

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

**CLASS: M.Pharm  
BRANCH: PHARMACY**

**SEMESTER: Ist  
SESSION: MO-2023**

**SUBJECT: MPL102T ADVANCED PHARMACOLOGY-I**

**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.
  5. Answer any five questions.
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| 1a. Describe combined effects of drugs with examples ?.  | [7] |
| 1b. Give therapeutic uses of Nitrates with emphasis on cyanide poisoning.  | [8] |
| 2a. Discuss drug metabolising reactions & enzymes with examples.   | [7] |
| 2b. What approaches are used for treating hypertension. Give mechanism of action of ACE inhibitors & thiazide diuretics?                                   | [8] |
| 3a. Give uses of fibrinolytics & antiplatelet drugs?   | [7] |
| 3b. Classify anticoagulants. Give mechanism of action & pharmacokinetics of heparin& oral anticoagulants ?   | [8] |
| 4a Illustrate synthesis , storage, postsynaptic action and termination of neurohumoral transmission?   | [7] |
| 4b. Explain sympathetic and parasympathetic out flow and their preganglionic and postganglionic neurotransmitters with suitable diagram?                   | [8] |
| 5a. Describe site and distribution , synthesis , types of receptors and physiological function of the following Neurotransmitters ?<br>a) GABA b) Dopamine | [7] |
| 5b. Describe site and distribution , synthesis , types of receptors and physiological function of Glutamate?   | [8] |
| 6a. Explain therapeutic uses of parasympathetic and sympathomimetic agents?  | [7] |
| 6b. Describe classification ,mechanism of action and therapeutic application of local anaesthetics ?   | [8] |
| 7a. Explain different phases , classification , mechanism of action and therapeutic application of general anaesthetics ?                                  | [7] |
| 7b. Explain types of depression and describe classification ,mechanism of action and therapeutic application of antidepressants ?                          | [8] |

**:::::22/11/2023 E:::::**