

(LQ 2051)

MARCH 2020

Sub. Code: 2051

B.PHARM. DEGREE EXAMINATION
PCI Regulation – SEMESTER V
PAPER I – MEDICINAL CHEMISTRY – II

Q.P. Code: 562051

Time: Three hours

Maximum: 75 Marks

I. Elaborate on: Answer any TWO questions.

(2 x 10 = 20)

1. a) What are antihistamines? What do you mean by H1 & H2-receptor antagonists?
b) Discuss its mechanism of action and classify them with examples.
c) Give the structures of any two antihistamines with pyrimidine nucleus. Add a note on synthesis of Promethazine HCl.
2. a) Classify anti-neoplastic agents.
b) Discuss the mechanism of action of its alkylating agents & anti-metabolites.
c) Give the synthesis and uses of Disopyramide and MTX.
3. a) Detail on Insulin and its preparations.
b) Write the classification of Anti-anginal. Explain the MOA of β -blocker and CCB classes of anti-anginal.

II. Write notes on: Answer any SEVEN questions.

(7 x 5 = 35)

1. Write the syntheses of High ceiling and Carbonic anhydrase inhibitor type diuretics.
2. Give an account on SAR of Local anaesthetics.
3. Write the structures and uses of :
i) Diazoxide ii) Nitroglycerin iii) Metformin and iv) Lidocaine
4. Justify for the administration of:
i) Lidocaine with Adrenaline and ii) Anticoagulants with Sulfa drugs
5. Discuss HMG-CoA reductase inhibitors as Anti-hyperlipidemic agents. Give any one structure.
6. Write the syntheses and uses of Isosorbide dinitrate and Triprolidine HCl.
7. Explain the mechanism of action of Diuretics.
8. Discuss the nomenclature and stereochemistry of steroids.
9. Classification of anti-arrhythmic drugs.

III. Short answers on: Answer ALL questions.

(10 x 2 = 20)

1. What are Potassium sparing Diuretics? Give examples.
2. Define Cardiotonics, give examples.
3. Give the structures and uses of Hydralazine HCl and Fluorouracil.
4. Write the general pharmacophore for Anti-histamines with one drug's structure.
5. Mechanism of action of anticoagulants.
6. Give the synthesis and use of Benzocaine.
7. Enumerate the lists of CHF. Give the structure of any one.
8. Define erectile dysfunction agents with examples.
9. Classify Local anaesthetics.
10. Give the structures and uses of Clofibrate and Nifedipine.
