

BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)

CLASS: B.PHARM
BRANCH: PHARMACY

SEMESTER : VII
SESSION : MO/19

SUBJECT: PS7407 PHARMACOLOGY - IV

TIME:3:00 HOURS

FULL MARKS: 60

INSTRUCTIONS:

1. The question paper contains 7 questions each of 12 marks and total 84 marks.
 2. Candidates may attempt any 5 questions maximum of 60 marks.
 3. The missing data, if any, may be assumed suitably.
 4. Before attempting the question paper, be sure that you have got the correct question paper.
 5. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
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- Q.1(a) Define Chemotherapy. [2]
Q.1(b) Describe the mechanism of action of sulfonamides & cotrimoxazole. [4]
Q.1(c) Classify the antimicrobials in detail? Mark your answer with proper examples in each category. [6]
- Q.2(a) Classify the 1st line and 2nd line drugs for the treatment of Tuberculosis. [2]
Q.2(b) Write a note on the theoretical basis of chemotherapy of tuberculosis. Write the mechanism of action of Isoniazid. [4]
Q.2(c) Analyses and represent the mechanism of action of a) Rifampicin b) Pyrazinamide c) Ethambutol [6]
- Q.3(a) Draw the structure of erythromycin highlighting the glycon and aglycon parts. [2]
Q.3(b) Discuss the MoA of Macrolide antibiotics in general. Provide some examples of macrolide antibiotics with the general uses. [4]
Q.3(c) Describe the classification of Quinolones in detail. Discuss the mechanism of action of Fluroquinolones. [6]
- Q.4(a) Draw the general structure of cephalosporin and penicillin highlighting the β -lactum ring. [2]
Q.4(b) Classify the cephalosporins with examples of each. [4]
Q.4(c) Discuss the mechanism of action of cephalosporins and penicillin in detail. What are the therapeutic uses of cephalosporins? [6]
- Q.5(a) Define Cancer & Neoplasm. [2]
Q.5(b) Analyses and represent your answer in flowchart about the Pathogenesis of Cancer highlighting the development of secondary tumors. [4]
Q.5(c) Classify the anticancer agents in detail along with examples of each type. Also write the mechanism of action of alkylating agents. [6]
- Q.6(a) Write a note on treatment of Urinary Tract Infection. [2]
Q.6(b) Write the sites of action of antifungal drugs. Classify the antifungal agents with examples. [4]
Q.6(c) Write the mechanism of action of a) cyclophosphamide b) cisplatin c) methotrexate [6]
- Q.7(a) Analyze and draw a neat flowchart on Drug Discovery & Development -Timeline. [2]
Q.7(b) Write the Drug discovery process in detail. [4]
Q.7(c) Define Clinical trials in human. Discuss about the different phases of clinical trials in brief. [6]

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