

**BIRLA INSTITUTE OF TECHNOLOGY, MESRA, RANCHI
(END SEMESTER EXAMINATION)**

**CLASS: M.PHARM.
BRANCH: PHARMACEUTICS**

**SEMESTER: I
SESSION: MO/2024**

SUBJECT: MPH104T REGULATORY AFFAIRS

TIME: 3.00 Hours

FULL MARK: 75

INSTRUCTIONS:

1. The missing data, if any, may be assumed suitably.
2. Before attempting the question paper, be sure that you have got the correct question paper.
3. Tables/Data hand book/Graph paper etc. to be supplied to the candidates in the examination hall.
5. Answer any five questions.

- 1a. Differentiate protected health information and research health information. Mention the research areas that are covered under HIPAA. State a few identifiers of protected health information according to HIPAA. [7]
- 1b. Schematically present the general process to attain IEC/IRB approval to conduct a clinical trial and state the responsibilities of IRB/IEC. [8]
- 2a. Describe the methods used to retain documentation in the pharmaceutical industry. Explain the method of ensuring electronic records using microfilms. [7]
- 2b. Write short notes on the drug master file. Discuss the necessity of an authorization letter for the drug master file. Mention the components of such an authorization letter. [8]
- 3a. Diagrammatically present the process of bioequivalence study. Illustrate different types of bioequivalence studies performed for pharmaceutical products. [7]
- 3b. Write an explanatory note on the drug discovery process. [8]
- 4a. Briefly describe the components of the batch manufacturing record of any pharmaceutical product. [7]
- 4b. Compare the pharmacovigilance guidelines in Schedule Y in context to ICH guidelines. [8]
- 5a. Define and explain the requirements of distribution records of pharmaceutical products in industry. Briefly mention the minimum requirements of such distribution records. [7]
- 5b. Explain the importance of the Hatch Waxman Act. Write notes on abbreviated new drug applications and generic drugs. [8]
- 6a. State the contents and types of investigational new drug applications. [7]
- 6b. When does an IND need to submit to the regulatory agencies? Describe the circumstances when IND application would not be necessary. Briefly discuss different classification codes on NDA. [8]
- 7a. What is IMP dossier? Briefly discuss it. [7]
- 7b. Schematically present the NDA review process after applying to the US FDA. Briefly discuss different copies of NDA that need to be submitted by the drug sponsors to the FDA. [8]

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