



DBX-014-1102002

Seat No. _____

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: 10×2=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: **2×10=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: **7×5=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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