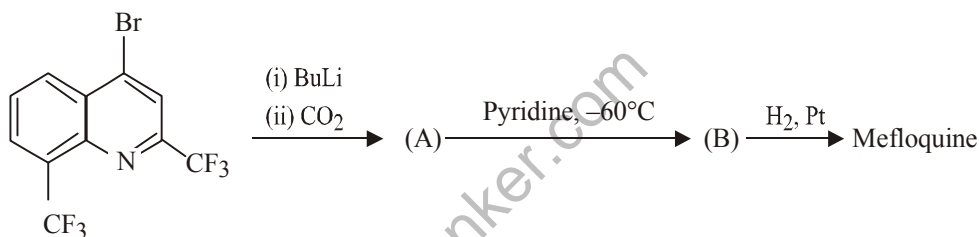
SECTION-E

9. Answer briefly :

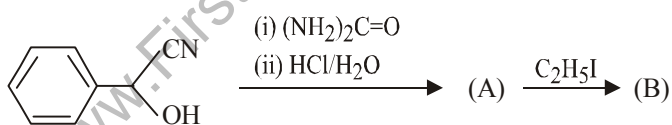
- Name any two drugs used for treatment of Herpes infections?
- Give the structure of lamivudine.
- What are acid stable penicillins? Give ONE example.
- Give the chemical structure of sulfadoxine.
- What are (A) and (B) in the following reaction?



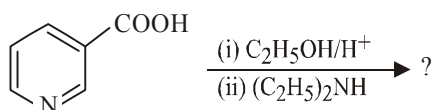
- What are (A) and (B) in the following reaction?



- Complete the following :



- Complete the following :



- Give the chemical structure of Amelioride.
- What are acidifying salts diuretics?