DR. BABASAHEB AMBEDKAR TECHNOLOGICAL UNIVERSITY, LONERE

End Semester Examination – Summer- 2023

Course: B. Pharmacy   **Sem: 6th**

Subject Name: Medicinal Chemistry-III   **Subject Code: BP601T**

Max Marks: 75   **Date: 10/07/2023**   **Duration: 3 Hr**

Instructions:
1. **All questions are compulsory**
2. **Draw diagrams / figures wherever necessary**
3. **Figures to right indicate full marks**

Q. 1. Objective Type questions (Answer all the questions)   **(10* 2) =20**

   i.   Write the structure and uses of Penicillin-G.

   ii.   Give the synthesis of Isoniazid.

   iii. List out important anti-viral agents. Draw the structure of acyclovir.

   iv.   Write the structure of any two anti-malarial drugs.

   v.   What are antiprotozoal agents? Write the structure of metronidazole.

   vi.   What are anthelmintics? Give examples.

   vii. Give the structure and IUPAC name of Dapsone.

   viii. Write the synthesis of para amino salicylic acid.

   ix.   Define anti-tubercular agents? Name the causative organism for tuberculosis.

   x.   Enlist the parameters of QSAR.

Q. 2. Long Answers (Answer 2 out of 3)   **(2 x 10) = 20**

   i.   Define and Classify antimalarial agents with examples. Give the mechanism of action and outline the synthesis of chloroquine.

   ii.   What are anthelmintics? Classify with suitable examples. Outline the synthesis and mechanism of action of Mebendazole.

   iii. What are antibiotics? Classify with examples. Discuss the SAR & MOA of tetracyclines.

Q. 3. Short Answers (Answer 7 out of 9)   **(7 x 5) = 35**

   i.   What are aminoglycosides? Write the mechanism and SAR of aminoglycoside antibiotics.

   ii.   Write a note on urinary tract anti-infective agents.

   iii. What are Sulphonamides? Explain their SAR.

   iv.   Write a note on combinatorial chemistry and its applications.

   v.   Define and classify anti-tubercular agents with examples. Write the MOA of isoniazid.

   vi.   Add a note on synthetic antifungal agents. Give the synthesis of Tolnaftate.

   vii. Write a note on prodrug concept and applications of prodrugs design.

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