

2023

Seat Number

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CJ-03

BP-601T

MEDICINAL CHEMISTRY-III

(736601)

Total Pages : 3]

Time : 3 Hours

Max. Marks : 75

Note : (1) Do not write anything on question paper except Seat No.

(2) Draw a well labelled diagram wherever necessary.

(3) Figures to the right indicate full marks.

1. Solve the following questions :

10×2=20

(a) What are β -lactum antibiotics ? Give one example.

(b) Discuss about the mode of action of macrolides.

(c) Define prodrug with an example.

(d) Give the synthesis of Isoniazid.

(e) Give the synthesis of Nitrofurantoin.

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(f) Discuss about the mode of action of amantadine HCl.

(g) Comment on : Antifungal antibiotics.

(h) Draw the structures of :

(i) Dapsone

(ii) Trimethoprim.

(i) What is molecular docking ?

(j) Give any *four* applications of solid phase synthesis.

2. Solve any *two* long answer questions :

2×10=20

(a) Define and classify in brief—antibiotics with suitable examples and discuss about the SAR of tetracyclines.

(b) What are antiviral agents ? Classify them with suitable examples and give mode of action and SAR of quinolones.

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- (c) Define QSAR and explain the various parameters used in QSAR and also discuss in short about the limitations of docking.

3. Solve any seven questions from the following :

7×5=35

- (a) Write a note on SAR of cephalosporins.
- (b) What are antimalarial agents ? Explain etiology of malaria.
- (c) Comment on types and applications of prodrugs.
- (d) Give the mechanism of action and synthesis of acyclovir.
- (e) Classify antiamoebic drugs and give the synthesis of metronidazole.
- (f) Write the mechanism of action, uses and adverse effect of pyrizinamide
- (g) Give the structure, mechanism of action and uses of mebendazole.
- (h) Write a note on sulphonamides.
- (i) Comment on pharmacophore modelling.