

*Jamia Hamdard (Deemed to be University)***SCHOOL OF CHEMICAL AND LIFE SCIENCES**

Examination: B.Sc. (Hons with Clinical Research)/ BSC (Hons) as per FYUP

BSc Semester: IV Examination (JULY 2024)

Paper Code and Title: BCR-DSC 403, Biopharmaceutics

Time: 2.5 hours

Maximum Marks:60

Write the roll number at the top immediately on receipt of this question paper. Attempt ALL questions. All parts of question must be attempted in continuation. Start answering each question on new page.

Q.1. Define following :**(2x5=10)**

(i)	Bioequivalence
(ii)	BBB
(iii)	Therapeutic equivalence
(iv)	Vd
(v)	Passive diffusion

Q.2 Attempt ANY TWO**(15x2=30 marks)**

A) Discuss various methods of drug absorption and what are the physicochemical factors affecting drug absorption?
B) What is plasma protein binding and discuss their role in clinical pharmacokinetics ?
C) Define Bioavailability and discuss in detail various methods used for the bioavailability assessment?
D) Enlist various regulatory requirements for the conduct of bioavailability assessment?

Q.3. Write short note on ANY FOUR**(5x4=20 marks)**

A) Discuss the role of BBB in drug distribution
B) Patient related factors affecting drug absorption?
C) Discuss biowaiver criteria ?
D) How biopharmaceutics is helpful in formulation development discuss in detail?
E) What is BCS classification and how it is helpful in drug development process?

*****END OF QUESTION PAPER*****