Roll No. Total No. of Pages : 02

Total No. of Questions: 10

# M.Sc. (Clinical Research) (Sem.-1) FUNDAMENTALS OF CLINICAL RESEARCH

Subject Code: UC-MSCR-102-19

M.Code: 77291

Date of Examintion: 21-01-23

Time: 3 Hrs. Max. Marks: 70

## **INSTRUCTIONS TO CANDIDATES:**

- SECTION-A is COMPULSORY consisting of TEN questions carrying TWO marks each.
- 2. SECTION-B contains FIVE questions carrying FIVE marks each and students have to attempt any FOUR questions.
- 3. SECTION-C contains FOUR questions carrying TEN marks each and students have to attempt any THREE questions.

### **SECTION-A**

## 1. Answer briefly:

- a. What are the objectives of Phase I clinical trials?
- b. What is a lead compound?
- c. What is the role of placebo in clinical trials?
- d. What is the role of Phase IV clinical trials?
- e. Differentiate between Validation and Calibration
- f. What is bio-availability?
- g. Differentiate between Acute toxicity and chronic toxicity
- h. What is a formulation and drug delivery system?
- i. Define Bioassay
- i. What is Nocebo?

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### **SECTION-B**

- 2. Discuss in detail the Biopharmaceutical Classification System.
- 3. What is High Throughput Screening (HTS)? Write a note on the purpose and advantages of HTS.
- 4. What are the provisions and content of Schedule Y and Schedule M?
- 5. Using suitable examples, discuss mutagenicity, teratogenicity and carcinogenicity in the context of pre-clinical testing of drugs.
- 6. Write a detailed note on the GMP and its requirement in the pharmaceutical industry.

### **SECTION-C**

- 7. What is drug discovery? Write in detail the approaches adopted in the drug discovery process.
- 8. Write in detail the classification of different drug formulations. Specify the advantages and disadvantages of each type of formulation.
- 9. Discuss in detail the phases of clinical trials adopted in drug evaluation and clinical development.
- 10. Discuss the significance of the Sulfonamide tragedy in the drug development process.

NOTE: Disclosure of Identity by writing Mobile No. or Making of passing request on any page of Answer Sheet will lead to UMC against the Student.

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