

26/05/17

Total No. of printed pages = 6

PY 132603

Roll No. of candidate

--	--	--	--	--	--	--	--	--	--



2017

B. Pharm. 6th Semester End-Term Examination

PHARMACEUTICAL CHEMISTRY - VI

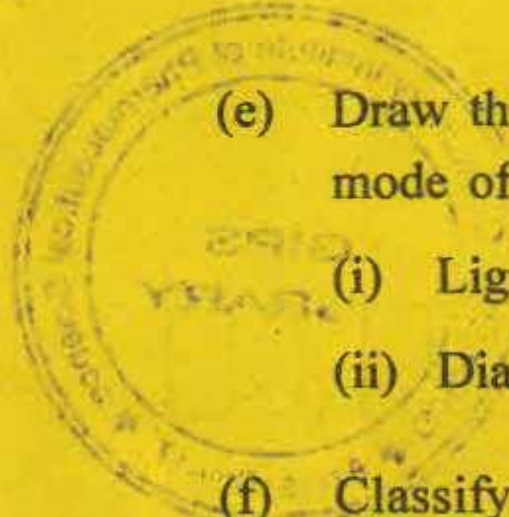
(Med. Chem-II)

Full Marks – 100 Pass Marks – 35 Time – Three hours

The figures in the margin indicate full marks
for the questions.

1. Answer any *ten* questions : 3×10=30
- (a) Classify steroids with suitable examples.
 - (b) Write down the nomenclature and stereochemistry of steroid hormones.
 - (c) Write down the synthesis of stanazolol.
 - (d) Draw the structure and write the IUPAC name of the following drugs :
 - (i) Ketamine
 - (ii) Phenytoin.

[Turn over



(e) Draw the following structure and write the mode of action of following drugs :

(i) Lignocaine

(ii) Diazepam.

(f) Classify general anaesthetics. Draw the structure of drugs in each class. Write down the mechanism of action of thiopental sodium.

(g) Draw the structure of Phenobarbitone. Write the IUPAC name. Write the mode of action.

(h) Write the synthesis of following drugs :

(i) Chlorpromazine

(ii) Methadone.

(i) Discuss the mode of action of opioid analgesics and barbiturates as sedative-hypnotic agents.

(j) Draw the structure of the following drugs :

(i) Progesterone

(ii) Ethosuximide

- (iii) Doxapram
 - (iv) Benzocaine
 - (v) Captopril
 - (vi) Dexamethasone.
- (k) What do you mean by anxiolytics. Mention some drugs of importance and write the mode of action of these class of agents.
- (l) Write down the synthesis of the following drugs :
- (i) Progesterone
 - (ii) Clofibrate.

2. Answer any *eight* questions : 5×8=40

- (a) Discuss the structural features, synthesis and therapeutic applications of the following drugs :
- (i) Testosterone
 - (ii) Betamethasone.
- (b) Write down the synthetic protocol of the following drugs :
- (i) Prednesolone
 - (ii) Pentobarbitone.

- (c) Discuss the SAR of the following class of drugs :
- (i) Phenothiazine derivative
 - (ii) Benzodiazepine derivative.
- (d) Write down the synthesis and mode of action of captopril and procainamide.
- (e) Write the synthetic protocol of ketamine and pentazocine. Discuss the SAR of Morphine derivative.
- (f) Classify antiparkinson drug and draw the structure of drug in each class. Write the synthesis of levodopa. Describe the mode of action of levodopa and carbidopa.
- (g) Classify CNS stimulant drugs. Write the mode of action of nikethamide.
- (h) What do you mean by neuroleptics ? Write down the synthesis of haloperidol. Describe the mode of action.
- (i) Classify antidepressant drugs. Write the synthetic protocol of Imipramine.

(j) Write the synthetic protocol of the following drugs :

(i) Phenobarbitone

(ii) Carbamazepine

(iii) Cramiphen.

3. Answer any *three* questions : $3 \times 10 = 30$

(a) Discuss about adrenocorticoids and anabolic agents. Write down the synthesis of the following drugs :

(i) Betamethasone

(ii) Diethyl stilbestrol.

(b) Classify anticonvulsants. Draw the structure of each class. Write the mechanism of action of all the classes. Write the synthesis of the following drugs :

(i) Phenytoin

(ii) Ethosuximide.

- (c) (i) Classify antiarrhythmic drugs. Draw the structure of drugs of each class. Discuss the mode of action of each class.
- (ii) Write down the synthesis of following drugs :
- (I) Coumadin
 - (II) Meprobamate
 - (III) Propranolol.
- (d) Write a note on cardiovascular drugs.