

International Islamic University Chittagong

Department of Pharmacy

B. Pharm (Hons.) Program

Final Examination

Autumn Semester 2021

Course Code: **Pharm-4705**

Course Title: **Pharmacology-III**

Time: 2 hours 30 minutes

Full Marks: 50

(Answer of separate groups should be given in separate scripts. Figures on right margin indicate marks)

Group A *(Answer any two questions from the followings)* **Marks: 20**

1. a) Criticize the sedative effects of benzodiazepines or barbiturates. Which one you would prefer and why? 4
- b) Enumerate the mechanism of action and therapeutic uses of diazepam. 3
- c) Illustrate the synthesis of insulin from human pancreatic cells. 3
2. a) Differentiate between IDDM and NIDDM. 2
- b) Integrate the causes and complications of diabetes. 2
- c) Classify the oral hypoglycemic agents. 3
- d) Summarize the mechanisms of metformin and glibenclamide in the treatment of diabetes mellitus. 3
3. a) What do you understand by the terms: mania and bipolar disease? 2
- b) What is MAO? Organize its function. 2
- c) Explain the antidepressant mechanisms of TCAs. 4
- d) Outline the adverse effects of SSRIs. 2

Group B *(Answer any three questions from the followings)* **Marks: 30**

4. a) Diagrammatically illustrate — the cancer cell cycle. 5
- b) Elucidate the detailed information of the drug that is widely used to treat lymphoma, leukemia, neuroblastoma and ovarian cancer. 5
5. a) Define the term- "Hormone therapy". 3
- b) Why is master gland so named and why? 3
- c) What are the behavioral effects of different hormone? 4
6. a) Diagrammatically illustrate the asexual life cycle of the malarial parasite in human host. Point out the targets for available antimalarial drugs. 5
- b) A group of college students are going to field trip to a tropical area with prevalence of amebiasis. What types of antimicrobial medications can be used for both prevention and treatment of amebiasis in these students? 5
7. a) Mention the principles of cancer chemotherapy. 4
- b) Illustrate classification of chemotherapeutic agents. 3
- c) Write down the mechanism of action of alkylating agents. 3