

Department of Pharmaceutical Technology, Jadavpur University, Kolkata 700 032  
B. Pharm. 2<sup>nd</sup> year 2<sup>nd</sup> Semester Examination 2022  
END SEMESTER EXAM

Paper –Pharmacology I  
Time – 03 hrs

Subject code BP404T  
Full Marks – 100

ATTEMPT ALL QUESTIONS

SECTION A (35 marks)

(Q1) With the help of a schematic diagram explain in detail the involvement and control of Neurotransmission in Ganglia and Neuromuscular junction for SYMPATHETIC Nerve supply. (10)

(Q2) Explain what happens when: (3+2+2+3)

(i) Effect of IV administration of Acetylcholine on Blood Pressure.

(ii) Dicyclomine HCl taken for colic pain.

(iii) *Rauwolfia serpentina* taken to manage Blood pressure.

(iv) Why AtropineSO<sub>4</sub> is used for examining retina.

(Q3) (i) Write in brief about GLAUCOMA. Explain in detail about the strategic anatomical and physiological points clinically utilised for Drug mediated management of this particular disease. (10)

(ii) What do you understand about "Plasmapheresis". (05)

SECTION B (35 marks)

(Q4) Mention the different routes of drug administration. Describe shortly about parenteral routes of drug administration. (5+10=15)

(Q5) Write notes on (*any two*): (10X2=20)

a) Factors influencing absorption and bioavailability of drugs.

b) G-protein coupled receptor.

c) Combined effects of drugs.

d) Principle and site of drug action.

SECTION C (30 marks)

(Q6) Explain the mechanism of axonal and synaptic conduction of nerve impulses. Briefly describe the different steps involved in exocytotic release of neurotransmitters. (5+5+5)

(Q7) Write short notes on (*any three*): (5x3=15)

a) Synthesis and storage of Dopamine

b) Pathophysiology of Parkinson's disease

c) Mechanism of Action of L-DOPA

d) Adverse effects of L-DOPA