Department of Pharmaceutical Technology, Jadavpur University, Kolkata 700 032
B. Pharm. 3rd year 2nd Semester Examination 2022
END SEMESTER EXAM

Paper –Pharmacology II | **Subject code: Pharm 323 T**
Time – 03 hrs | **Full Marks – 100**

ATTEMPT ALL QUESTIONS

SECTION A (35 marks)

(Q1) (a) Mentioning the key steps in the synthesis and degradation of Dopamine at neuronal ends explain where and how 'Anti-psychotic effect' and 'Psychotic symptoms' can be achieved. (10)

(b) Briefly discuss about the functioning of Dopamine – D1 – like and D2 – like family receptors. (10)

(c) Explain the mechanism for anti-depressant activity of Fluoxetine and Tranylcypromine. (08)

(d) Explain how Lithium salts are able to manage Bipolar type of disorder. (07)

SECTION B (35 marks)

(Q2) Write down the biosynthesis of insulin. How insulin secretion is regulated? Illustrate the molecular (Receptor) mechanism of insulin. (4+5+6=15)

(Q3) Write short notes on (***any two***): (10X2=20)

a) Sulfonylureas as oral hypoglycemic agent.
b) Diabetic ketoacidosis.
c) Biosynthesis of thyroid hormones.
d) Hypothyroidism.

SECTION C (30 marks)

(Q4) Write short notes on (*any four*): (5x4=20)

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

e) Significance of Carbidopa in management of Parkinson's disease

(Q5) Explain briefly the synthesis and metabolism of Serotonin. What are the different types of serotonin receptors ? (5+5=10)