

Seat No.: _____

Enrolment No. _____

GUJARAT TECHNOLOGICAL UNIVERSITY

Diploma Pharmacy Second Year Examination May 2010

Subject code: 420002

Subject Name: Pharmaceutical Chemistry II

Date: 20 / 05 / 2010

Time: 03.00pm – 06.00pm.

Total Marks: 80

Instructions:

1. Attempt any five questions.
2. Make suitable assumptions wherever necessary.
3. Figures to the right indicate full marks.

Q.1

- (a) Draw the structure of following heterocyclic ring systems. **06**
- (i) Indole
 - (ii) Imidazole
 - (iii) Quinoline
 - (iv) Acridine
 - (v) Pyridine
 - (vi) Furan
- (b) Define and classify antihistaminic drugs with suitable examples. **05**
- (c) What are diagnostic agents? Classify them with examples. **05**

Q.2

- (a) Classify antitubercular agents with examples. Draw the structure of any two antitubercular agents. **06**
- (b) Define and classify antiseptics and disinfectants with examples. **05**
- (c) Classify antifungal agents with examples. **05**

Q.3

- (a) Define hypnotics and sedatives. Write short note on barbiturates as hypnotics and sedatives (draw structure wherever necessary) **06**
- (b) Write short note on Narcotic analgesics. **05**
- (c) Define hormones. Write a note on anti thyroid drugs. **05**

Q.4

- (a) Give structure, chemical name and uses of following compounds. **06**
- (i) Lignocaine HCl
 - (ii) α -methyl dopa
 - (iii) sulphadiazine
- (b) Explain the following terms. **05**
- (i) Hyperglycemic
 - (ii) Antipyretics
 - (iii) Cardio tonics
 - (iv) Diuretics
 - (v) Tranquilizers
- (c) Describe the life cycle of plasmodium with the drugs acting on different stages of it. **05**

Q.5

- (a) Define analeptics. Write structure, chemical name, chemical properties and storage condition of any two of it. **06**

- (b) What do you mean by antibiotics? Give chemical classification of antibiotics. **05**
- (c) Give the storage condition of following compounds. **05**
 - (i) Insulin
 - (ii) Histamine
 - (iii) Riboflavin
 - (iv) Anesthetic ether
 - (v) Thyroxin

Q. 6

- (a) Give structure, chemical name and uses of following compounds. **06**
 - (i) Paracetamol
 - (ii) Metronidazole
 - (iii) Thiamine
- (b) Classify General anesthetics with suitable examples. **05**
- (c) What is epilepsy? What are its different stages? Classify antiepileptic drugs. **05**

Q.7

- (a) What is neoplasm? Why cancer is difficult to treat than bacterial infection? **06**
Name any four alkylating agents to treat cancer.
- (b) Write structure, chemical name, chemical properties and uses of imipramine. **05**
- (c) Write a short note on anticholinergic drugs. **05**
