

PSG COLLEGE OF ARTS & SCIENCE
(AUTONOMOUS)

MSc DEGREE EXAMINATION DECEMBER 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 drug.
b Comment on acute toxicity study,
c Elaborate a detailed note on pharmacokinetics.
OR
d Define Pharmacodynamics,
e Make a note on route of drug administration,
f How do Preclinical and clinical trials are carried out?
- 2 a What is meant by dosage?
b Write the advantages and disadvantages of oral drug delivery,
c Exemplify transdermal drug delivery in detail.
OR *
d What is meant by controlled drug delivery?
e Give a short account on parenteral drug delivery and its advantages,
f Explain in detail on liposomal and targeted drug delivery.
- 3 a Write any 2 factors affecting drug absorption,
b Write a note on drug absorption.
c Elaborate on toxicity of drug metabolites in Liver and Kidney.
OR
d Define Genotoxicity.
e Comment on drug metabolism,
f Discuss in detail on drug resistance.
- 4 a What is neurotransmitter?
b Give a short account on types of membrane in brain,
c Write a detailed note on the mechanism of biotransport.
OR
d Write any 2 differences between BMEC and normal endothelial cells,
e Write about the types, of neurotransmitter and their mode of action,
f Discuss in detail types of drug receptor interactions.
- 5 a Write any 2 advantages of herbal drugs,
b Write a note on drug formulation.
c Discuss in detail about herbs used for immunomodulation.
OR
d What is phytopharmaceutical?
e Comment on mode of action of psycho active drugs,
f Elaborate in detail about immunomodulatory role of *Ocimum*.