

Name of the Examination: B.PHARMACEUTICAL TECHNOLOGY FOURTH YEAR SECOND

SEMESTER(Old)-2017

Subject: NEWER DRUGS AND

BIOTECH. APPLICA-II

Time: Three Hours

Full Marks: 100

Answer any five questions taking at least two from each group

Group-A

- Q.1. Define bio-isosterism and bio-similar drugs with illustration. Define agonist, antagonist, partial agonist and reverse agonist. What are the approaches leading to conformational and topological changes in the receptor site influenced by drug molecule. 5+5+10
- Q.2. What are GPCRs? Explain its involvement in different physiological processes. Explain the signal transduction process for cellular response. 3+7+10
- Q.3. Explain briefly the drug discovery process. What are the limitations? What are newer approaches adopted to reduce the limitation? 12+3+5
- Q.4. What are physico-chemical properties relevant to know about a new drug molecule? Discuss about Ferguson principle, Hammett equation and Hantzsch analysis. 5+5+5+5

Ref. No. : Ex/Pharm/T/425B/2017

B. PHARMACEUTICAL TECHNOLOGY, FOURTH YEAR SECOND SEMESTER, 2017

Subject : NEWER DRUGS AND BIOTECH.APPLICA II Time :3hrs Full Marks :100

**GROUP - B**

Use separate answer scripts for each Group / answer any five questions

5. Write notes on 4x5=20
- a) UMP biosynthesis pathway
  - b) Classificaion of dihydroorotate dehydrogenase
  - c) Leflumomide metabolite as inhibitor dihydroorotate dehydrogenase
  - d) Drug binding sites of dihydroorotate dehydrogenase
6. Discuss about the *Helicobacter pylori* dihydroorotate dehydrogenase as drug target 20
7. Discuss about the *Plasmodium falciparum* dihydroorotate dehydrogenase as drug target 20