

**GUJARAT TECHNOLOGICAL UNIVERSITY**  
**PHARM.D YEAR-5/PHARM.D(PB) YEAR-2 EXAMINATION – SUMMER-2023**

**Subject Code: 858801/828901****Date: 23\06\2023****Subject Name: Clinical Research****Time:10:30 AM TO 01:30 PM****Total Marks: 70****Instructions:**

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

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|-------------|---|-----------|
| <b>Q.1</b>  | (a) Discuss the role of pharmacological studies in drug development process.                            | <b>06</b> |
|             | (b) Compare and contrast of Phase-1 & Phase-2 clinical trials.  | <b>04</b> |
|             | (c) Explain the role and responsibilities of clinical research associates in clinical trial studies.    | <b>04</b> |
| <b>Q.2</b>  | (a) Discuss in detail about CDSCO guidelines.   | <b>06</b> |
|             | (b) What is drug discovery? What are the steps involved in the process?                                 | <b>04</b> |
|             | (c) Enlist various methods of PMS study. Discuss the any two methods of PMS study.                      | <b>04</b> |
| <b>Q.3</b>  | (a) Explain the role and responsibilities of investigator in clinical trial studies.                    | <b>06</b> |
|             | (b) Explain investigator brochure.  | <b>04</b> |
|             | (c) Write in detail various components of protocol in clinical trial. Describe the protocol amendments. | <b>04</b> |
| <b>Q.4</b>  | (a) Write a note on ANDA requirements.  | <b>06</b> |
|             | (b) Write a note on micro dosing clinical trial study.  | <b>04</b> |
|             | (c) Explain Data Safety Monitoring Board.   | <b>04</b> |
| <b>Q.5</b>  | (a) Explain composition and role and responsibilities of IRB/IEC.                                       | <b>06</b> |
|             | (b) Describe the procedure of communicating ADR reports & Periodic Safety Update Reports (PSUR).        | <b>04</b> |
|             | (c) Discuss the role of dosage form studies in drug development process.                                | <b>04</b> |
| <b>Q. 6</b> | (a) Discuss the purpose of IND, NDA and ANDA.   | <b>06</b> |
|             | (b) Write a note on Informed Consent Process.   | <b>04</b> |
|             | (c) Give an overview of regulatory environment in USA.  | <b>04</b> |
| <b>Q.7</b>  | (a) Write in detail about Data storage and security in CDM.   | <b>06</b> |
|             | (b) Write a note on compensation for clinical trial subjects as per ethical guideline.                  | <b>04</b> |
|             | (c) Describe the essential criteria of ICH-GCP guideline for conducting clinical trials.                | <b>04</b> |

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