B. Pharm. (CBCS Pattern) Semester - VI
BP601T - Medicinal Chemistry-III

P. Pages : 3

Time : Three Hours

Max. Marks : 75

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Notes : 1. All questions are compulsory.

1. Multiple choices questions. **20x1 =20**

1) Chemically INH is
   a) Isonicotinic acid hydrazide   b) Nicotinic acid
   c) Nicotinic hydrazine   d) Acid hydrazine

2) Which is anti-tubercular antibiotic?
   a) Rifampicin   b) Pyrazinamide
   c) Amikacin   d) Isoniazid

3) Clotrimazole is used for
   a) Bacterial infection   b) Candidiasis
   c) Meningitis   d) Fever

4) Which parameter is use to find steric property
   a) Taft steric constant   b) Free Wilson
   c) Hansch analysis   d) Hammett constant

5) QSAR is
   a) Quantitative structure activity relationship
   b) Qualitative structure activity relationship
   c) Qualitative structure scan report
   d) Quantity structure action report

6) Doxycycline binds to the 50S subunit of ribosomes thereby inhibit protein synthesis
   a) True   b) False

7) Resistance to penicillin in bacteria is due to β - lactamase enzymes
   a) True   b) False

8) Erythromycin contain
   a) Macrocyclic lactone ring   b) Lactam ring
   c) Beta-lactam ring   d) Pyrolidine and pyridine

9) Streptomycin contain streptidine moiety
   a) True   b) False

10) β -lactamase enzyme inhibitor includes all except.
   a) Clavulanic acid
   b) Sulbactam
   c) Tazobactam
   d) Monobactam

11) Chloramphenicol is used for the treatment of
   a) Brain fever
   b) Hay fever
   c) Typhoid fever
   d) Pneumonia

12) Tubercular drug are acts by inhibit the
   a) Mycolic acid synthesis
   b) Purine synthesis
   c) Protein synthesis
   d) DNA synthesis

13) Cephalosporin is more potent than penicillin
   a) True
   b) False

14) Penicillin inhibit bacterial cell wall synthesis by inhibiting ------- enzyme
   a) Transferase
   b) Trans peptidase
   c) β - lactamase
   d) None of these

15) Penicillin discovered by ----
   a) Florey and Chan
   b) Sheehan
   c) Alexander Fleming
   d) Beecham

16) Benzyl penicillin is also called ------
   a) Penicillin A
   b) Penicillin V
   c) Penicillin G
   d) None of these

17) Tetracyclines are --------- in nature
   a) Acidic
   b) Basic
   c) Amphoteric
   d) None of these

18) Ring D in tetracycline is aromatic
   a) True
   b) False

19) Chloroquine contains a
   a) 8-aminoquinoline
   b) 4-aminoquinoline
   c) 6-aminoquinoline
   d) None of these

20) Macrolides acts by inhibiting
   a) Cell wall synthesis
   b) DNA synthesis
   c) Purine synthesis
   d) Protein synthesis

2.   Long answer question solve **any two.**   2x10
                                                                   =20

   1) Write classification of antimalarial drugs with example and give SAR of quinolines antimalarial drug.

2) Discuss mechanism of action and SAR of cephalosporin

3) Discuss mechanism of action and SAR of tetracycline.

3. Short answer questions solve **any seven.** **7x5 =35**

1) Give mechanism of action, synthesis and uses of trimethoprim.

2) Give structure of streptomycin and discuss mechanism of action and uses of streptomycin.

3) Write note on MOA of penicillin and bacterial resistance to penicillin

4) Discuss about degradation of Cephalosporin.

5) Discuss basic concept and applications of prodrug design with suitable example.

6) Discuss synthesis and therapeutic uses of chloramphenicol.

7) Write note on macrolides.

8) Write classification of anti-tubercular drugs and give synthesis of isoniazid.

9) Give mechanism of action, synthesis and uses of dapsone.

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