

PURUS – VII (SEMESTER PATTERN): April-May 2010
SUBJECT: PHARMACOLOGY-IV

Day: Saturday
Date: 15-05-2010

Time: 2.00 PM TO 5.00 PM,
Max. Marks: 80

N.B.:

- 1) Q. No 1 and 5 are **COMPULSORY**. Out of the remaining attempt any **TWO** questions from **Section – I** and any **TWO** questions from **Section – II**.
- 2) Answer to the two Sections should be written in the **SEPARATE** answer books.
- 3) Figures to the **RIGHT** indicate full marks.

SECTION – I

- Q.1 Give scientific reasons for **ANY FIVE** of the following (10)
- a) Rifampicin plus INH
 - b) Chloramphenicol
 - c) Penicillin plus streptomycin
 - d) Acyclovir
 - e) Ofloxacin plus ornidazole
 - f) Amphotericin B and nystatin
 - g) Erythromycin
- Q.2 a) Classify antineoplastic agents on the basis of their specificity or non specificity for the phases of cell cycle (08)
- b) Give the mechanism of action of alkylating agents along with their uses and limitation (07)
- Q.3 a) Describe mode of action, antimicrobial spectrum and adverse effects of fluoroquinolones (08)
- b) Describe mechanism of action of anti-retroviral drugs. Discuss HIV-AIDS treatment guidelines. (07)
- Q.4 Write short note on **ANY THREE** of the following (15)
- | | |
|-----------------------|-----------------------------|
| a) Antimalarials | b) Toxicity of tetracycline |
| c) Antifilarial drugs | d) Antiamoebic drugs |

SECTION – II

- Q.5 Answer **ANY FIVE** of the following (10)
- a) Define teratogenicity
 - b) Enumerate major toxicities of oral contraceptives
 - c) Give example of immunosuppressants
 - d) Classify oral hypoglycaemics
 - e) Mention drugs acting on uterus
 - f) Give examples of mineralocorticoides
 - g) Enlist adverse effects of oral hypoglycaemic drugs

P.T.O.

- Q.6** a) Describe the mechanism of action, adverse effect and uses of testosterone (08)
b) Discuss the synthesis, actions and uses of thyroid hormones (07)
- Q.7** a) Describe the action, adverse effects and indications of insulin (08)
b) Explain the drugs for paediatric therapy (07)
- Q.8** Write short note on **ANY THREE** of the following (15)
- a) Preparations of oral contraceptives b) Hormones of anterior pituitary
c) Toxicity of glucocorticosteroids d) Antiestrogens

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PURUS-VIII (SEMESTER PATTERN) : APRIL/ MAY 2010
SUBJECT : MEDICINAL CHEMISTRY-IV

Day : *Thursday*
Date : *06-05-2010*

Time : *2:00 P.M. To 5:00 P.M.*
Max. Marks : 80.

N.B.:

- 1) Q. No. 1 and Q. No. 5 are **COMPULSORY**. Out of the remaining attempt **TWO** questions from Section-I and any **TWO** questions from Section-II.
- 2) Figures to the **RIGHT** indicate full marks.
- 3) Answers to both sections should be written in **SEPARATE** answer books.

SECTION-I

- Q.1** Answer any **FIVE** of the following: (10)
- a) Search out synthetic pathway for Mephenamic acid.
 - b) Give chemical classification of NSAID.
 - c) Write down synthesis of Tolbutamide or Chlorpropamide.
 - d) Give any two examples along with at least one structure of synthetic Narcotic analgesic.
 - e) Write down any two structures of NSAID from salicylic acid class.
 - f) Applications of QSAR.
- Q.2** Explain in brief chemistry, SAR, MOA, uses and side effects of Narcotic analgesic containing phenanthrene basic nucleus. (15)
- Q.3** a) Explain - pyrazolidinedione as NSAID. (06)
b) Give an account of thyroid hormones. (09)
- Q.4** Write short notes on any **THREE** of the following: (15)
- a) Diagnostic agents used to check liver function test
 - b) Molecular modeling
 - c) Narcotic antagonist
 - d) CADD.

SECTION-II

- Q.5** Answer any **FIVE** of the following: (10)
- a) Write down structure and IUPAC name of any one - Betamethasone, Estradiol.
 - b) Write down synthesis of Tripeleminamine.
 - c) Write down structure of Dicoumarol or warfarin.
 - d) Write down synthesis of any one Nonsteroidal Estrogens.
 - e) Give applications of Antihistaminic agents.
 - f) Write down structure of cimetidine.
- Q.6** What are glucocorticoids? Give their chemistry, SAR, MOA and functions of Glucocorticoids. (15)
- Q.7** Draw general structure of Antihistaminic agents. Give an account of agents from Amino Alkyl Ether and Ethylene diamine class. (15)
- Q.8** Write short notes on any **THREE** of the following: (15)
- a) Coumarin derivatives as Anticoagulants
 - b) Nomenclature of prostaglandins
 - c) Female sex hormones
 - d) Combinatorial chemistry.

PURUS – VIII (SEMESTER PATTERN): APRIL / MAY 2010
SUBJECT: DRUG REGULATORY AFFAIRS

Day : *Friday*
Date : *14-05-2010*

Time: *2:00 P.M To 5:00 P.M.*
Max. Marks: 80

N.B.:

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of remaining questions attempt **ANY TWO** from each section.
- 2) Answers to both the sections should be written in the **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

- Q.1** Answer the following: [10]
- a) What is meant by extent of act?
 - b) What is patent and proprietary medicine?
 - c) Write major amendments to Indian Patents Act, 1970.
 - d) Name any two psychotropic substances.
 - e) What is first register?
- Q.2** a) Describe in brief Central Administrative Agencies for Drugs and Cosmetics Act. [08]
b) Explain qualifications, duties, procedures and powers of drug inspector. [07]
- Q.3** a) Explain provisions for bonded laboratory. [08]
b) Explain the provisions given under schedules of Drug price control order. [07]
- Q.4** Prepare notes on: [15]
- a) Provisions for cosmetics
 - b) Pharmaceutical policy
 - c) Education Regulations 1991

SECTION – II

- Q.5** Answer the followings: [10]
- a) Enlist prohibited operations under Narcotic drugs and psychotropic substances act.
 - b) What is a misbranded drug?
 - c) What is a bulk drug?
 - d) What are objectionable advertisement?
 - e) Write provision for labelling of veterinary products.
- Q.6** a) Give a comprehensive idea about schedule Y of DC act. [08]
b) Explain provision of Indian Patent Act 2005. [07]
- Q.7** a) Describe the standards for : [08]
i) Drug ii) Ayurvedic drug iii) Homoeopathic drug iv) Veterinary drug.
b) What is code of pharmaceutical ethics? [07]
- Q.8** Prepare notes on: [15]
- a) Export of Drugs
 - b) Offences under Pharmacy Act
 - c) First schedule of Drug and Cosmetics act

PURUS – VIII (SEMESTER PATTERN): APRIL / MAY 2010
SUBJECT: PHARMACEUTICAL MANAGEMENT

Day : *Monday*
Date : *17-05-2010*

Time: *2:00 P.M. To 5:00 P.M.*
Max. Marks: 80.

N.B.:

- 1) **Q.No.1 and Q.No.5 are COMPULSORY.** Out of remaining questions attempt **ANY TWO** questions from each section.
- 2) Answers to both the sections should be written in **SEPARATE** answer books.
- 3) Figures to the right indicate **FULL** marks.

SECTION – I

- Q.1** Answer **ANY FIVE** of the following: **[10]**
- a) Enumerate the differences between Dunkel Text and GATT.
 - b) State objectives of finance management.
 - c) What is structured communication?
 - d) Enumerate qualities of creative manager.
 - e) What is Line and Staff relationship?
 - f) Give a brief account of MBO
 - g) Define matrix organization
- Q.2** a) Discuss the various theories of motivation. **[10]**
b) Comment on 'Decentralization of authority'. **[05]**
- Q.3** a) Discuss departmentation by function and territory. **[08]**
b) Give a brief account of growth of pharmacy profession in India. **[07]**
- Q.4** Write short notes on **ANY THREE** of the following: **[15]**
- a) Types of policies
 - b) Performance appraisal in Industry
 - c) Leadership style and behaviour
 - d) Recruitment in organization
 - e) Organization in industry

SECTION – II

- Q.5** Answer **ANY FIVE** of the following: **[10]**
- a) State meaning and importance of inventory.
 - b) State the importance of Lead time.
 - c) What is process validation?
 - d) Define 'SOP'.
 - e) Enlist preamble of GLP.

- Q.6 Solve the following example and identify normal as well as crash critical path [15]
with time and money involved.

Activity	Time		Money	
	Normal	Crash	Normal	Crash
1 → 2	6	4	4,000	6,000
1 → 3	4	2	6,000	8,000
2 → 3	4	3	5,000	8,000
3 → 4	6	4	8,000	10,000
4 → 5	2	1	4,000	6,000

- Q.7 All well pharmaceuticals manufactures ethambutol tablets with a batch size [15]
1,00,000 tablets. The selling price per tablet is Rs. 1.0. Total variable cost is
Rs. 20,000. Fixed cost is Rs. 30,000. Calculate:
- a) P/V ratio
 - b) BEP
 - c) BEP if selling price is increased by 20%
 - d) Operating sales at profit Rs. 20,000
 - e) Profit at operating sales Rs. 80,000
 - f) Margin of safety

- Q.8 Write short notes on ANY THREE of the following: [15]

- a) Product life cycle
- b) Merits and demerits of ISO 9000-2001
- c) Promotional methods of drug
- d) Methods of inventory control
- e) Techniques of improvement in productivity

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