

## M.Sc Sem-3 Examination

301

Clinical Research

November-2024

Time : 2-30 Hours]

[Max. Marks : 70

**Instructions:**

- Question-1 to Question-4 are compulsory.
- Attempt any fourteen questions in question.5.

**Que. 1 Describe the following:**

- a) Explain different Study design in BA/BE studies. 07
- b) Discuss Bio statistical procedure to conduct BABE studies. 07

OR

**Que. 1 Describe the following:**

- a) Define method of validation & discuss its parameters for generic module. 07
- b) Discuss methods to document BABE according to USFDA Guidelines 07

**Que. 2 Describe the following:**

- a) Guidelines for report preparation according to ANVISA Guidelines. 07
- b) Explain reference and test product selection in a BABE study according to EMEA Guidelines. 07

OR

**Que. 2 Describe the following:**

- a) Directorate General of Foreign Trade 07
- b) General Considerations for BABE Study according to Brazilian Guideline 07

**Que. 3 Describe the following:**

- a) Discuss the similarities and differences in bioequivalence guidelines on Following parameters 07
  - Requirement of Fed study & Retention quantities of study drugs
- b) Differences in BE guideline with reference to inclusion and exclusion criteria 07

OR

**Que. 3 Describe the following:**

- a) Enlist different global regulatory & their role in bioavailability studies. 07
- b) Differences in BE guidelines with reference to 07
  - Selection of test and reference products & Drug content and potency.

**Que. 4 Describe the following:**

- a) Explain the study workflow in a BABE unit. 07
- b) Write a note on BABE study budget. 07

OR

**Que. 4 Describe the following**

- a) Write roles and responsibilities of PM and BD Departments. 07
- b) Explain R&R of Quality Assurance and Quality control in BABE studies. 07

**Module VII CONDUCT OF BIOEQUIVALENCE STUDIES****Que. 5 Answer the following (write any 14 out of 17)****14**

1. Define: Cross Validation
  2. Write full form of PBD \_\_\_\_\_
  3. Define : Sensitivity
  4. Briefly explain packaging details of study product as per EMEA Guidelines
  5. Write minimum sampling time points required for BE study
  6. Define: Generic Drug
  7. If an amendment is necessary to eliminate an apparent immediate hazard to the safety of subjects in a trial, it should:
    - a) Be implemented before IRB review
    - b) Be implemented immediately after IRB review
    - c) Be handled by expedited review
    - d) Be reported to the regulatory before going to the IRB.
  8. Define: Evidence-based Medicine
  9. Smokers are not eligible to participate in Clinical Trial. True/False Justify
  10. Write down two responsibilities of a medical writer
  11. Define: Comparative Clinical Trial
  12. Define: Biowaiver
  13. Write down the number of subjects required for BE study (pilot and pivotal)
  14. Enlist any 5 responsibilities of Corporate Communication Department
  15. Explain Washout
  16. Define: non-liner pharmacokinetics.
  17. Describe requirement of fed study.
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