VIDYASAGAR UNIVERSITY

M.Sc. Examinations 2020
Semester IV
Subject: BIO MEDICAL LABORATORY SCIENCE & MANAGEMENT
Paper: BML - 402
(Theory)

Full Marks:40   **Time: 2HRS**

Candidates are required to give their answers in their own words as far as practicable.

Answer any one of the following questions (within 250words)
Paper: BML 402: Clinical Research and Bio-informatics

1. What is pharmacokinetics? State the covered domains in pharmacokinetics as per IUPAC. State the bioavailability of drug in brief.

2. Discus in brief about DRA. State the function of DCGI. Write the schedule M, T and Y under DCGI.

3. Define pharmacovigilance and write its aims. Describe the importance of pharmacovigilance. Write the present status of it in India.

4. What is clinical research? Write the objectives of clinical research. Describe the process adopted in phase I, II, and Phase III clinical trial under clinical research.

5. What is patent? Write the criteria to patent a product as per IPR. State the steps adopted to patent a research product.

6. Define toxicity. Write the difference among normo-reactive, hypo-reactive and hyper-reactive individuals. Describe the major markers of reproductive toxicity.

7. What are the quality markers of clinical research? State the phase-0 in clinical research. Write the major groups considered in clinical research.

8. What is genotoxicity? State the process of genotoxicity induction by the toxicants. What is SNP in connection with genotoxicity?

9. What is 'Bioinformatics'? Discuss the application of Bioinformatics in the field of Biomedical Laboratory Science.

10. Name the different tools used in the field of Bioinformatics. How does a PDB software work?

11. Give a detailed description of primer design technique along with flow chart using a widely used Bioinformatics tool. State the critical consideration you will take care during primer designing.

12. Discuss the role of different Drug Regulatory Authorities in India.