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**BPHARM**  
**(SEM VIII) THEORY EXAMINATION 2023-24**  
**PHARMACEUTICAL REGULATORY SCIENCE**

**TIME: 3 HRS****M.MARKS: 75**

**Note: 1.** Attempt all Sections. If require any missing data; then choose suitably.

**SECTION A**

**1. Attempt all questions in brief.****10 x 2 = 20**

|    |                                                    |
|----|----------------------------------------------------|
| a. | Define generic drugs.                              |
| b. | Why preclinical studies are not required for ANDA? |
| c. | Describe the Nonclinical drug development process. |
| d. | Define post marketing surveillance.                |
| e. | Describe typical difference between CTD and eCTD.  |
| f. | Enlist different clinical trial phases.            |
| g. | Discuss investigator brochure.                     |
| h. | Explain the need of independent ethics committee.  |
| i. | Discuss the GCP obligations of Investigators.      |
| j. | Discuss Orange book.                               |

**SECTION B**

**2. Attempt any two parts of the following:****2 x 10 = 20**

|    |                                                                                 |
|----|---------------------------------------------------------------------------------|
| a. | Discuss the organization structure of European Union and types of applications. |
| b. | Discuss in detail about Investigational New Drug (IND).                         |
| c. | Discuss in detail about New Drug Application (NDA).                             |

**SECTION C**

**3. Attempt any five parts of the following:****7 x 5 = 35**

|    |                                                                             |
|----|-----------------------------------------------------------------------------|
| a. | Illustrate the different Stages of drug discovery.                          |
| b. | Write an overview of regulatory authorities of India.                       |
| c. | Explain the Drug Master Files (DMF).                                        |
| d. | Illustrate the procedure for export of pharmaceutical products.             |
| e. | Elaborate the clinical trial protocol development.                          |
| f. | Discuss the Federal Register and CFR.                                       |
| g. | Describe the formation and working procedure of Institutional Review Board. |