

PSG COLLEGE OF ARTS & SCIENCE  
(AUTONOMOUS)

MSc DEGREE EXAMINATION MAY 2018  
(Second Semester)

Branch -**BIOTECHNOLOGY**

**PHARMACEUTICAL BIOTECHNOLOGY**

Time: Three Hours

Maximum: 75 Marks

Answer **ALL** questions  
**ALL** questions carry **EQUAL** marks (2 + 5+ 8)

- 1 a Define pharmacokinetics.  
b Write a short note on routes of drug administration,  
c Explain various types of drug preparation in detail.  
OR  
d Define acute toxicity.  
e Write a short note on preclinical and clinical trails,  
f Discuss the strategies involved in clinical research design.
- 2 a Define TDDS.  
b Write a short note on liposomal drug delivery system,  
c Explain drug delivery system in detail.  
OR  
d Define parenteral drug delivery system,  
e Discuss about the targeted drug delivery system in brief,  
f Explain the role of controlled Drug Delivery in detail.
- 3 a Define detoxification.  
b Give a short note on mechanism of drug absorption,  
c Explain management of drug resistance system in detail.  
OR  
d Define drug metabolites,  
e Write a short note on genotoxicity screening,  
f Give a detailed note on metabolism of drug.
- 4 a Define blood brain barrier.  
b Write a short note on types of biomembrane,  
c Explain anatomy of brain.  
OR  
d Define neurotransmitter.  
e Write a short note on difference between BMEC and normal endothelial cells,  
f Explain types of drug-receptor interaction in detail.
- 5 a Define phytopharmaceutical.  
b Write a short note on herbal medicine,  
c Explain immunomodulatory role of ocimum.  
OR  
d Define advent of herbal drug.  
e Discuss psychoactive and psychotropic properties of herbal medicine,  
f Explain immunomodulatory role of emblica.