(PHD30110)

Pharm. D DEGREE EXAMINATION, JULY 2018.

(Examination at the end of Third Year of 6 Years Course)

Paper I — PHARMACOLOGY – II

(Regulation 2010-11)

Time : Three hours Maximum : 70 marks

Answer any FIVE questions.

All questions carry equal marks.

1. Discuss about pharmacology of articoagulants.

2. Classify diuretics and describe the pharmacology of loop diuretics.

3. Write a note on pharmacology of
   (a) Aminoglycosides
   (b) Fluroquinolines.

4. Describe the pharmacology of antimalarial drugs.

5. Write a note on :
   (a) Amoebiasis
   (b) Giardiasis.

6. Discuss the following :
   (a) Chronic toxicity studies
   (b) Immunostimulants.

7. What is restriction point and explain about Cell cycle regulators and modifiers?

8. Write a note on recombinant DNA technology and its applications in gene therapy.

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(PHD30210)

Pharm.D. DEGREE EXAMINATION,
JULY 2018.

(Examination at the end of Third Year of
6 Years Course)

Paper II — PHARMACEUTICAL ANALYSIS

(Regulation 2010 – 2011)

Time : Three hours Maximum : 70 marks

Answer any FIVE questions.

All questions carry equal marks.

1. Write short note on :

   (a) Sources of quality variation

   (b) ICH guidelines

2. Write the working principles instrumentation and applications of ion exchange chromatography.

3. What is HPTLC? Differentiate HPLC and HPTLC. Write in detail on applications of HPTLC.

4. Write in briefly on :

   (a) Electrodes used in potentiometry.

   (b) Interpretation of polarographic wave.

5. Discuss the following

   (a) Affinity chromatography

   (b) Factors affecting resolution in HPLC

6. With a neat diagram explain the principles, instrumentation and applications of IR spectroscopy.

7. Give an account of :

   (a) ESR

   (b) XRD

8. Write in detail on principle, instrumentation and applications of DSC.

(PHD30310)

Pharm.D DEGREE EXAMINATION, JULY 2018.

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Paper III — PHARMACOTHERAPEUTICS – II

(Regulation 2010-11)

Time : Three hours Maximum : 70 marks

Answer any FIVE questions.

All questions carry equal marks.

1. Write a note on etiology, pathophysiology and Pharmacotherapy of respiratory tract infections.

2. Write a note on the pharmacotherapy of
   (a) Fungal infections
   (b) Meningitis

3. Write a note on the pathophysiology and pharmacotherapy of Opportunistic infections.

4. Write a note on the pharmacotherapy of
   (a) Gout
   (b) Spondylitis.

5. Describe the etiology, pathophysiology and Pharmacotherapy of Acute renal failure.

6. Write a note on:
   (a) Basic principles of cancer chemotherapy
   (b) Management chemotherapy induced nausea and vomiting

7. Write a note on the pathophysiology and pharmacotherapy of Scabies

8. Write a note on:
   (a) Drug induced renal disorder
   (b) Lupus erythematosis.

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(PHD30410)

Pharm. D DEGREE EXAMINATION, JULY 2018.

(Examination at the end of Third Year of Six Years Course)

Paper — IV : PHARMACEUTICAL JURISPRUDENCE

(Regulation 2010-2011)

Time : Three hours Maximum : 70 marks

Answer any Five Questions.

All Questions carry equal marks.

1. (a) Explain the procedure for obtaining the license for the manufacture of drugs. What are conditions for grant of license and conditions of license? (9)

(b) Write about the significance of Schedule M. (5)

2. (a) Write the salient features of Indian Patents and Design Act 1970 with reference to Drugs and Cosmetics? (7)

(b) Write about Drug Price Control Order 2013. (7)

3. (a) Explain the construction and working of a bonded laboratory. (7)

(b) Mention the objectives of Drugs and Magic Remedies Act? Write about prohibited advertisements with suitable examples under this act. (7)

4. Bring out the salient features of the Narcotic Drugs and Psychotropic Substances Act. Explain the procedure for cultivation and production of opium. (14)

5. (a) Match the following: (4)

(i)	Schedule H	(1)	Diseased or ailments which a drug may not purport to prevent or cure
(ii)	Schedule X	(2)	Life period of drugs
(iii)	Schedule J	(3)	List of prescription drugs
(iv)	Schedule P	(4)	List of drugs whose import, manufacture and sale, labeling and packing are governed by special provisions.

(b) Define adulterated and spurious drugs. (4)

(c) Mention the labeling requirements of Schedule X and H drugs with suitable examples. (6)

6. (a) Mention the qualifications and duties of the Drugs Inspector. Write about sampling procedure to be followed by drugs inspector. (9)

(b) Write about Drugs Consultative Committee. (5)

7. (a) Give the constitution and write about functions of Pharmacy Council of India. (9)

(b) Write about joint state pharmacy council and mention their advantages. (5)

8. Write about the following:

(a) Pharmacist ethics with respect to trade and profession. (7)

(b) Prevention of cruelty to animals. (7)

(PHD30510)

Pharm.D DEGREE EXAMINATION, JULY 2018.

(Examination at the end of Third Year of 6 Years Course)

Paper V — MEDICINAL CHEMISTRY

(Regulation 2010-2011)

Time : Three hours Maximum : 70 marks

Answer any FIVE questions.

All questions carry equal marks.

1. What is a prodrug? Write in detail on how prodrugs can solve solubility, $t_{1/2}$ and toxicity problems?

2. Write short notes on : (7 + 7 = 14)

   (a) 1st line anti TB agents

   (b) Urinary tract anti infectives.

3. With a neat sketch describe life cycle of malarial parasite and identify drug targets. Write in detail on MOA. SAR, synthesis and uses of chloroquine.

4. Write short notes on :

   (a) Anti-hormones as anticancer agents

   (b) Fluoroquinolones antibacterials.

5. Write short notes on : (7 + 7 = 14)

   (a) PPAR gama modulators in the clinical management of diabetes

   (b) 1st generation sulfonamides.

6. Write the structure, IUPAC name, MOA and clinical applications of (5 + 4 + 5 = 14)

   (a) 5-FU

   (b) diethylcarbamazine

   (c) propranolol.

7. Write in brief on : (9 + 5 = 14)

   (a) Centrally acting antihypertensive agents

   (b) Coagulants.

8. Classify diuretics with examples. Write MOA, SAR and uses of thiazide diuretics. Outline the synthesis of chlorthiazide.

(PHD30610)

Pharm.D DEGREE EXAMINATION, JULY 2018.

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Paper VI — PHARMACEUTICAL FORMULATIONS

(Regulation 2010-2011)

Time : Three hours Maximum : 70 marks

Answer any FIVE questions.

All questions carry equal marks.

1. (a) Explain the process of wet granulation. (6)
   (b) Enumerate the various defects of tablets during the manufacture and suggest suitable remedies. (8)

2. (a) Enumerate the additives used in the parenteral products. (9)
   (b) Write a note on the containers and closures for parenteral products. (5)

3. (a) Give the classification of ointment bases and discuss their relative merits. (9)
   (b) Define displacement value and mention its significance in the preparation of suppositories. (5)

4. (a) Give the classification of dosage forms based on the type of dosage form and discuss their relative merits. (10)
   (b) Write about the advantages of buccal drug delivery systems. (4)

5. (a) Write about the advantages, method of formulation of emulsions. (7)
   (b) Write about the evaluation methods of suspensions. (7)

6. (a) Why capsules are formulated? Write about the raw materials used in the preparation of capsules. Add a note of different sizes of capsules. (8)
   (b) Name the methods for the preparation of soft gelatin capsules and explain rotary die process. (6)

7. Write about the following novel drug delivery systems : (2 × 7)
   (a) Implants
   (b) Occular drug delivery systems.

8. Write short notes on the following :
   (a) Weight variation test for tablets as per I.P (5)
   (b) Pyrogen testing (5)
   (c) Defects of sugar coating. (4)