

School of Chemical and Life Sciences
Ph.D. Course Work Examinations (Oct, 2023)
Title and Code: CTS PHD 102: Drug discovery and development

Time: Three Hours**Maximum Marks: 75****(Write your Roll No. at the top immediately on receipt of this question paper)****Answer ALL questions. All parts of a question must be answered in continuation. Start answering each question on a new page. Cite examples and draw labeled diagrams.****Q1. Short Answer Type or Define; attempt any 10 (not more than half a page) 10×1.5=15**

- i) Two models of epilepsy
- ii) Pharmacogenomics
- iii) OECD
- iv) HTS
- v) Phase 0 clinical trials
- vi) CFR
- vii) TMF
- viii) IDMC
- ix) Monitor
- x) Audits
- xi) Cross-sectional studies
- xii) Missing data
- xiii) Proteomics
- xiv) FDA
- xv) Animal model for hypertension

Q2. Short note type; Attempt any 04 (not more than two pages) 4×5=20

1. Write a note on combinatorial chemistry.
2. Discuss the role and responsibilities of the sponsor.
3. Describe site close-out activities on completion of clinical trials.
4. Differentiate between cross-over and factorial design along with appropriate examples.
5. Prepare an advertisement for Phase 2 clinical trial.
6. Write a short note on budgeting for clinical trials.

Q3. Long note type (no limit of pages). Attempt any 02 2×20=40

1. Prepare a protocol synopsis of phase 3 clinical trials on hypertensive patients. Highlight the inclusion criteria depending on the recent guidelines on the treatment of hypertension.
2. Write a note on essential documents required to initiate a clinical trial.
3. Explain in detail about the drug discovery process. What is the importance of pharmacogenomics in the same?
4. Give an outline of types of audits. What are the responsibilities of an auditor? How do these duties differentiate in monitor?
5. Write a note on the roles and responsibilities of the ethics committee. How does an ethics committee works? Explain by giving suitable examples.
