

Part- B

5×4=20

Answer the following

Answer should not exceed 200 words or one page

- 11.a Define a) Partial agonist b) Inverse agonist with examples
(Or)
11.b Explain antagonist with suitable examples
- 12.a) Explain First pass effect
(Or)
12.b) Briefly discuss about the routes of drug administration
13. a) How to calculate LD50 and ED50
(Or)
13.b) Explain the metabolism of drugs
- 14.a) Briefly explain process validation
(Or)
14.b) Write notes on common contaminants in pharmaceuticals
- 15.a Briefly discuss the functions of National authorities for drug regulation
(Or)
15b) Discuss the role and purpose of pharmacovigilance

Part-C

5×7 = 35

Answer the following

Answer should not exceed 600 words or three pages

- 16.a) Describe the mechanism of drug action in detail
(Or)
16.b) Explain the adverse drug reactions.
- 17.a) Describe in detail about the drug discovery and development process
(Or)
17.b) Explain the upstream processing in production of biopharmaceuticals
- 18.a) Explain the phases involved in preclinical studies
(Or)
18.b) Explain i) drug receptor interaction ii) Dose response relationship
- 19.a) Explain the recovery and purification process in Biopharmaceutical production
(Or)
19. b) Describe the factors that modify the effects of drugs
- 20.a) Explain the FDA rules and regulatory issues in product approval for Biopharmaceuticals
(Or)
20.b) Discuss in detail about IPR pertaining to process patent and product patent