



**JAJ-1612030701060300**

Seat No. \_\_\_\_\_

**M. P. M. (Sem. VI) (CBCS) (External) Examination**

**November - 2019**

**Pharmaceutical Chemistry - VII**

*(Medicinal Chemistry - II)*

Time : 3 Hours]

[Total Marks : 80

- Instructions :**
- (1) Answer and tie up both the sections separately.
  - (2) Figure to the right indicates marks.
  - (3) Answer three (03) questions from each section.
  - (4) Question one (01) and question five (05) are compulsory.
  - (5) Draw neat and clean diagrams as required.

**SECTION - I**

- 1** Answer the following : (any seven) **14**
- (a) Differentiate opioid and non-opioid analgesics.
  - (b) Enlist stages of general anaesthesia.
  - (c) Explain mechanism of action of local anesthetics.
  - (d) Define prodrug with examples.
  - (e) Give side effects of NSAIDs.
  - (f) Write synthesis of Imipramine.
  - (g) Write biosynthesis of thyroid hormones.
  - (h) Write structure and uses of carbamazepine.
  - (i) Explain cognition enhancers with examples.
  - (j) What is Alzheimer's disease? Give name of drugs used in treatment of it.
- 2** Answer the following :
- (a) Write a short note on CYP450 in detail. **7**
  - (b) Describe factors affecting drug metabolism in detail. **6**
- 3** Answer the following :
- (a) Explain SAR of local anesthetic agents with respect to benzoic acid and aniline derivatives. **7**
  - (b) Write a short note on : **6**
    - (a) Analeptic
    - (b) Anti epileptic

- 4 Answer the following :  
(a) Write short notes on 7  
(a) Anti thyroid drugs  
(b) Xenobiotic metabolism  
(b) Write SAR of Barbiturates. 6

## SECTION - II

- 5 Answer the following : (any two) 14  
(a) Describe in detail SAR of Tricyclic antidepressant.  
(b) Write a short note on :  
(1) Drugs acting on uterine motility  
(2) Anti Parkinson drugs  
(3) Define and classify antidiabetic agents with its mechanism of action. Give synthesis of Tolbutamide.
- 6 Answer the following :  
(a) Define and classify sedative and hypnotic. 7  
Give general method of synthesis of barbiturates.  
(b) Explain SAR of adrenocorticoids and estrogens. 6
- 7 Answer the following :  
(a) Explain SAR of morphine in detail. 7  
(b) Give synthesis and uses of following : 6  
(1) Ibuprofen  
(2) Pethidine  
(3) Lignocaine
- 8 Answer the following :  
(a) Write a short note on : 7  
(1) Anti gout drugs  
(2) DMARDs  
(b) Explain nomenclature and stereochemistry of steroids. 6