



**DBX-014-1102002**      Seat No. \_\_\_\_\_

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## **M. Pharm. (Regulatory Affairs) (Sem. II)**

## (W.E.F. 2017) Examination

July - 2022

## **Regulatory Aspects of Herbals & Biologicals : MRA-202T**

**Faculty Code : 014**

**Subject Code : 1102002**

Time : 3 Hours]

[Total Marks : 75]

**Instructions :** (1) Figures to the right indicates full marks.

(2) Draw neat and clean diagram wherever required.

1 Answer the following questions:  $10 \times 2 = 20$

- (1) What are similar biologics?
- (2) What are biological products? Give any four examples of biological products.
- (3) Enlist any four guidelines given by European regulatory authorities for biological products.
- (4) Classify herbal medicines.
- (5) Write down the importance of safety of vaccines.
- (6) Which guideline is followed by European regulatory for stability testing of biologics? At which year this guideline was enacted?
- (7) What is 510(k)?
- (8) Enumerate the data required for preclinical studies of biologics in India.
- (9) Differentiate generic products and biosimilars.
- (10) What is comparability?

**2** Answer any two out of the following questions:  **$2 \times 10 = 20$**

- (1) What are the quality legislations for herbal products in India and US? Explain the same with similarities and differences.
- (2) Write a note on Blood and Blood products regulatory requirements in India.
- (3) Describe the details of ISBT and IHN.

**3** Answer any seven out of the following questions:  **$7 \times 5 = 35$**

- (1) Explain in detail about TSE-BSE evaluation of the product.
- (2) Describe in-depth regarding plasma master file.
- (3) Discuss marketing authorization requirements for vaccines in USA.
- (4) Write a short note on BLA.
- (5) Describe comparative measures for biological regulations in US, Europe and India.
- (6) Write a brief note on Clinical Trial Application for biologics.
- (7) Explain post market data for similar biologics and pharmacovigilance in India.
- (8) Explain in detail about the labelling and packaging requirements of biologics.
- (9) Write a brief note on different types of Marketing Authorization Procedure in EU.

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