

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

**CLASS: B.PHARM.
BRANCH: PHARMACY**

**SEMESTER: VI
SESSION: SP2025**

SUBJECT: BP602 PHARMACOLOGY III

TIME: 3.00 Hours

FULL MARK: 75

INSTRUCTIONS:

1. The missing data, if any, may be assumed suitably.
 2. Before attempting the question paper, be sure that you have got the correct question paper.
 3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
 4. This question paper consists of (03) three parts. Read the part wise instructions before attempting the questions.
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PART-I

Objective types questions (Instruction: Answer all questions)

Q1. (10 x 2 = 20 Marks)

- A. What is superinfection? How does it occur?
- B. Give one example each of anorectic, cholorectic, carminative, prokinetic drugs.
- C. Mention the limitations of beta lactam antibiotics.
- D. What are antispasmodic agents? Give examples.
- E. What are the variable subtypes of Mutation?
- F. Name the fungal target protein for amphotericin B action.
- G. Mention the goals of chronic asthma management.
- H. Describe how mast cell stabilizers help reduce asthma attacks in susceptible individuals.
- I. Explain how radical curatives help in the therapeutic efficacy of malaria.
- J. State the mechanism of action of mebendazole as an anthelmintic agent.

PART-II

Short Answers

(Instruction: Answer seven out of nine questions)

(7 x 5 = 35 Marks)

- Q2. Classify beta lactam antibiotics with examples in each case. Illustrate the advantages and disadvantages of combination therapy of antibiotics.
- Q3. Write short notes on any one: (i)Purgatives, (ii) antidiarrhoeal agents
- Q4. Discuss the mechanism of action of sulphonamides specifically on the bacterial cells. Elaborate on the importance of cotrimoxazole.
- Q5. What are the variable steps of animal reproductive cycles?
- Q6. Describe the auxotrophic mutant. What is the specific test to detect mutagenicity.
- Q7. Write the mechanism of action of ketoconazole with adverse effects and contraindications.
- Q8. Classify the drugs used in the treatment of chronic obstructive pulmonary disorder with examples.
- Q9. State the mechanism of actions of drugs used in the management of cough.
- Q10. Illustrate the mechanism of actions of drugs used as tissue amoebicidal agents with examples of each category.

PART-III

Long Answers

(Instruction: Answer two out of three questions)

(2 x 10 = 20 marks)

- Q11. What is antibiotic resistance? Elaborate on the factors pertaining to antibiotic resistance. Explain opportunistic infections with examples.
- Q12. Name the variable drug not administered in the conception and implantation periods. Describe Single dose studies/ Acute toxicity studies and Repeated dose studies / sub-acute.
- Q13. Correlate the mechanism of actions of different calcineurin and mTOR inhibitors with their immunosuppressive role. Provide examples of such categories of drugs. Classify different biological agents used as immunosuppressive agents with examples.