

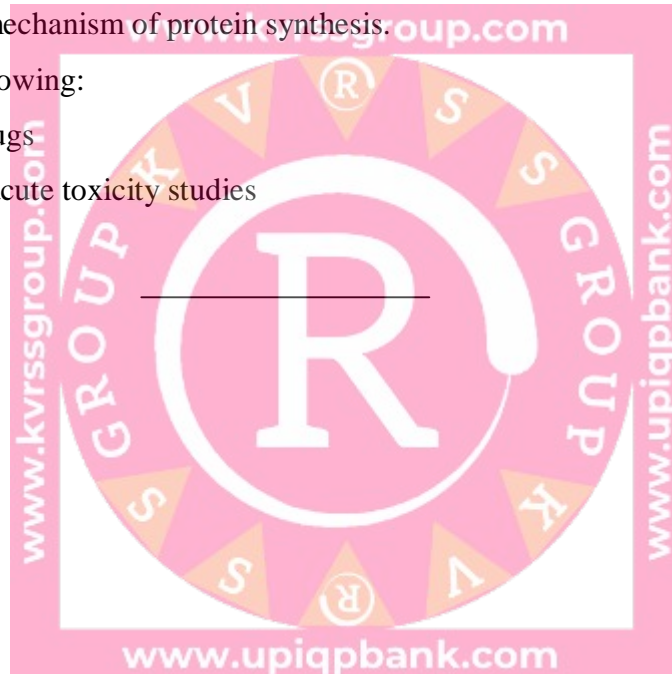
**PHD30110**  
**Pharm. D (Regular) Examinations -July, 2015**  
(Regulation 2010-11)  
(Examination at the end of Third year of 6 Years Course)  
**Paper-I: Pharmacology - II**

Time : Three hours

Maximum Marks: 70

Answer any FIVE questions. All questions carry equal marks.

1. Discuss about the classification, mechanism of action and therapeutic uses of diuretics.
2. Explain about the mechanism of action, adverse effects and therapeutic uses of penicillins.
3. Discuss about the chemotherapy of malaria. Add a note on cerebral malaria.
4. Discuss about anti-metabolites and plant based anti-cancer drugs.
5. Discuss about the mechanism of action and therapeutic uses of immunosuppressants.
6. Describe the structure and functions of chromosomes. Add a note on mRNA?
7. Explain about the mechanism of protein synthesis.
8. Write about the following:
  - a) Anti-platelet drugs
  - b) Acute and sub-acute toxicity studies



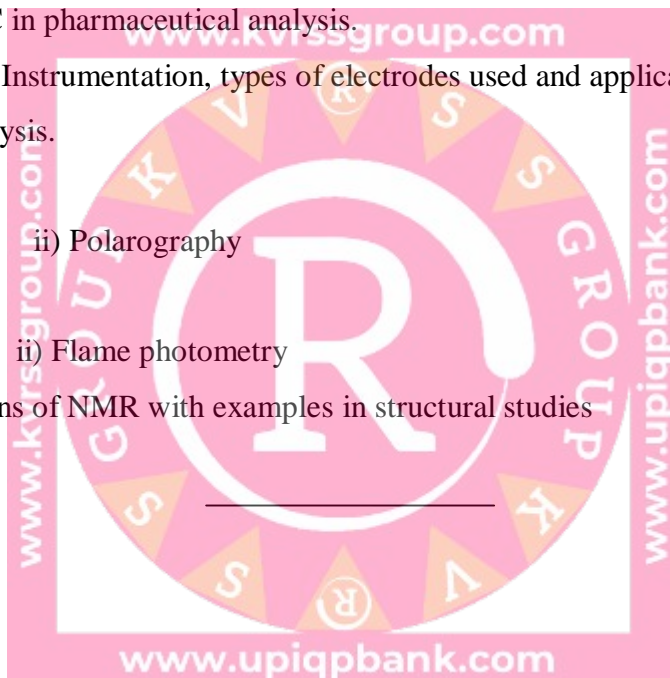
**PHD30210**  
**Pharm. D (Regular) Examinations -July, 2015**  
(Regulation 2010-11)  
(Examination at the end of Third year of 6 Years Course)  
**Paper-II: Pharmaceutical Analysis**

Time : Three hours

Maximum Marks: 70

Answer any FIVE questions. All questions carry equal marks.

1. What do you know of
  - i) Total Quality Management
  - ii) Validation Methods
2. What is ICH? Discuss the different guidelines under this. Add a note on ISO 9000.
3. Give an account of
  - i) TLC
  - ii) Column Chromatography
4. What is GLC? Explain with a schematic diagram, the different components of GLC and write the applications of GLC in pharmaceutical analysis.
5. Write the Principle, Instrumentation, types of electrodes used and applications of Amperometry in pharmaceutical analysis.
6. Write short note on
  - i) Conductometry
  - ii) Polarography
7. Give an account of
  - i) IR spectroscopy
  - ii) Flame photometry
8. Write the applications of NMR with examples in structural studies



**PHD30310**  
**Pharm. D (Regular) Examinations -July, 2015**  
(Regulation 2010-11)  
(Examination at the end of Third year of 6 Years Course)  
**Paper-III: Pharmacotherapeutics-II**

Time : Three hours

Maximum Marks: 70

Answer any FIVE questions. All questions carry equal marks

1. Explain the pathogenesis and clinical manifestations of HIV. Add a note on Protease inhibitors?
2. Explain the pathophysiology and clinical types of Eczema? Add a note on patient care for eczema?
3. Explain the aetiology and pathophysiology of Leukemia?
4. Write a note on the following
  - a) Immuno suppressant's
  - b) Aetiology of Tuberculosis
5. Explain the pathogenesis and treatment of Urinary tract infections?
6. Discuss about the pathophysiology of Meningitis? Add a note on the treatment of adult meningitis?
7. Write about the following
  - a) Disease-Modifying anti-rheumatic drugs
  - b) Renal Dialysis
8. Discuss about the following
  - a) Spondylitis
  - b) Gastroenteritis



**PHD30410**  
**Pharm. D (Regular) Examinations -July, 2015**  
(Regulation 2010-11)  
(Examination at the end of Third year of 6 Years Course)  
**Paper-IV: Pharmaceutical Jurisprudence**

Time : Three hours

Maximum Marks: 70

Answer any Five Questions

All Questions carry equal marks

1. a) What different bodies are constituted under Drugs and Cosmetics Act for its administration. Give the constitution and functions of DTAB. 8  
b) Mention the qualifications and duties of drugs inspector. 6
  2. a) What is your understanding of 'Code of Ethics'? Mention the Code of Ethics of Pharmacists in relation to his trade and profession. 8  
b) Write about the Prevention of Cruelty to Animals Act 1960. 6
  3. a) What classes of drugs are prohibited for import? Explain the procedure for import of drugs meant for different purposes. 7  
b) What is a patent? Write about the salient features of Indian Patent Act. 7
  4. a) Write the constitution and functions of State Pharmacy Council. 7  
b) What are the objectives and duties of Pharmacy Council of India 7
  5. a) Explain the layout of a bonded laboratory and describe the procedure for obtaining spirit from the distillery. 8  
b) Mention the advantages of non bonded laboratory and write the procedure for its operation. 6
  6. a) Enumerate the salient features of Drugs and Magic Remedies Act. 8  
b) Write about prescription and non-prescription drugs. 6
  7. a) Write about the National Drug Policy and procedures adopted for fixing the prices of formulations and bulk drugs. 10  
b) Write a note on Schedule M of Drugs and Cosmetics Act. 4
  8. Write short notes on  
a) Cultivation and sale of opium 6  
b) Narcotic and Psychotropic Consultative Committee 4  
c) Offences and penalties under Narcotic and Psychotropic Substances Act 4
-

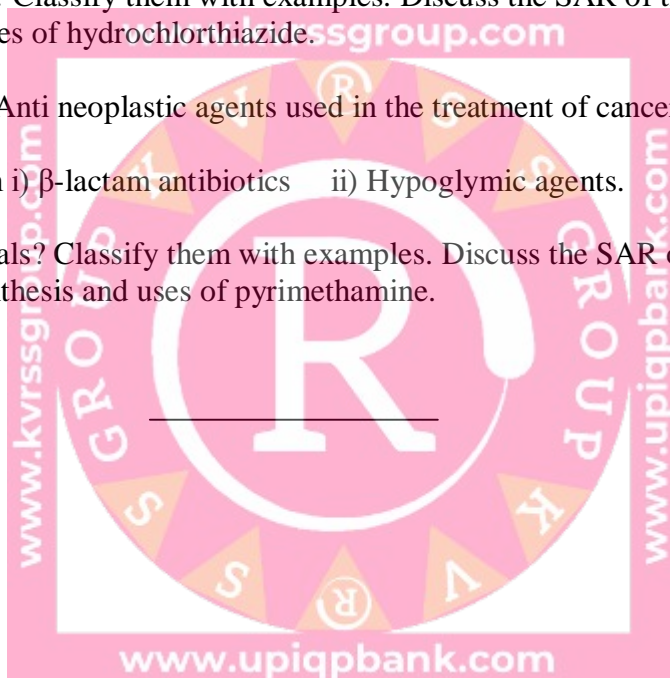
**PHD30510**  
**Pharm. D (Regular) Examinations -July, 2015**  
(Regulation 2010-11)  
(Examination at the end of Third year of 6 Years Course)  
**Paper-V: Medicinal Chemistry**

Time : Three hours

Maximum Marks: 70

Answer any FIVE questions. All carry equal marks.

1. What is Rational Drug Design? Discuss with examples the role of QSAR in such a design.
2. What is combinatorial synthesis? Discuss the different techniques and methods used in this synthesis.
3. Write briefly on i) Anti-tubercular agents ii) Anti-viral agents
4. Outline the synthesis and uses of Sulphapyridine, Iocetamic acid, Metronidazole and Miconazole.
5. What are diuretics? Classify them with examples. Discuss the SAR of thiazide diuretics. Write the synthesis and uses of hydrochlorothiazide.
6. Give an account of Anti neoplastic agents used in the treatment of cancer.
7. Write short notes on i)  $\beta$ -lactam antibiotics ii) Hypoglycemic agents.
8. What are antimalarials? Classify them with examples. Discuss the SAR of quinoline class of drugs. Write the synthesis and uses of pyrimethamine.



**PHD30610**  
**Pharm. D (Regular) Examinations -July, 2015**  
(Regulation 2010-11)  
(Examination at the end of Third year of 6 Years Course)  
**Paper-VI: Pharmaceutical Formulations**

Time : Three hours

Maximum Marks: 70

**Answer any Five Questions**  
**All Questions carry equal marks**

1. a) Explain the different granulation techniques for the manufacture of tablets mentioning their advantages. 7  
b) Explain the process of sugar coating. 7
  2. a) Explain the layout of small volume parenteral unit with suitable diagram. 7  
b) Name the official quality control tests for parenteral products and explain the test for sterility in detail. 7
  3. a) What are suppositories and write about the bases for their preparation. 7  
b) Briefly describe the methods of sterilization for ophthalmic ointments. 7
  4. a) Enumerate the excipients used in the preparation of suspensions. 9  
b) Give the classification of emulsifying agents with suitable examples and discuss their merits. 5
  5. Give the classification of dosage forms based on the route of administration and explain their relative advantages with suitable examples. 14
  6. a) Write about the advantages of hard gelatin capsules. Mention the types of gelatin used in the preparation of hard gelatin capsules. 8  
b) Explain any one method for the preparation of soft gelatin capsules. 6
  7. a) Discuss the advantages and disadvantages of controlled drug delivery systems. 6  
b) Give the classification of transdermal drug delivery systems and write about the excipients used in their preparation. 8
  8. Write short notes on the following:  
i) Disintegration test for tablets as per I.P. 5  
ii) Preservatives for ophthalmic preparations. 4  
iii) Evaluation of emulsions 5
-