Code No. 12461

FACULTY OF PHARMACY

Pharm D III-Year (6-YDC) (Main & Backlog) Examination, October 2021

Subject: Pharmaceutical Analysis

Time: 2 Hours **Max. Marks: 75**

Note: Answer any six questions from Part-A, any four questions from Part-B.

PART - A (6 x 5 = 30 Marks)

1 Define total quality management.
2 Explain the different types of ion exchange synthetic resins.
3 Define Gel filteration chromatography and affinity chromatography.
4 What are the different factors which affects column efficiency?
5 Give Ilkovic's equation.
6 What are the limitations of Beer Law?
7 What are the different types of transitions in organic molecules?
8 What are fluorescent indicators? Give examples.
9 Define (a) optical rotatory dispersion (b) circular dichroism.
10 Write the applications of electrophoresis.

PART - B (4 x 10 = 40 Marks)

11 (a) Define GLP. What are the different requirements to maintain GLP?
(b) Explain the importance of ISO 9000.

12 (a) Describe the derivatisation techniques in Gas chromatography.
(b) Add a note on applications of Ion exchange chromatography.

13 (a) What are the different methods of detecting end point? Describe two methods in brief.
(b) Add a note on different columns in HPLC.

14 Describe the principle, instrumentation applications in UV-spectroscopy with the help neat diagram.

15 Explain the theory and instrumentation involved in flame photometry.

16 Add a note on applications of
(a) NMR spectroscopy
(b) Mass spectroscopy.

17 Explain the instrumentation and applications of
(a) DSC
(b) DTA.

18 (a) Describe the principle and instrumentation in paper electrophoresis.
(b) Differentiate between TLC & HPTLC.

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Code No. 12464

FACULTY OF PHARMACY

Pharma. D III Year (6-YDC) (Main & Backlog) Examination, October 2021
Subject: Medicinal Chemistry

Time: 2 Hours **Max. Marks: 70**

Note: Answer any six questions from Part A, Answer any four questions from Part B.

PART – A (6 x 5 = 30 Marks)

1 What are various parameter used in QSAR
2 Give two structures of Antitubercular drugs
3 Write the application of combinational chemistry
4 Give the classification of Local and anti infective Agents and Write the structures of any three drugs
5 Write the mechanism of action and uses of Metronidazole and Pyrizinamide
6 Write the advantages of Prodrugs
7 Give the structures and write the uses of any two tetracyclins
8 Write the mechanism of action of Enalpril and Acetazolamide
9 Write the structure and medicinal use of chloramphenicol
10 Write the mechanism of action of Loop Diuretics with examples

PART – B (4 x 10 = 40 Marks)

11 What is QSAR? Discuss its applications in drug design.

12 (a) Write the classification of Pencillins with examples and discuss their mechanism of action.
(b) Write the SAR of tetracycline.

13 (a) Classify Sulfadrugs. Give one example with structure for each class.
(b) Outline the synthesis of (I) Sulfanilamide (II) Chlorambucil

14 (a) Write the SAR of thiazide diuretics.
(b) Write a note on antithyroid agents.

15 Write the synthesis, mechanism of action of following drugs (i) Cephalexin (ii) Isoniazid (iii) Metronidazole.

16 (a) Classify diuretics with examples. Write the synthesis of Acetazolmide.
(b) Write a note on ACE inhibitors.

17 (a) Give a brief account on steroidal hormones.
(b) Outline the synthesis of Tolbutamide and metformin.

18 (a) Classify antihyperlidemic agents and write the synthesis any one of them.
(b) Write a note on diagnostic agents.

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Code No. 12465

FACULTY OF PHARMACY

Pharm.D III Year (6-YDC) (Main & Backlog) Examination, October 2021

Subject: Pharmaceutical Formulations

Time: 2 Hours **Max. Marks: 70**

PART – A

Note: Answer any six questions. **(6 x 5 = 30 Marks)**

1 Differentiate between HGC and SGC.
2 Discuss properties of diluents used in tablet manufacturing with examples.
3 Define bloom gel strength give its significance.
4 Define different solution dosage forms used for oral administration.
5 Explain vehicles used in parenteral dosage forms.
6 What are emulsifying agents and list out them?
7 Account the ideal requirement of drug candidates for sustain release dosage form development.
8 Mention differences between SVP and LVPs.
9 List out steps involved in sugar coating process.
10 Give the significance of displacement value in suppositories preparation.

PART – B

Note: Answer any four questions. **(4 x 10 = 40 Marks)**

11 Write note on different granulation techniques and discuss compression stages of tablet manufacturing process.

12 Write in detail about IPQC tests conducted for parenteral dosage forms.

13 Mention merits and demerits of emulsion dosage forms and give brief note on stability of emulsions.

14 Write short note on syrups and mouthwashes.

15 Explain formulation types of jellies and methods preparation in detail.

16 Enumerate formulation and methods of preparation of suppositories.

17 Write a note on formulation and evaluation of TDDS.

18 Elaborately explain different containers used for sterile dosage form packaging.

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Code No. 12463

FACULTY OF PHARMACY

Pharma. D III Year (6-YDC) (Main & Backlog) Examination, October 2021
Subject: Pharmaceutical Jurisprudence

Time: 2 Hours **Max. Marks: 70**

Note: Answer any six questions from Part A, Answer any four questions from Part B.

PART – A (6 x 5 = 30 Marks)

1 What is Repacking licence
2 Define Cosmetics as per D & C Act
3 Write the function of Government Analyst
4 Define Spurious drug
5 Write the objectives of Drug & Magic Remedies Act
6 Write the objectives of essential commodities Act 1955
7 Give the labelling requirements for Opthalmic preparations
8 What are 'Patent' & 'Patentee' under Patent & Design Act
9 Write the constitution of Animal Ethical Committee
10 What are Non Prescription drugs? Give its examples

PART – B (4 x 10 = 40 Marks)

11 Explain the Constitution & functions of PCI?

12 Explain in detail about the Schedule Y of Drugs Cosmetic Act?

13 Explain in detail Design, Construction & Manufacturing in Bonded Laboratory?

14 Explain in detail about the Schedule M of Drugs & Cosmetic Act?

15 Give the various Offences & Penalties mentioned under NDPS Act?

16 What is a Patent? Write in detail the procedure for getting Patent.

17 What are the Powers and Duties of Drug Inspector?

18 Explain in detail on prevention of cruelty of Animal Act 1960?

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Code No: 12460

FACULTY OF PHARMACY

Pharm-D III-Year (6-YDC) (Main &Backlog) Examination, October 2021

Subject: Pharmacology - II

Time: 2 Hours **Max. Marks: 70**

PART- A

Note: Answer any six questions: **(6 x 5 = 30 Marks)**

1. Write a note on Acute toxicity studies as per OECD guidelines.
2. Mention the complications of potassium sparing diuretics.
3. Define coagulants. Explain Vit.K.
4. Write the adverse effects of Isoniazid.
5. Write briefly about macro molecular assemblies.
6. Write the mechanism of action Methotrexate.
7. Write a note on tumour suppressor genes.
8. Define mutations, deletions and amplifications.
9. Write the advantages of carbapenems over pencillins.
10. Write a note on oncogenes.

PART-B

Note: Answer any four questions: **(4 x 10 = 40 Marks)**

11. Classify anticoagulants. Write the Pharmacology of Warfarin and Heparin.
12. Classify diuretics. Write the Pharmacology of Loop diuretics and carbonic anhydrase inhibitors.
13. Classify Anticancer agents. Discuss the pharmacology of alkylating agents.
14. Write a note on a) Chronic toxicity studies b) immune modulators.
15. Write the Pharmacology of a) Pencillins b) Aminoglycosides.
16. Write in detail about a) Gene expression b) Gene mutations.
17. Discuss protein synthesis in detail.
18. Write in detail about MAPK signalling pathways in eukaryotic cells.

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Code No. 12462

FACULTY OF PHARMACY

Pharma. D III Year (6-YDC) (Main & Backlog) Examination, October 2021
Subject: Pharmacotherapeutics – II

Time: 2 Hours **Max. Marks: 70**

Note: Answer any six questions from Part A, Answer any four questions from Part B.

PART – A (6 x 5 = 30 Marks)

1 What are the signs and symptoms of SLE
2 What are the various types of psoriasis
3 What are the risk factors for breast cancer
4 Write a note on xanthine oxidase inhibitors and its role in management of Gout
5 Write the monitoring parameters for drugs used in T.B
6 Define community acquired and hospital acquired Pheumonia
7 What are the two major classes of genes involved in carcinogenesis? Give examples.
8 What is the role of dexamethasone in the treatment of chemotherapy induced nausea
9 Write a note on amino glycoside induced renal disorders
10 What is the common regimen to treat Gonorrhoea

PART – B (4 x 10 = 40 Marks)

11 (a) Write the basic principles of cancer therapy.
(b) Write about different types of viral infections and their management.

12 (a) Write the guidelines for rational use of antibiotics.
(b) Write a note on surgical prophylaxis of antibiotics for various surgeries.

13 Write the clinical presentation and management of
(a) Scabies (b) Impetigo.

14 (a) Give a brief account on the vaccination for influenza.
(b) Write a note on the treatment on malaria.

15 (a) Discuss the management of UTI.
(b) What is the etiology for endocarditis?

16 Discuss pharmacological management of
(a) Gastroenteritis (b) Septicemia.

17 Write a note on Pathophysiology of (a) LRTI (b) Syphilis

18 Write a note on haemodialysis. Mention the advantages and disadvantages of haemodialysis and peritoneal dialysis.

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Code No. 6190

FACULTY OF PHARMACY

Pharm-D (6-YDC) III-Year (Instant) Examination, February 2020

Subject : Pharmaceutical Jurisprudence

Time : 3 Hours **Max. Marks: 70**

Note : Answer all the questions from Part-A. Answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are Schedule G and Schedule N as per Drugs and Cosmetics Act?
2 Differentiate between Spurious drug and Adultered drug.
3 What is Loan Licence?
4 What is meant by MAPE and how it is calculated?
5 Define cannabis and Opium.
6 Give the labeling requirements for Schedule X and Schedule H drugs.
7 What are Prescription and Non Prescription Products?
8 Define the terms Advertisement and Magic remedies as per Drug and Magic remedies Act
9 Write the Objectives of Essential Commodities Act 1955.
10 Define Copyright and trademark.

PART- B (50 Marks)

11 Write about the Constitution and functions of State and Joint State Pharmacy Council. (5+5)

12 Describe the qualification and powers of a Drug Inspector under Drug and Cosmetics Act. (10)

13 What is bonded laboratory? Discuss the Layout and Construction of Bonded Laboratories. (10)

14 Write a note on prevention of Cruelty to Animals Act 1960.

15 Explain in detail about procedure to obtain license for manufacture of drugs belonging to Schedule C, Schedule C_1 and Schedule X. (10)

16 (a) What classes of Advertisement are prohibited under Drug and Magic remedies Act? (5)
(b) Describe the constitution and functions of DTAB. (5)

17 Give an account of Cultivation, manufacturing, sale, export and import of Narcotic and Psychotropic substance. (10)

18 Define Patent. Mention different types of Patents and the procedure for patenting. (10)

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Code No. 6191

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Instant) Examination, February 2020

Subject : Medicinal Chemistry

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part – A, answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What is CADD? What are its advantages?
2 Write the synthesis of Isoniazid.
3 Define Antibiotics. Write the mechanism of action of aminoglycoside antibiotics.
4 What are antihelminthics? Give examples.
5 Draw the structures of : (a) Cortisone (b) Hydrocortisone
6 Explain epimenization reaction in tetracyclines.
7 Write the degradation reactions of Penicillins.
8 What are Coagulants? Give the examples with structures.
9 Write the brand names of the following drugs.
(a) Amoxacillin + clavulanic acid (b) Cefpodoxiome
10 Define antiseptics and disinfectants with examples.

PART – B (5 x 10 = 50 Marks)

11 What is combinatorial synthesis? Explain in detail the essential requirements of solid phase synthesis. (10)

12 (a) Give the classification of antihypertensives. (5)
(b) Write the mode of action and SAR of ACE inhibitors. (5)

13 Classify Antitubercular. Write the mechanism of action of each class of drugs. (5+5)

14 (a) Write the mechanism of action and SAR of (5)
(i) Statins (ii) Fibrates
(b) Write the Synthesis of : (5)
(i) Hydrochlorthiazide (ii) Furosemide

15 (a) Write the mode of action, SAR and uses of penicillin. (6)
(b) Give the synthesis of clofibrate and clonidine (4)

16 What is prodrug? What are the types of prodrug? Explain in detail its applications along with examples.

17 (a) Classify antiviral drugs with examples. (5)
(b) Write the mechanism of action of : (5)
(i) loop diuretics (ii) Thiazide diuretics

18 (a) Classify antianginal agents with examples. (5)
(b) Write the synthesis and mode of action (5)
(i) Ketoconazole (ii) Ethambutol

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Code No. 6199 / PB

FACULTY OF PHARMACY

Pharm. D. (3 YDC) I – Year (Post Baccalaureate)(Instant) Examination,

January 2020

Subject : Pharmacotherapeutics I & II

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A & answer any Five questions from Part-B.

PART - A (10 x 2 = 20 Marks)

1 Define Rationale use of drugs with examples.
2 Write the clinical presentation of Bacterial conjunctivitis.
3 Write a note on type of Glaucoma.
4 What are the differences between Angina decubitus and prinzmetal angina?
5 Name any four drug induced renal disorders with examples.
6 Write a note on HbA1c.
7 Write the pharmacological treatment of Syphilis.
8 What are the signs and symptoms of SLE?
9 Write a brief note on types of Pneumonia.
10 What is the role of inotropes in the management of sepsis?

PART - B (5 x 10 = 50 Marks)

11 Explain the pathophysiology and pharmacotherapy of Asthma. 10

12 a) Explain the management of Hyperthyroidism. 5
b) What is the pharmacological management of osteoporosis? 5

13 a) What is the pharmacotherapy involved in Diabetes mellitus? 6
b) How do pharmacokinetic parameters alter in pediatrics? 4

14 Explain pathphysiology and pharmacotherapy of Meningitis. 10

15 What is hypertensive emergency and explain its pharmacotherapy? 10

16 What is the pharmacotherapy of tuberculosis in specialized population? 10

17 What are different types of leukemia and add a note on its pharmacotherapy? 10

18 a) Discuss pharmacological treatment of Rheumatoid arthritis. 5
b) Write a note on Management of chemotherapy induced nausea and vomiting. 5

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Code No. 6187

FACULTY OF PHARMACY

Pharm-D (6-YDC) III-Year (Instant) Examination, January 2020

Subject : PHARMACOLOGY-II

Time : 3 Hours **Max. Marks: 70**

Note : Answer all the questions from Part-A. Answer any five questions from Part-B.

PART- A(10x2=20 Marks)

1 Write the mechanism of action of Fluoroquinolones.

2 Classify antidiuretics with examples.

3 What is the mechanism of action of cotrimoxazole?

4 What are the adverse effects of Sulfonamides?

5 Classify anti-fungal agents.

6 Name two Immunostimulants and write their mechanism of action.

7 Write about the resistance mechanisms developed by organisms against penicillins.

8 What is the mechanism of functioning of MAP kinase?

9 Write about Oncogenes.

10 Write the applications of gene therapy.

PART-B (5x10=50 Marks)

11 Write in detail about the steps involved in translation in prokaryotes.

12 Write about r-DNA technology process and applications.

13 Elaborate the replication process in prokaryotes.

14 Write a note on toxicity studies.

15 Explain in detail about oral anticoagulants.

16 Write a note on antiretrovirals.

17 Write in brief about (i) fibrinolytics (ii) streptomycin.

18 Classify anti cancer drugs. Write in detail about any two antimetabolites.

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Code No. 6192

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Instant) Examination, February 2020

Subject : Pharmaceutical Formulation

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part – A, answer any five questions from Part-B.

PART – A (10x2=20 Marks)

1 Define tablets. List out the different types of tablets.
2 Explain the therapeutic reasons for enteric coating.
3 Write the composition of hard gelatin shell.
4 Explain the stability of suspensions.
5 Classify emulsifying agents with examples. Write its mechanism of action.
6 Write the vehicles used in parenterals with examples.
7 Write the official tests for glass containers.
8 Explain the physiochemical parameters of gelatin.
9 Define controlled drug delivery systems. Write its advantages.
10 Define penetration enhancers. Give suitable examples.

PART- B (5x10=50 Marks)

11	Explain the quality control tests for tablets.	10
12	Explain the advantages of film coating over sugar coating. Explain the method and materials used in sugar coating of tablets.	3+7
13	Define capsules. Discuss any two filling methods of hard gelatin capsules.	2+8
14	Explain the evaluation of emulsion including shelf life.	10
15	Explain the formulations of suspensions with examples.	10
16	Write in detail about production facilities for parenteral formulations. Explain the evaluation tests for parenterals.	5+5
17	Discuss the different types of suppository bases. Add note on method of preparation.	5+5
18	Describe the formulation and evaluation of transdermal patch.	10

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Code. No: 6389

FACULTY OF PHARMACY

Pharm D (6-YDC) III-Year (Main & Backlog) Examination, December 2020

Subject : Pharmaceutical Analysis

Time: 2 Hours **Max. Marks: 70**

PART- A

Note: Answer any Six questions. **(6x5=30 Marks)**

1. Name the different factors affecting fluorescence.
2. Define Frontal analysis and elution analysis in column chromatography.
3. Explain the different types of development techniques of paper chromatography.
4. Define nebulisation and residual current.
5. What are the different sources of quality variation.
6. Give the Ilkovics equation.
7. What are the different sample handling techniques in IR spectroscopy.
8. What are the different carrier gases used in the Gas chromatography?
9. Write the principle involved in Atomic absorption spectroscopy?
10. What are the different methods for detecting the end point in potentiometry?

PART- B

Note: Answer any Four questions. **(4x10=40 Marks)**

11. Discuss the Principle and Instrumentation of Infrared spectroscopy.
12. Write short notes on
    a. ISO 9000 b. Concept of statistical control.

. Describe the Derivatisation techniques in Gas chromatography.

b. Explain the different factors affecting the fluorescence and add a note on quenching

14. Explain the instrumentation and applications of Flame Photometry.
15. a. Derive Beers- Lamberts law, applications and its deviation.

    b. Explain the different applications of NMR spectroscopy.

16. a. Differentiate between DSC and DTA.
    b. Explain the advantages and disadvantages of Amperometry over Potentiometry
17. Enumerate the ICH guidelines for quality assurance.
18. Explain the different conductometric titrations and their applications.

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Code. No: 6390

FACULTY OF PHARMACY

Pharm D (6-YDC) III-Year (Main & Backlog) Examination, December 2020

Subject : Pharmacotherapeutics-II

Time: 2 Hours **Max. Marks: 70**

PART- A

Note: Answer any Six questions. **(6x5=30 Marks)**

1 Write about specific diagnosis for T.B.

2 Mention types and clinical presentation of syphilis.

3 Write the American college of rheumatology diagnostic criteria for hip and knee Osteoarthritis.

4 classify urinary tract infections.

5 Give clinical presentation of eczema.

6 What are the commonly used regimens for treatment of malaria?

7 Write about the etiology for breast cancer.

8 Write a brief note on spondylitis.

9 Write a note on amino glycoside induced renal disorders.

10 What are the commonly occurring protozoal infections

PART- B

Note: Answer any Four questions. **(4x10=40 Marks)**

11 a) What are the antibiotics used prophylactically for Gastro intestinal surgeries?
b) Write a note on pathogens involved in the management of infective endocarditis.

12 a) Write a note on Respiratory tract infections
b) Explain in detail about the causes, clinical presentation and treatment for LRTI.

13 Write the pathophysiology for HIV. Write a brief note on symptoms and diagnosis for HIV.

14 a) Write a note on Acute tubular necrosis along with its prevention.
b) Write about the treatment options for acute renal failure.

15 Write a note on hemodialysis and write about the advantages and disadvantages of hemodialysis and peritoneal dialysis.

16 Write a note on the various chemotherapeutic agents inducing nausea and vomiting and discuss its management.

17 Write a note on management
a) SLE b) Gout

18 Write a note on etiopathogenesis of
a) Impetigo b) Psoriasis

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Code. No: 6391

FACULTY OF PHARMACY

Pharm D (6-YDC) III-Year (Main & Backlog) Examination, December 2020

Subject : Pharmaceutical Jurisprudence

Time: 2 hours **Max. Marks: 70**

Part – A

Note: Answer any Six questions. **(6x5 = 30 Marks)**

1. What is Loan licence?
2. Define Cosmetics as per D & C Act?
3. Write the objectives of Drug & Magic Remedies Act?
4. Define Spurious drug?
5. Write the function of Government Analyst?
6. Write the Objectives of essential commodities Act 1955?
7. Give the labelling requirements for Opthalmic preparations.
8. What are 'Patent' & 'Patentee' under Patent & Design Act?
9. Write the constitution of Animal Ethical Committee?
10. What are Non Prescription drugs? Give its examples.

Part – B

Note: Answer any Four questions. **(4x 10 = 40 Marks)**

11. Explain the Constitution & functions of PCI?
12. Explain in detail on prevention of cruelty of Animal Act 1960?
13. Explain in detail Design, Construction & Manufacturing in Bonded Laboratory?
14. Explain in detail about the Schedule M of Drugs & Cosmetic Act?
15. Give the Various Offences & Penalties mentioned under NDPS Act?
16. What is a Patent? Write in detail the procedure for getting Patent.
17. Explain in detail about the Schedule Y of Drugs & Cosmetic Act?
18. What are the Powers and Duties of Drug Inspector?

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Code. No: 6393

FACULTY OF PHARMACY

Pharm D (6-YDC) III-Year (Main & Backlog) Examination, December 2020

Subject : Pharmaceutical Formulations

Time : 2 Hours **Max. Marks: 70**

PART-A

Note : Answer any Six questions. **(6x5=30 Marks)**

1. Explain the Bloom strength.
2. Describe Pyrogen test for Parenterals.
3. Discuss the permeation enhancers for the Buccal drug delivery system.
4. Differentiate Macro and micro Emulsions.
5. Define Zeta potential? Give its significance in stability of dispersion system.
6. Define the following tableting problems with remedies
   a) Mottling b) Capping and lamination
7. Explain content uniformity test for HGC.
8. Write a note on Ocular inserts.
9. Write a note on preservatives used in Ophthalmic preparations.
10. Define Displacement value? Mention its significance in the preparation of suppositories.

PART-B

Note : Answer any Four questions. **(4x10=40 Marks)**

11. Write about the following Novel drug delivery systems
    a) Nasal b) Rectal drug delivery system
12. a) Describe the different Granulation techniques commonly employed in the manufacturing of tablets.
    b) Add a note on different Ointment based in formulation of Ointments.
13. Explain briefly about the Sugar coating and Film coating process.
14. Explain formulation additives of Parenterals with examples.
15. Give different approaches for Transdermal drug delivery system.
16. a) Write in detail about formulation of Solutions with examples.
    b) What are the different types of containers for packing of parenterals.
17. a) Write a note on theories of Emulsification.
    b) Write about the (Q C) Quality Control tests for Ophthalmic preparations.
18. a) Describe Rotary die process for manufacturing of SGC.
    b) Write a note on production facilities required for Parenterals.

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Code. No: 6392

FACULTY OF PHARMACY

Pharm D (6-YDC) III-Year (Main & Backlog) Examination, December 2020

Subject : Medicinal Chemistry

Time: 2 Hours **Max. Marks: 70**

PART- A

Note: Answer any Six questions. **(6x5 = 30 Marks)**

1 Give the structure of cotrimoxazole

2 Write the synthesis of Isoniazid

3 Write the structure and mechanism of action of potassium clavulanate

4 Define vasodilators and draw the structures of any two vasodilators

5 Classify alkylating agents Explain the MOA, and structure of any two alkylating drugs.

6 Define prodrug. Give two examples of prodrugs and their active forms.

7 Write the structures of any two diagnostic agents and its uses

8 Write the structure and mechanism of action of acetazolamide and propylthiouracil

9 What is Hyper lipoproteinaemia? Give the list of drugs to treat

10 Give the structures of any two selective COX-2 inhibitors.

PART- B

Note: Answer any Four questions. **(4x10 = 40 Marks)**

11 a) Write a short note on QSAR approaches in drugs design.
b) Write a short note on prodrugs and its applications.

12 a) Discuss the SAR of Tetracycline antibiotics with examples
b) Write the structure, mechanism of action and uses of chloramphenicol.

13 Classify anti malarial agent with suitable examples. Write the synthesis of Chloroquine

14 a) Define & Classify Antihelmenthic drugs Write the structure and mechanism of action of albendazole
b) Give the synthesis of chlorambucil brucil

15 a) Write the SAR of sulfadrugs with examples.
b) Give the synthesis of Trimethoprim and Dapsone

16 a) Write in detail about Calcium channel blockers with structures
b) Give the synthesis of Acetazolamide and Verapamil.

17 a) Write the structures and therapeutic uses of adrenocorticoids
b) Give the structure and uses of testosterone and progesterone

18 a) Write the structures and mechanism of action of thiazide diuretics?
b) Write a short notes on Insulin preparations.

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Code. No: 6388

FACULTY OF PHARMACY

Pharm D III-Year (Main & Backlog) Examination, December 2020

Subject : Pharmacology - II

Time: 2 Hours **Max. Marks: 70**

PART- A

Note: Answer any Six Questions **(6 x 5=30 Marks)**

1 Write briefly about functions of ER and Golgi apparatus.

2 Write note on tumour suppressor or genes.

3 Write MOA and therapeutic uses of Clopidogrel.

4 Define Resistance to antibiotics and cross Resistance.

5 Write notes on Artemisinin derivatines.

6 Explain briefly frame shift mutations.

7 Write the MOA and uses of metronidazole.

8 Write the role of erythropoietin and thrombopoietin in haemopoiesis.

9 Write the adverse effects of Tetracyclines.

10 Write briefly the role of P38 Kinase and JNK in signaling pathways in Eukaryotic cells.

PART- B

Note: Answer any Four Questions **(4 x 10=40 Marks)**

11 Classify antiviral drugs. Explain pharmacology of NRTIs (Nucleoside Reverse Transcriptase Inhibitors) and NNRTIs (Non Nucleoside Reverse transcriptase Inhibitors

12 Explain the process of DNA Replication in Eukaryotes

13 a) Explain the role of Cyclins and Colks in regulation of cell Cycle.
b) Pharmacology of Chloroquine.

14 a) Explain the Pharmacology of Thiazide domestics
b) Write about antifungal antibiotics

15 Explain RNA processing in Prokaryotes.

16 Explain MOA, Adverse effects and dose regulation of Heparin

17 Write short notes on
i) Chloramphenical
ii) Benzimidazole Antihelmintics

18 a) Write the pharmacology of Aminoglycoside antibiotics
b) Write notes on 6MP (6-Mercapto purine) and 5-FU (5 - Fluoro Uracil)

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Code No. 13289

FACULTY OF PHARMACY

Pharm-D (6-YDC) III-Year (Main & Backlog) Examination, June / July 2019

Subject : Pharmacotherapeutics - II

Time : 3 Hours **Max. Marks: 70**

Note : Answer all the questions from Part-A. Answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are the commonly used regimens for treatment of malaria?
2 Write a brief note on Bronchiolitis.
3 What are the risk factors for breast cancer?
4 Define community acquired and hospital acquired pneumonia.
5 Classify fungal infections.
6 Name any four drugs that induce renal disorders.
7 Define SIRS.
8 What are the criteria for diagnosing rheumatoid arthritis as per American college of Rheumatology?
9 What are the adverse effects of Methotrexate?
10 Write the treatment of syphilis.

PART –B (5 x 10 = 50 Marks)

11 (a) Explain the management of Urinary tract infections. (5)
(b) What are the antibiotics used prophylactically for GI surgery & orthopedic surgeries. (5)

12 Write short notes on: (a) SLE (b) Psoriasis (5+5)

13 (a) Write the clinical presentation, diagnosis and management of osteoarthritis. (7)
(b) Add a note on DMARDS. (3)

14 (a) Explain in detail the Pathophysiology of acute renal failure. (5)
(b) Write the basic principles of cancer therapy. (5)

15 (a) Write the etiopathogenesis of HIV. (5)
(b) Write about different types of viral infections and their management. (5)

16 (a) Discuss pharmacological management of gastroenteritis. (4)
(b) Write the principle, indication and complications of peritoneal dialysis. (6)

17 Write in detail management of Leukemias. (10)

18 (a) Write etiopathogenesis of infective endocarditis. (4)
(b) Explain the causes, clinical presentation and treatment for lower respiratory tract infections. (6)

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Code No. 13287

FACULTY OF PHARMACY

Pharm-D (6-YDC) III-Year (Main & Backlog) Examination, June 2019

Subject : PHARMACOLOGY-II

Time : 3Hours **Max. Marks: 70**

Note : Answer all the questions from Part-A. Answer any five questions from Part-B.

PART- A(10x2=20 Marks)

1 Write about the uses of Antiplatelet drugs?

2 Define Acute toxicity and chronic toxicity with examples.

3 What is the mechanism of action of Co-trimoxazole?

4 Write a note on Streptomycin

5 Elaborate the adverse effects of Chloramphenicol.

6 Name four Immunosuppressants.

7 Write a note on MAP Kinase.

8 What is super infection?

9 Write a note on human chromosome structure

10 How does the flow of genetic information occur?

PART-B (50 Marks)

11 What is Gene therapy? Discuss in detail about the different types of gene therapy with examples. (10)

12 Elaborate the replication process in prokaryotes. (10)

13 (a) Explain about various transcription factors that regulate transcription in prokaryotes and eukaryotes. (4)
(b) Explain the chemotherapy of malaria. (6)

14 Elaborate the adverse effects of : (i) Antimicrobial agents (ii) Anti cancer agents (5+5)

15 Write short notes on: (i) Penicillins (ii) Sulfonamides (6+4)

16 Classify Diuretics. Write in detail about potassium sparing diuretics. (10)

17 Write a brief note on TB Chemotherapy. (10)

18 Write in detail about Heparin and Warfarin. (5+5)

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Code No. 13292

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main & Backlog) Examination, July 2019

Subject : Pharmaceutical Formulation

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part – A, answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are multiple compressed tablets? Write its merits and demerits.
2 Explain the disintegration test for enteric coated tablets.
3 Define base absorption and gram/minim factor. Write its importance.
4 Write about different sizes of hard gelatin capsules with their capacities.
5 Explain the instability of emulsions.
6 Explain the differences between flocculated and deflocculated suspensions.
7 Define sterilization. List out different methods of sterilization.
8 Write the importance of displacement value in preparation of suppositories.
9 Explain about effervescent tablets.
10 Write a note on ocular inserts.

PART- B(5X10=50 Marks)

11	Write in detail excipients used in formulation of tablets with examples.	10
12	Explain the evaluation tests for coated tablets.	10
13	What are advantages and disadvantages of hard gelatin capsules? Describe the composition and steps involved in preparation of hard gelatin shell.	4+6
14	Explain the formulation of emulsions with examples.	10
15	(a) Write the difference between small volume and large volume parenterals. (b) Explain the containers used in parenterals.	5 5
16	Explain the quality control tests for parenterals.	10
17	Explain the formulation, packing and labelling of ophthalmic ointments.	5+5
18	What are the criteria for selection of novel drug delivery systems? Write a brief note on ocular inserts	5+5

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Code No. 13291

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main & Backlog) Examination, July 2019

Subject : Medicinal Chemistry

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part – A, answer any five questions from Part-B.

1 What are preservatives? Draw the structures of any two of them.
2 Write the synthesis of Tolbutamide.
3 What is DOTS therapy ? Explain.
4 Explain why tetracyclines should not be taken with milk.
5 What is selenium distillation of steroids?
6 Write the difference between penicillins and cephalosporins.
7 Define prodrug with examples. Write any two applications.
8 Classify anti arrhythmic agents with examples.
9 Write the mechanism of action of carbonic anhydrase inhibitors.
10 What are antisense molecules? Give examples.

PART – B (5 x 10 = 50 Marks)

11 Define QSAR. Explain in detail the parameters of QSAR. (10)

12 (a) Classify antifungal agents with examples. (5)
(b) Write the mechanism of action of any two classes of antihyper lipidemics. (2½+2½)

13 (a) Give the classification of antineoplastic agents. (6)
(b) Write the SAR and mechanism of action of alkylating agents. (2+2)

14 (a) Classify calcium channel blockers? Write its mechanism of action and SAR. (2+2+2)
(b) Write the synthesis of (i) Verapamil (ii) Nefidepine (3+1)

15 (a) Write the chemistry involved in the steroidal drugs. (5)
(b) Write a short note on Oral contraceptives. (5)

16 (a) Write mechanism of action and SAR of : (3+3)
(i) Thiazide diuretics (ii) Thiaznolidine diomes
(b) Write a short note on thyroid drugs. (4)

17 Writ the synthesis, mode of action of (2+3+2+3)
(a) Isosorbide dinitrate (b) Metformim (c) Warfnin (d) Dipyridamol

18 (a) Write a short notes on Hypoglycemic agents. (6)
(b) Write the structure and uses of (i) testosterone (ii) Progesterone (4)

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Code No. 13290

FACULTY OF PHARMACY

Pharm-D (6-YDC) III-Year (Main & Backlog) Examination, July 2019

Subject : Pharmaceutical Jurisprudence

Time : 3 Hours **Max. Marks: 70**

Note : Answer all the questions from Part-A. Answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What is the Objectives of Pharmacy Act 1948?
2 Differentiate between Misbranded drug and Adultered drug.
3 What is Repacking Licence?
4 What are Schedule X and Schedule C as per Drugs and Cosmetics Act?
5 Differentiate between bonded and Non bonded laboratory.
6 Give the labeling requirements for Schedule G and H drugs.
7 Give the labeling requirements for Ophthalmic Preparations.
8 Define Cannabis and Opium.
9 Write the Objectives of Essential Commodities Act 1955.
10 Define Drug and Magic Remedies Act.

PART- B (50 Marks)

11 Explain the Constitution and Functions of PCI. (10)

12 What are Narcotic drugs and Psychotropic substances? Write a note on prohibition, control and regulation of Narcotic drugs and Psychotropic substances. (10)

13 Describe the qualification and powers of a Drug Inspector under Drug and Cosmetics Act. (10)

14 What are the legal procedures for Cultivation, production and manufacturing of Opium? (10)

15 Explain the Construction of bonded laboratory. Write a note on warehousing of alcoholic preparations. (10)

16 (a) Write briefly about the Code of Pharmaceutical Ethics. (3)
(b) Write the constitution and functions of DCC. (7)

17 Explain about the Schedule M of drugs and cosmetics Act. (10)

18 What are the inventions and Non inventions according to patents Act 1970? (10)

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Code No. 13288

FACULTY OF PHARMACY

Pharm-D (6-YDC) III-Year (Main & Backlog) Examination, June/July 2019

Subject : Pharmaceutical Analysis

Time : 3 Hours **Max. Marks: 70**

Note : Answer all the questions from Part-A. Answer any five questions from Part-B.

PART- A(10x2=20 Marks)

1 Write the principle involved in Electrophoresis?
2 Define validation and calibration.
3 Name different type of detectors used in IR?
4 Distinguish between TLC and HPTLC.
5 Write and explain Bragg's equation?
6 Write about the reference standard used in NMR.
7 Explain the principle of separation involved in ion exchange chromatography?
8 Write the composition of karlfischer reagent?
9 Explain different types of transitions in UV region?
10 Write the principle involved in Atomic Emission Spectroscopy?

PART – B (5x10=50 Marks)

11 Write short notes on
(a) ISO-9000 (4)
(b) Calibration of UV VIS Spectroscopy (or) HPLC (6)

12 Discuss the principle and instrumentation of GLC? (10)

13 Explain the principle and instrumentation of Polarography. (10)

14 Discuss the principle and different Conductometric titration. (10)

15 (a) Write about different types of ionisation techniques used in Mass spectroscopy (5)
(b) Explain the principle and instrumentation of ESR. (5)

16 Write the instrumentation and applications of HPLC. (10)

17 Explain the principle and development technique of Paper chromatography? (10)

18 Describe the construction and working of DSC and DTA? (5+5)

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Code No.1250

FACULTY OF PHARMACY

Pharm D (6–YDC) III – Year (Main & Backlog) Examination, July 2018

Subject: Pharmacology – II

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part – A. Any Five questions from Part – B.

PART – A (10x2 = 20 Marks)

1 Write a note on erythropoietin.
2 Explain the mechanism involved by anti-thrombotic drugs.
3 Explain free water clearance.
4 Explain complication of thiazide diuretics.
5 Classify anti viral drugs.
6 Write the causative organisms of TB and protozoal infections.
7 How DNA is replicated in bacterial cell?
8 Write a note on immunostimulants.
9 Write a note on PI3 kinase.
10 Write a note on tumor suppressor gene.

PART – B (50 Marks)

11 Explain in detail about DNA replication.

12 Describe in detail the determination of sub acute and chronic toxicity.

13 Write the pharmacology of thrombolytics and anticoagulants.

14 Classify antifungal agents. Write the pharmacology of any two drugs.

15 Describe in detail about gene therapy.

16 Explain in detail about chemotherapy of malaria.

17 Explain in brief about pharmacology of anti-diuretics.

18 How is cancer caused? Classify the drugs used to treat cancer. Write the pharmacology of any two drugs.

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Code No. 1254

FACULTY OF PHARMACY

Pharm D (6–YDC) III – Year (Main & Backlog) Examination, June 2018

Subject: Medicinal Chemistry

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part – A. Any Five questions from Part – B.

PART – A (10x2 = 20 Marks)

1 Define scabicide with example.
2 Mention the type of hyperlipo proteinemia.
3 Give two examples with therapeutic use of polypeptide antibiotics.
4 Differentiate between disinfectant and antiseptic.
5 Write the chemical structure and uses of testosterone.
6 Define the term pro-drug and write application.
7 What is combinatorial synthesis?
8 Write the structure mode of action of fluconazd.
9 Write the mode of action of cardiac glycoside.
10 Classify antihelmintic agents.

PART – B (50 Marks)

11 a) Write the classification of anti-malarial agents with one example from each class. 5
b) Write synthesis, mode of action: 5
i) Cefalexine
ii) Minocycline.

12 a) Write the S.A.R of cephalosporin and outline the synthesis of ampicillin. 5
b) What are antiarrhythmic drugs? Classify them with examples, write the structure and uses of verapamil, phenytion, and propranolol 5

13 a) Write the S.A.R. of thiazide diurette. 5
b) What are calcium channel blocker? Describe their effect on cardiovascular system. Write the synthesis of Warfarin. 5

14 Write the synthesis, mode of action of following drugs: 10
i) Propylthioureacil
ii) Mebendazole
iii) Clofibrate
iv) Tolbutamide

15 a) Write the S.A.R of sulfonyl ureas. 5
b) Write the synthesis mode of action of:
i) Albendazole ii) Ketoconazole 5

16 a) Write the classification of antiviral drug with one example of each class. 5
b) Write the synthesis, mode of action of: 5
i) Ethanbutolal ii) Isoniazid

17 Write short notes on: 10
i) Anti-inflammatory steroid ii) Endocrine hormone

18 a) Classify antianginal agent with example. 5
b) Write the S.A.R of 7-chloro-4-amino quinolin. 5

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Code No. 1253

FACULTY OF PHARMACY

Pharm D (6–YDC) III – Year (Main & Backlog) Examination, July 2018

Subject: Pharmaceutical Jurisprudence

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part – A. Any Five questions from Part – B.

PART – A (10x2 = 20 Marks)

1 Define V & P Schedules according to D & C Act.
2 Give the cautionary labeling requirement for Schedules H drugs.
3 Do all the OTC medications are prescribed drugs. Justify.
4 Distinguish between misbranded and adulterated drug.
5 What is repacking license?
6 In which two central govt. factories opium can be manufactured?
7 What is the differentiation between 'Pharmacy' and 'Chemist & Druggist shop'?
8 Define 'Design' under Design Act.
9 What are different types of IPR?
10 What is legal definition of 'Cosmetics'?

PART – B (50 Marks)

11 Write a note on Schedule Y.

12 What are the power and duties of drug inspector?

13 Classify the drugs according to prescribe and non-prescribe drugs.

14 Write about first, second and third schedule of Drug Price Control order and mention the formula for calculation of retail price.

15 Describe the objectives of drugs enquiry committee 1930.

16 What is patent? Write the procedure for getting patent.

17 Enlist the prohibition of advertisement and penalties as per Drugs and Magic Remedies Act.

18 Write down in brief about the code of Pharmaceutical Ethics.

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Code No. 1251

FACULTY OF PHARMACY

Pharm D (6–YDC) III – Year (Main & Backlog) Examination, July 2018

Subject: Pharmaceutical Analysis

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part – A. Any Five questions from Part – B.

PART – A (10x2 = 20 Marks)

1 Write and explain ilkovic's equation.
2 Define accuracy and precision.
3 Name different type of ionization techniques in mass spectroscopy.
4 Distinguish isocratic and gradient elution.
5 Define chemical shift and list the factors influencing it.
6 Write about the reference standard used in ESR.
7 Explain the principle of separation involved in gel filtration.
8 List out ICH guidelines for quality (Q).
9 Define current voltage curve.
10 Write the principle involved in flame photometry.

PART – B (50 Marks)

11 Write short notes on:
a) TQM 5
b) GLP 5

12 Write about different types of detector used in GLC with neat sketch. 10

13 Explain the working principle and instrumentation for gel electrophoresis. 10

14 Discuss different electrodes used in potentiometric titration. 10

15 Elaborate different X-ray diffraction methods. 10

16 Write the instrumentation and applications of UV-VIS spectroscopy. 10

17 Explain the principle and development techniques in paper chromatography. 10

18 a) Describe the construction and working of DME. 5
b) Write the principle and application of DTA. 5

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Code No. 1252

FACULTY OF PHARMACY

Pharm. D. (6 YDC) III – Year (Main & Backlog) Examination, July 2018

Subject : Pharmacotherapeutics-II

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A & answer any Five questions from Part-B.

Part - A (10 x 2 = 20 Marks)

1 Differentiate between Rheumatoid and Osteoarthritis.
2 What is the common regimen to treat Gonorrhea?
3 What is the role of dexamethasone in the treatment of chemotherapy induced nausea?
4 What are the various types of psoriasis?
5 Write a brief note on Pseudomembranous colitis and its treatment.
6 What are the common pathogens causing meningitis? Add a note on the clinical presentation.
7 Write the clinical presentation and treatment for impetigo.
8 Define Acute renal failure based on AKIN criteria.
9 Write a note on diuretic resistance.
10 Write briefly about the FAB classification of Acute myeloid leukemia.

Part - B (5 x 10 = 50 Marks)

11 a) Discuss in detail the pharmacological management of Gout. 5
b) What is the significance of appropriate surgical prophylaxis? 5

12 Write note on : a) Contrast induced nephropathy b) Eczema 5+5

13 a) Write a note on pharmacological management of Rheumatoid Arthritis. 5
b) What are the common regimen options in treating new patients with HIV? 5

14 a) Explain the pathophysiology and clinical presentation of infective endocarditis. 5
b) Write notes on diagnosis of TB infection. 5

15 a) Write the principle behind hemodialysis. 5
b) Write a note on the various superficial fungal infections. 5

16 Write in detail the approach for antimicrobial regimen selection. 10

17 a) Write a brief note on cryptococcal meningitis and its management. 5
b) Write a note on Cholera and its management. 5

18 Write notes on
a) Spondylitis b) Opportunistic infections 5+5

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Code No. 1255

FACULTY OF PHARMACY

Pharm D (6–YDC) III – Year (Main & Backlog) Examination, July 2018

Subject: Pharmaceutical Formulations

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part – A. Any Five questions from Part – B.

PART – A (10x2 = 20 Marks)

1 Write about significance of clarity test.
2 What is bloom strength and explain its importance.
3 Write a note on preservatives used in ophthalmic products.
4 Write about leaker test of parenterals.
5 Give the classification of emulsifying agents with suitable examples.
6 Write about preservatives for ophthalmic products.
7 Explain displacement value and mention its importance.
8 Explain about lamination and capping.
9 What are the defects of sugar coating?
10 Write about sedimentation parameters.

PART – B (50 Marks)

11 Explain briefly about various excipients used in tablet formulation and their functions. 10

12 Explain in detail the different granulation techniques for the preparation of tablets with their advantages. 10

13 Define and classify capsule. Explain the manufacturing and evaluation of soft gelatin capsules. 2+8

14 Explain formulation and evaluation of suspensions. Write different identification tests of emulsions. 7+3

15 With the help of neat labeled diagram explain the layout of small volume parenteral unit. Explain the official quality control tests of parenterals. 5+5

16 What are the suppositories and write about the bases used for their preparation. Write about formulation of jellies. (1+4+5)

17 Discuss in detail about the containers used in packaging of parenterals. 10

18 Define prolonged action dosage form. Write their advantages and disadvantages. Explain the formulation and evaluation of transdermal patches. 10

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Code No. 1113

FACULTY OF PHARMACY

Pharm. D (6 YDC) III - Year (Instant) Examination, March 2018

Subject: Pharmacology – II

Time: 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Write briefly about Macromolecular assemblies.

2 Write note on Oncogenes.

3 Write note on Acute toxicity studies

4 Write the advantages of Azithromycin over the Macrolide antibiotics.

5 Write the shared toxicities of Aminoglycoside

6 Explain briefly wobble Hypothesis.

7 Mention the complications of Loop diuretics.

8 Write the role of G-CSF and GN-CSF in Haemopoieses.

9 Write the adverse effects of Chloramphenicol.

10 Write briefly the role of MAPK signaling pathways in Eukaryotic Cells.

PART – B (5 x 10 = 50 Marks)

11 Classify Antifungal drugs. Write the Pharmacology of Azoles.

12 Explain the process of transcription in Eukaryotes.

13 Explain the different phases of cell cycle and role of positive and negative regulators of cell cycle.

14 (a) Explain the Pharmacology of Thiazida diuretics.
(b) Write the mechanism of action, adverse effects and therapeutic uses of Sulfonamides.

15 (a) Classify anti cancer drugs. Write the pharmacology of Anti metabolites.
(b) Write notes on Anti platelet drugs.

16 Explain in detail various types of gene therapy with examples.

17 Write the Pharmacology of Heparin and LMW heparins.

18 Write short notes on (i) Fluoroquinolones
(ii) Tetracyclines

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Code No. 1117

FACULTY OF PHARMACY

Pharm. D (6 YDC) III - Year (Instant) Examination, March 2018

Subject: Medicinal Chemistry

Time: 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Give two structural examples of Macrolide antibiotics.
2 Explain the mechanism of action of organic nitrates as antianginal agents with examples.
3 Give two examples and therapeutic uses of Disinfectant.
4 Mention the applications of ASAR.
5 Write two examples of anti-inflammatory glucocorticoids.
6 Write the name and structure of drug used as anticonvulsant and antiarrhythmic agent.
7 Write the structure and uses of chloramphenicol.
8 Mention the classification of prodrugs.
9 Explain the mechanism of action and uses of ACE inhibitors.
10 Give the applications of Diagnostic agents.

PART – B (5 x 10 = 50 Marks)

11 (a) Give the classification of antihypertensive agents giving two examples for each class.
(b) Explain SAR and mode of action of thiazide diuretics.

12 Outline the synthesis and uses of
(a) Cloridine
(b) Tinidazole

13 (a) Write the classification of antitubercular drugs giving one structural example for each class
(b) Discuss about plant products used as antieoplastic agents.

14 Write the synthesis, mode of action and uses of
(a)Dilitiazem
(b)Chloroguine Phosphate

15 (a) Explain SAR and mechanism of action of penicillins.
(b) Write a note on anti AIDS agents.

16 (a) Write the classification of antifungal agents giving two examples for each class
(b) Write a note on Androgens.

17 Outline the synthesis mode of action and therapeutic uses of
(a)Clofiberate
(b) Furosemide
(c) Sulfarnethoxazole

18 Give a brief note on
(a) Combinational chemistry
(b) Loop Diuretics.

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Code No. 1116

FACULTY OF PHARMACY

Pharm. D (6 YDC) III - Year (Instant) Examination, March 2018

Subject: Pharmaceutical Jurisprudence

Time: 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Define spurious drug.
2 What are schedule M and H?
3 How to calculate retail price of formulation?
4 Write the functions of government Analyst.
5 Define a)Illicit traffic b) Coca
6 Write the function of Drug Consultative Committee.
7 What is Loan License?
8 Write the objective of Essential Commodities Act 1966?
9 Write the objective of Drugs and Magic remedies Act.
10 What are prescription and Non-prescription products?

PART – B (5 x 10 = 50 Marks)

11 Write the objective of Pharmacy act -1948. Explain the constitution and function of PCI.

12 Explain the construction of bonded manufactory and Warehousing of Alcohol preparation.

13 Define manufacture of drug as per D and C Act 1945. Explain in detail manufacture of schedule C and C_I Drugs.

14 What are the powers of Drug inspector? Explain in detail procedure of inspection.

15 Write the objective of Indian patent Act 1970. What are the provisions of Act?

16 Define Drug and Magic reminder as per Act. Explain Exempted advertisement in detail.

17 Write a note on prevention of cruelty of Animal Act 1960.

18 What are Narcotic drugs and Psychotropic substances? Write a note on Prohibition, Control and Regulation of Narcotic drugs and psychotropic substances.

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Code No. 1115

FACULTY OF PHARMACY

Pharm D (6–YDC) III – Year (Instant) Examination, March 2018

Subject: Pharmacotherapeutics – II

Time: 3 Hours **Max.Marks: 70**

Note: Answer all questions from Part – A. Any Five questions from Part – B.

PART – A (10x2 = 20 Marks)

1 Write a brief note etiopathogenesis of meningitis.
2 Name any two common adjuvant chemotherapy regimens for breast cancer.
3 Write a brief note on acute bronchitis.
4 What are the clinical features of sepsis?
5 Differentiate between osteoarthritis and Rheumatoid arthritis.
6 Write a brief note on impetigo and its management.
7 Write a note on amino glycoside induced renal disorders.
8 Classify urinary track infections.
9 What are the two major classes of genes involved in carcinogenesis? Give examples.
10 What are the commonly occurring protozoal infections?

PART – B (50 Marks)

11 Write in detail the pharmacological management of hospital acquired pneumonia.

12 a) Describe the role of DMARDS in treatment of rheumatoid arthritis. Add a note on their adverse effects.
b) Write a note on the pathophysiology of Gout.

13 a) Write a brief note on management of Psoriasis.
b) Discuss the pathophysiology and treatment of SLE.

14 a) Write a note on the risk factors and prevention of surgical site infections.
b) Classify agents to treat HIV infection along with examples.

15 Discuss pharmacological management of malaria and add a note on its pathogenesis.

16 Write notes on:
a) Adequacy of hemodialysis and Kt/V.
b) Use of erythropoietins in chronic kidney disease.

17 a) Write notes on adverse effects of anticancer agents.
b) Give detailed description of antineoplastic agents:
i) Alkylating agents
ii) Vinca alkaloids

18 a) Write the treatment algorithm for management of Leukemias.
b) Role of colony stimulating factors in acute myeloid leukemia.

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Code No. 1114

FACULTY OF PHARMACY

Pharm. D (6 YDC) III - Year (Instant) Examination, March 2018

Subject: Pharmaceutical Analysis

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are the advantages of HPTLC over HPLC?
2 Write a note on spraying reagents used in Paper Chromatography.
3 Write and explain Lkovic equation.
4 Write the sources of IR Spectroscopy.
5 Define the Quenching and Chromophone.
6 Write the principle involved in Ion Exchange Chromatography
7 Write a note on Karlfischer Titration.
8 Classify Chromatography based on its separation technique.
9 Write a note on Preparative TLC.
10 Write a note on solvent effects on UV spectroscopy.

PART – B (5 x 10 = 50 Marks)

11 Write a note on Total Quality Management.
12 Write the principle, Instrumentation and Applications of Flourimetry
13 Write a note on Gel Electrophoresis.
14 Write a short notes on
   (a) Columns used in HPLC
   (b) Detectors used in GLC
15 Write a note on Principle, Construction and Applications of Amperonetric Titrations.
16 Write the principle and Instrumentation of Mass Spectroscopy.
17 Discuss the applications of the following in Pharmaceutical Analysis.
   (a)Thermal Analysis
   (b) X-Ray Difraction
18 Discuss the Principle, Instrumentation and Applications of UV-Visible Spectroscopy.

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Code No. 1118

FACULTY OF PHARMACY

Pharm. D (6 YDC) III - Year (Instant) Examination, March 2018

Subject: Pharmaceutical Formulations

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Enlist the tablet coating defects.
2 Write a note on LAL test for pyrogens
3 What is the significance of displacement value in the preparation of suppositories?
4 Differentiate between sugar coating and film coating.
5 Enlist the quality control tests for soft gelatin capsules.
6 Write a note onjellies.
7 What are Ocyserts?
8 Mention advantages and limitations of controlled drug delivery systems.
9 Differentiate between buccal and sublingual tablets.
10 What is bloom strength and explain its importance.

PART – B (5 x 10 = 50 Marks)

11 Define and Classify Ointments. Write a note on preparation of Ointments by fusion, trituration and chemical reaction.

12 Classify and explain different types of Pharmaceutical dosage forms.

13 Write a note on production, filling and quality control tests of hard gelatin capsules.

14 Describe formulation of different types of tablets. Write in detail about granulation techniques.

15 Write a note on transdermal drug delivery system and nasal drug delivery systems.

16 Explain formulation and evaluations of suspensions.

17 What are suppositories? Discuss in detail about suppository bases.

18 Describe formulation of Large Volume parenterals. Explain briefly dry heat sterilization and moist heat sterilization.

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Code No. 4265

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmacotherapeutics - II

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Write a brief note on newer diagnosis tests for tuberculosis.
2 How is pyelonephritis treated?
3 What are the commonly used regimens for treatment of malaria?
4 Write a note on xanthine oxidase inhibitors and its role in management of Gout.
5 Give clinical presentation of eczema.
6 Write a brief note on spondylitis.
7 What are the treatment options for acute renal failure?
8 What are the risk factors for Breast cancer?
9 Define and classify Leukemias.
10 Define community acquired and hospital acquired pneumonia.

PART – B (5 x 10 = 50 Marks)

11 (a) Discuss the treatment of candidiasis and Asperigillosis.
(b) What are the antibiotics used prophylactically for Gastro intestinal surgeries?

12 Write notes on : (a) SLE (b) Scables

13 (a) Write a note on clinical presentation and diagnosis of Rheumatoid Arthritis.
(b) Write the principle behind peritoneal dialysis along with a note on its complications.

14 (a) Explain the pathogens involved and the management of infective endocarditis.
(b) Explain the role of integrase inhibitors and entry inhibitors in the treatment of HIV infection along with examples.

15 (a) Write a note on Acute tubular necrosis along with its prevention.
(b) Discuss the complications of chronic kidney diseases.

16 (a) Give a brief account on the vaccination for influenza.
(b) Elaborate on the treatment of malaria.

17 (a) Write a note on treatment of early Breast cancer.
(b) Write a note on the various chemotherapeutic agents inducing nausea and vomiting.

18 (a) Describe the various strategies used to treat Osteoarthritis.
(b) Write the pathogen involved and the pharmacotherapy for Gonorrhea.

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Code No. 4266

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmaceutical Jurisprudence

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Define F and F1 Schedules according to D & C Act.

2 Give the labeling requirement for hair dyes containing dyes, colors and pigment.

3 What is the definition drug spurious according to D & C Act?

4 What are 'Animal' and 'Cruelty' under Prevention of Cruelty to Animal Act?

5 What is Loan license?

6 What are the categories of alcoholic preparations which exempt from excise duty according to Excise Duties Act?

7 Enlist the separate kind of licenses for selling of drug in 'Pharmacy' and 'Chemist and druggist shop'.

8 Mention the formula to calculate Retail Price under Drug (Price Control) Order 1995.

9 What are 'Patent' and 'Patentee' under Patent and Design Act'?

10 What is the definition of Opium according to D & C Act?

PART – B (5 x 10 = 50 Marks)

11 Describe in detail on Wholesale of drug.

12 What are the classes of drugs which are exempted from provision of Chapter IV and D & C Act?

13 Write about administrative agencies under NDPS Act and Rules.

14 Write the constitution and function of State as well as Joint State Pharmacy Council.

15 Discuss about the Registration of Designs under Design Act.

16 Discuss the warehousing of alcoholic preparation.

17 Describe in detail on Central Drug Laboratory.

18 What are the objectives of National Drug Policies 2002?

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Code No. 4263

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmacology - II

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are anticoagulants? Write their therapeutic uses.

2 Write a note on Fibrionlytics.

3 Explain about osmatic diuretics.

4 Explain about Acetazolamide.

5 Classify antifungal agent with example.

6 Classify anticancer drugs.

7 Explain about suicidal bags of the cell.

8 What are the principles involved in toxicology?

9 Explain onchogenes and tumor suppressor genes.

10 Define mutations, deletions and amplifications.

PART – B (5 x 10 = 50 Marks)

11 What are the basic principles of transcription in pro and eukaryotes and discuss the factors that regulate transcription?

12 What are the different toxicity studies? Explain how to design a protocol for chronic toxicity studies.

13 Explain the mechanism of action, pharmacological activity uses and adverse effects of Loop Diuretics.

14 What are signal transduction pathways explain any four of them?

15 Write the mechanism of action, therapeutic uses and adverse effects of
(a) Penicillins
(b) Tetracyclines

16 Explain in detail about chemotherapy of tuberculosis.

17 What is Recombinant DNA technology? Write their processes and applications.

18 Describe about gene sequencing and mapping.

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Code No. 4264

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmaceutical Analysis

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Write the principle involved in gel filtration.
2 Define linearity and robustness.
3 Name different type of detectors use in GLC.
4 Distinguish between HPLC and HPTLC.
5 Define Hook's law and write its equation.
6 Write about the reference electrode used in potentiometry.
7 Explain the principle of separation involved in ion exchange chromatography
8 Write the composition of karlfischer reagent.
9 Explain different ions in mass spectroscopy.
10 Write the principle involved in AAS.

PART – B (5 x 10 = 50 Marks)

11 Write short note on :
(a) ICH – guidelines
(b) Regulatory control

12 Discuss the principle and instrumentation of IR spectroscopy.

13 Explain the principle and instrumentation of gel electrophoresis.

14 Discuss the principle and different amperometric titration.

15 (a) Write about different analyzers used in Mass spectroscopy.
(b) Define chemical shift and list the various factors affecting it.

16 Write the instrumentation and applications of HPTLC.

17 Explain the principle and development technique of column chromatography.

18 Describe the construction and working of X-Ray diffraction methods.

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Code No. 4267

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Medicinal Chemistry

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are various parameter used in QSAR?
2 Give two structure of Loop diuretics.
3 What is application of combinational chemistry?
4 What are diagnostic Agents? Give one example with an application?
5 What is the action of anti ineffective drugs?
6 Some drug containing an ester group are inactive invitro but once the drug absorbed invivo. what term is used for such drug (i) post drug (ii) predrug (iii) Metabolite (iv) pro-drug
7 Define antithrombolytic.
8 Give popular brand name of following drugs.
(i) Cefadroxil (ii) Tinadazole (iii) ofloxacin (iv) melformin
9 Sketch the structure and medicinal use of chloramphenicol.
10 Write the mechanism of action of anti-angina agent.

PART – B (5 x 10 = 50 Marks)

11 (a) Write a note Antiscables and antipediculars agent.
(b) Write the SAR of tetracycline.

12 Write the synthesis, mechanism of action of following drug (i) cefadroxil (ii) Isomazy (iii) ampicillin (iv) metronidazole

13 (a) Classify sulphonamides. Give one example with structure for each class.
(b) Outline the synthesis of (i) Enalapris (ii) Mechlor ethamin

14 (a) Write the SAR of angio-tension - II antagonist.
(b) Write a note on antithyroid agents.

15 (a) Give a brief account on steroidal hormones.
(b) Write the synthesis of any two drugs belonging to class anti-malarial.

16 (a) Classify diuretics with examples. Write the synthesis of acetozolmide.
(b) Write a note on macrocide agent.

17 (a) Classify antihyper lidemic agents and write the synthesis any one of them.
(b) Outline the synthesis of Tolbutamide and metformin.

18 (a) Write a note on local infective agents.
(b) Classify the pro-drug and enlist the ideal property.

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Code No. 7298

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Instant) Examination, January 2014

Subject : Pharmaceutical Analysis

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1	Explain fluorescence and phosphorescence phenomena.	2
2	Give different types of fuel gases and oxidants used in flame photometry technique.	2
3	Explain Beer-Lambert's law.	2
4	Define chemical shift and give different scales for its measurement.	2
5	Explain Bathochromic and Hypsochromic shifts with examples.	2
6	Write Ilkovic's equation and explain.	2
7	Give advantages of amperometric titrations over potentiometry.	2
8	Explain current-voltage curve in polarography.	2
9	Give Nernst equation for calculation of Electrode potentials.	2
10	Write differences between HPLC and HPTLC techniques.	2

PART – B (5 x 10 = 50 Marks)

11	Write ICH guidelines for validation of HPLC methods	10
12	Describe the instrumentation and working of IR-spectrophotometer with a neat sketch.	10
13	Discuss the principles of separation by electrophoresis and give details of gel electrophoresis.	10
14	Describe the different components of a differential scanning calorimeter	10
15	Discuss the principle and theory involved in NMR and ESR techniques	10
16	Explain in detail about the detectors used in gas chromatography.	10
17	a) Explain optical Rotary dispersion and circular dichroism.	5
	b) Write the principles of Mass spectroscopy and about different types of peaks in mass spectrum	5
18	Write about single component methods for analysis of medicinal substances by UV-visible spectrophotometry.	10

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Code No. 7301

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Instant) Examination, January 2014

Subject : Medicinal Chemistry

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1	What is combinational chemistry? Write its application in the drug discovery.	2
2	Classify antimalarials with one example for each class.	2
3	Give structures, IUPAC name of any two sulphonamides used as antibacterials.	2
4	Write a note on β-lactamase inhibitors.	2
5	Write structure, mechanism of action of any one coumarin derivative as anticoagulant.	2
6	Write a note on angiotensin-II antagonists.	2
7	Write structure, mechanism of action of any two drugs belonging to sulphonylureas as oral hypoglycaemic agents.	2
8	Write the structures of any two diagnostic agents in evaluating kidney function.	2
9	Exemplify any four steroidal anti-inflammatory drugs. Write structures of any two.	2
10	Give popular brand name for the following : i) Cephelexin ii) Chloroquin iii) Metformin iv) Ketoconazole	2

PART – B (5 x 10 = 50 Marks)

11	a)	Define QSAR and explain about Hansch and Free-Wilson analysis.	6
	b)	Write a note on loop diuretics.	4
12	a)	Write the applications of prodrug with suitable examples.	4
	b)	Outline the synthesis, mechanism of action, uses of the following : i) Ciprofloxacin ii) Metronidazole	2 x 3 = 6
13	a)	Give the synthesis, mechanism of action, uses of the following : i) Chloroquin ii) Ketoconazole	2 x 3 = 6
	b)	Write a note on aminoglycoside antibiotics.	4
14	a)	Classify anthelmentic drugs with one example for each class.	2
	b)	Outline the synthesis, mechanism of action, uses of the following : i) Isoniazid ii) Albendazole iii) Methotrexate	2.5+2.5+3
15	a)	Classify diuretics with one example for each class.	2
	b)	Write a note on : i) Calcium channel blockers	5
		ii) Bile acid sequestrants as antihyperlipidemic agents	3
16		Write a note on : i) anti anginal agents ii) Biguanides as oral hypoglycaemic agents iii) Androgens and anabolic agents	4+3+3
17	a)	Classify alkylating agents with one example for each class. Write the synthesis, mechanism of action of any one drug.	4
	b)	Outline the synthesis, mechanism of action, uses of the following : i) Captopril ii) Triamterene	2x3=6
18		Write a note on : i) Antithyroid drugs ii) Anti AIDS agents iii) Local anti infective agents	3+4+3

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Code No. 7299

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Instant) Examination, January 2014

Subject : Pharmacotherapeutics - II

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1. Write the monitoring parameters for drugs used in T.B. 2
2. List out any two drugs which can lead to acute tubular necrosis and obstructive nephropathy. 2
3. Differentiate Rheumatoid arthritis from osteoarthritis. 2
4. Mention the etiology for psoriasis. 2
5. Write specific diagnosis for T.B. 2
6. List out the opportunistic infections in HIV. 2
7. Write a note on clinical presentation of rheumatoid arthritis. 2
8. List out diagnostic criteria for viral infections. 2
9. Write the epidemiology and etiology for breast cancer. 2
10. Write the pathophysiology for chemotherapy induced nausea and vomiting. 2

PART – B (5 x 10 = 50 Marks)

11. Write a note on :
    a) Management of Malaria 5
    b) Management of Leukemia 5

12. Write a note on :
    a) Management of fungal infections 6
    b) Pathophysiology of Meningitis 4

13. Write a note on :
    a) LRTI 6
    b) Pathophysiology of Endocarditis 4

14. a) Write the management for complications in CKD. 6
    b) Write a note on clinical presentation and complications of malaria. 4

15. a) Write a note on clinical presentation and pathophysiology of SLE. 7
    b) Mention types and clinical presentation of syphilis. 3

16. a) Write the management for drug induced renal disease. 6
    b) Write the clinical presentation and management of scabies. 4

17. Write a note on :
    a) Etiopathogenesis and Management of T.B. 7
    b) Pathophysiology of Psoriasis 3

18. Write a note on :
    a) Management of Septicemia 4
    b) Pathophysiology and management of Rheumatoid arthritis 6

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Code No. 7302

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Instant) Examination, January 2014

Subject : Pharmaceutical Formulations

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1	Enumerate the advantages of soft gelatin capsules.	2
2	List out the different types of tablets.	2
3	Differentiate between dosator and dosing disc for capsule filling.	2
4	Define suspension and emulsion with examples of preparation for each.	2
5	Differentiate between creaming and cracking.	2
6	Explain the leak test for parenterals.	2
7	Distinguish between flocculated and deflocculated suspensions.	2
8	List out different types of waters used in pharmaceutical dosage form preparations.	2
9	What is displacement value? How is it calculated?	2
10	Compare and contrast between conventional and controlled release dosage forms with suitable examples.	2

PART – B (5 x 10 = 50 Marks)

11	Discuss about the different granulation techniques for the preparation of tablets.	10
12	a) Distinguish between diffusible and indiffusible solids. b) Write the procedure for the preparation of calamine lotion and its evaluation by sedimentation ratio.	2 8
13	a) Write about the following evaluation tests for parenteral dosage forms. i) Invivo pyrogen testing ii) Clarity test b) Add a note on working of laminar air flow.	6 4
14	Define the following controlled drug delivery systems i) Transdermal ii) Ocular iii) Rectal iv) Buccal v) Implants	10
15	Describe the different types of ointment bases used with their advantages and limitations.	10
16	Discuss about the types of packaging materials used and types of packing of pharmaceutical dosage forms.	10
17	Write about the preparation of suppository with examples.	10
18	Explain the steps involved in sugar coating technique with the compositions of coating liquids at each steps.	10

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Code No. 4265

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmacotherapeutics - II

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Write a brief note on newer diagnosis tests for tuberculosis.
2 How is pyelonephritis treated?
3 What are the commonly used regimens for treatment of malaria?
4 Write a note on xanthine oxidase inhibitors and its role in management of Gout.
5 Give clinical presentation of eczema.
6 Write a brief note on spondylitis.
7 What are the treatment options for acute renal failure?
8 What are the risk factors for Breast cancer?
9 Define and classify Leukemias.
10 Define community acquired and hospital acquired pneumonia.

PART – B (5 x 10 = 50 Marks)

11 (a) Discuss the treatment of candidiasis and Asperigillosis.
(b) What are the antibiotics used prophylactically for Gastro intestinal surgeries?

12 Write notes on : (a) SLE (b) Scables

13 (a) Write a note on clinical presentation and diagnosis of Rheumatoid Arthritis.
(b) Write the principle behind peritoneal dialysis along with a note on its complications.

14 (a) Explain the pathogens involved and the management of infective endocarditis.
(b) Explain the role of integrase inhibitors and entry inhibitors in the treatment of HIV infection along with examples.

15 (a) Write a note on Acute tubular necrosis along with its prevention.
(b) Discuss the complications of chronic kidney diseases.

16 (a) Give a brief account on the vaccination for influenza.
(b) Elaborate on the treatment of malaria.

17 (a) Write a note on treatment of early Breast cancer.
(b) Write a note on the various chemotherapeutic agents inducing nausea and vomiting.

18 (a) Describe the various strategies used to treat Osteoarthritis.
(b) Write the pathogen involved and the pharmacotherapy for Gonorrhea.

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Code No. 4266

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmaceutical Jurisprudence

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Define F and F1 Schedules according to D & C Act.

2 Give the labeling requirement for hair dyes containing dyes, colors and pigment.

3 What is the definition drug spurious according to D & C Act?

4 What are ‘Animal’ and ‘Cruelty’ under Prevention of Cruelty to Animal Act?

5 What is Loan license?

6 What are the categories of alcoholic preparations which exempt from excise duty according to Excise Duties Act?

7 Enlist the separate kind of licenses for selling of drug in ‘Pharmacy’ and ‘Chemist and druggist shop’.

8 Mention the formula to calculate Retail Price under Drug (Price Control) Order 1995.

9 What are ‘Patent’ and ‘Patentee’ under Patent and Design Act’?

10 What is the definition of Opium according to D & C Act?

PART – B (5 x 10 = 50 Marks)

11 Describe in detail on Wholesale of drug.

12 What are the classes of drugs which are exempted from provision of Chapter IV and D & C Act?

13 Write about administrative agencies under NDPS Act and Rules.

14 Write the constitution and function of State as well as Joint State Pharmacy Council.

15 Discuss about the Registration of Designs under Design Act.

16 Discuss the warehousing of alcoholic preparation.

17 Describe in detail on Central Drug Laboratory.

18 What are the objectives of National Drug Policies 2002?

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Code No. 4263

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmacology - II

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are anticoagulants? Write their therapeutic uses.
2 Write a note on Fibrionlytics.
3 Explain about osmatic diuretics.
4 Explain about Acetazolamide.
5 Classify antifungal agent with example.
6 Classify anticancer drugs.
7 Explain about suicidal bags of the cell.
8 What are the principles involved in toxicology?
9 Explain onchogenes and tumor suppressor genes.
10 Define mutations, deletions and amplifications.

PART – B (5 x 10 = 50 Marks)

11 What are the basic principles of transcription in pro and eukaryotes and discuss the factors that regulate transcription?

12 What are the different toxicity studies? Explain how to design a protocol for chronic toxicity studies.

13 Explain the mechanism of action, pharmacological activity uses and adverse effects of Loop Diuretics.

14 What are signal transduction pathways explain any four of them?

15 Write the mechanism of action, therapeutic uses and adverse effects of
(a) Penicillins
(b) Tetracyclines

16 Explain in detail about chemotherapy of tuberculosis.

17 What is Recombinant DNA technology? Write their processes and applications.

18 Describe about gene sequencing and mapping.

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Code No. 4264

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Pharmaceutical Analysis

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 Write the principle involved in gel filtration.
2 Define linearity and robustness.
3 Name different type of detectors use in GLC.
4 Distinguish between HPLC and HPTLC.
5 Define Hook's law and write its equation.
6 Write about the reference electrode used in potentiometry.
7 Explain the principle of separation involved in ion exchange chromatography
8 Write the composition of karlfischer reagent.
9 Explain different ions in mass spectroscopy.
10 Write the principle involved in AAS.

PART – B (5 x 10 = 50 Marks)

11 Write short note on :
(a) ICH – guidelines
(b) Regulatory control

12 Discuss the principle and instrumentation of IR spectroscopy.

13 Explain the principle and instrumentation of gel electrophoresis.

14 Discuss the principle and different amperometric titration.

15 (a) Write about different analyzers used in Mass spectroscopy.
(b) Define chemical shift and list the various factors affecting it.

16 Write the instrumentation and applications of HPTLC.

17 Explain the principle and development technique of column chromatography.

18 Describe the construction and working of X-Ray diffraction methods.

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Code No. 4267

FACULTY OF PHARMACY

Pharm. D (6 YDC) III-Year (Main) Examination, July 2017

Subject : Medicinal Chemistry

Time : 3 Hours **Max. Marks: 70**

Note: Answer all questions from Part - A and answer any five questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1 What are various parameter used in QSAR?
2 Give two structure of Loop diuretics.
3 What is application of combinational chemistry?
4 What are diagnostic Agents? Give one example with an application?
5 What is the action of anti ineffective drugs?
6 Some drug containing an ester group are inactive invitro but once the drug absorbed invivo. what term is used for such drug (i) post drug (ii) predrug (iii) Metabolite (iv) pro-drug
7 Define antithrombolytic.
8 Give popular brand name of following drugs.
(i) Cefadroxil (ii) Tinadazole (iii) ofloxacin (iv) melformin
9 Sketch the structure and medicinal use of chloramphenicol.
10 Write the mechanism of action of anti-angina agent.

PART – B (5 x 10 = 50 Marks)

11 (a) Write a note Antiscables and antipediculars agent.
(b) Write the SAR of tetracycline.

12 Write the synthesis, mechanism of action of following drug (i) cefadroxil (ii) Isomazy (iii) ampicillin (iv) metronidazole

13 (a) Classify sulphonamides. Give one example with structure for each class.
(b) Outline the synthesis of (i) Enalapris (ii) Mechlor ethamin

14 (a) Write the SAR of angio-tension - II antagonist.
(b) Write a note on antithyroid agents.

15 (a) Give a brief account on steroidal hormones.
(b) Write the synthesis of any two drugs belonging to class anti-malarial.

16 (a) Classify diuretics with examples. Write the synthesis of acetozolmide.
(b) Write a note on macrocide agent.

17 (a) Classify antihyper lidemic agents and write the synthesis any one of them.
(b) Outline the synthesis of Tolbutamide and metformin.

18 (a) Write a note on local infective agents.
(b) Classify the pro-drug and enlist the ideal property.

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Code No. 2736 / M

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Main) Examination, September 2013

Subject : Pharmacotherapeutics – II

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1. What is the etiology for endocarditis? 2
2. Write a brief note on symptoms and diagnosis for HIV. 2
3. What are the adverse effects of chemotherapy and radiation? 2
4. Write a note on Biological DMARDS and its complications. 2
5. Write the American college of rheumatology diagnostic criteria for hip and knee osteoarthritis. 2
6. What are the risk factors for breast cancer? 2
7. Mention the types of Eczema. 2
8. Classify Leukemias. 2
9. Write the monitoring parameters for chromic kidney disease. 2
10. Define SLE and spondylitis. 2

PART – B (5 x 10 = 50 Marks)

11. Write note on
    a) Management of psoriasis 6
    b) Etiopathogenesis of impetigo 4

12.a) Write a note on clinical presentation and management of breast cancer. 7
    b) Write a brief note on hospital acquired pneumonia. 3

13.a) Describe the etiopathogenesis for osteoarthritis. 5
    b) Discuss pharmacological management of gastroenteritis. 5

14.a) Discuss the management of UTI. 7
    b) Discuss the management of chemotherapy induced nausea and vomiting. 3

15.a) Write the pathophysiology for HIV. 5
    b) Write a note on fungal infections. 5

16.a) Write the guidelines for rational use of antibiotics. 4
    b) Write a note on surgical prophylaxis of antibiotics for various surgeries. 6

17.a) Write the pathophysiology for septicemia. 6
    b) Discuss the management of gout. 4

18.a) Write a note on hemodialysis. 6
    b) Mention the advantages and disadvantages of hemodialysis and peritoneal dialysis. 4

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Code No. 2739 / M

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Main) Examination, September / October 2013

Subject : Medicinal Chemistry

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1. Write a note on bioprecursor prodrug. 2
2. Give structure, mechanism of action and use of any one antifungal antibiotic. 2
3. What are anticoagulants? Write structure, mechanism of action of any one drug. 2
4. Write structures, IUPAC name of any two antiseptics. 2
5. Classify antihelmentnic drugs with one example for each class. 2
6. List out any four antitubercular drugs. Write structure, mechanism of action of any one drug. 2
7. What are diagnostic agents? Write the structures of any two. 2
8. Write a note on antiscabies agents. 2
9. Write the structure of any two anti-tubercular agents. 2
10. Give popular brand name for the following drugs. 2
    i) Ciprofloxacin ii) Glimeperide iii) Furosemide
    iv) Amoxicillin and clavulinic acid

PART – B (5 x 10 = 50 Marks)

11. a) What is Prodrug? Write their classification based on the functional groups. 4
    b) Discuss SAR of Quinolones as antibacterials. 3
    c) Give synthesis, mechanism of action of Norfloxacin. 3

12. Write a note on the following with special reference to their chemistry
    i) Tetracyclines ii) β-blockers as antihypertensives 2 x 5 = 10

13. Outline the synthesis, mechanism of action, uses of the following : 4 x 2.5 = 10
    i) Isoniazid ii) Tinidazole iii) Sulphamethoxazole iv) Pyrimethamine

14. Write a note on the following : 4+3+3
    i) Semisynthetic Penicillins ii) Thiazide diuretics iii) Antianginal agents

15. a) Classify oral hypoglycaemic agents with one example for each class. 2.5
    b) Outline synthesis, mechanism of action of the following :
    i) Glibenclamide ii) Furosemide iii) Clofibrate 3 x 2.5 = 7.5

16. a) Write the structures, mechanism of action, therapeutic uses of any four anticancer agents from different class. 6
    b) Write a note on antiviral drugs. 4

17. a) Classify antihypertensives with one example for each class. 2
    b) Write synthesis, mechanism of action, uses of the following : 2 x 3 = 6
    i) Clonidine ii) Diltiazem
    c) Write structure, mechanism of action, uses of Artether. 2

18. Write a note on : i) Oral contraceptives ii) Antithyroid drugs
    iii) Class I antiarrhythmic agents 4+3+3

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Code No. 2734 / M

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Main) Examination, September 2013

Subject : Pharmacology – II

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1. Write a note on erythropoietin. 2
2. Explain about thiazide diuretics. 2
3. Write the adverse effects of aminoglycoside antibiotics. 2
4. Name the causative organism for malaria and giardiasis. 2
5. Classify anticancer agents. 2
6. Write a note on immunostimulants. 2
7. Explain about LD_{50}. 2
8. Write a note on P38 kinase. 2
9. Write the significance of paracrine and autocrine cell communications. 2
10. Write a note on tumor suppressor genes. 2

PART – B (5 x 10 = 50 Marks)

11. Write the pharmacology thrombolytic and anticoagulants. 10

12. Explain in brief about pharmacology of antidiuretics. 10

13. Explain in detail about antifungal agents. 10

14. a) Classify antiviral agents. 5
    b) Write the pharmacology of penicillins and polypeptide antibiotics. 5

15. Describe in detail about DNA replication. 10

16. Describe in detail about protein synthesis. 10

17. Describe in detail about determination sub acute and chronic toxicity. 10

18. Write in detail about 10
    a) Transcription factors b) Gene therapy

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Code No. 2735 / M

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Main) Examination, September 2013

Subject : Pharmaceutical Analysis

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1. Write the different factors effecting fluorescence phenomenon. 2
2. Explain different types of peaks in mass spectrum. 2
3. Give pharmaceutical applications on DSC technique. 2
4. State and explain Beer-Lamberts law. 2
5. Write the principle involved in conductometric titration of strong acid Vs strong base. 2
6. Write about sampling of solids in IR spectroscopy. 2
7. Give advantages and disadvantages of Hydrogen Electrode. 2
8. Explain about different derivatization techniques in gas chromatography. 2
9. Define retardation factor and how do you calculate. 2
10. Define validation and give the importance of validation of analytical methods. 2

PART – B (5 x 10 = 50 Marks)

11. Describe the calibration procedure of UV-visible spectrophotometers. 10

12. Write about different types of detectors used in HPLC chromatograph. 10

13. Discuss the principles and applications of flame photometry technique. 10

14.a) Write about different types of vibrations in IR spectroscopy. 5
b) Give applications of fluorimetry. 5

15.a) Give description and working of DME. 5
b) Write its advantages and disadvantages. 5

16.a) Write the principles and applications of DTA. 5
b) Make a note on X-ray diffraction patterns. 5

17.a) Explain different methods for measurement of potential and pH. 5
b) List out different types of Indicator and reference electrodes used in potentiometric titrations. 5

18. Discuss the principles and theory involved in NMR and ESR techniques. 10

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Code No. 2737 / M

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Main) Examination, September 2013

Subject : Pharmaceutical Jurisprudence

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1. Define Spurious drugs. 2
2. What is loan license? 2
3. Write the constitution of Animal Ethical Committee. 2
4. Give the labeling requirement for schedule H drug. 2
5. Define cosmetic as per D & C Act. 2
6. Write the objective of Essential Commodity Act 1955. 2
7. What is E.R.? 2
8. Give the qualification of Drug Inspector. 2
9. What is schedule X and Schedule Y. 2
10. What are non-prescription drugs? Give its examples. 2

PART – B (5 x 10 = 50 Marks)

11. Explain in detail, design, construction and manufacturing in bonded lab. 10

12. Describe the constitution and function of Pharmacy Council of India. 10

13. Define Ethics. Write a note on pharmacist in relation to his job. 10

14. What are the objective of DPCO? Explain the calculation of retail price of drug formulation. 10

15. Write a short note on :
    a) Drug Enquiry Committee 5
    b) Central Drug Laboratory 5

16. Give the various offences and penalties mentioned under Narcotic and Psychotropic substances Act and Rules. 10

17. Define Patent. Explain the non-patentable and patentable invention. 10

18. What are the objective and target of National Drug Policy? 10

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Code No. 2738 / M

FACULTY OF PHARMACY

Pharm D. (6 YDC) III – Year (Main) Examination, September / October 2013

Subject : Pharmaceutical Formulations

Time : 3 hours **Max. Marks : 70**

Note: Answer all questions from Part-A. Answer any FIVE questions from Part-B.

PART – A (10 x 2 = 20 Marks)

1. Describe the weight variation test for hard gelatin capsules. 2
2. Give the use of tablet coating and the types of coatings. 2
3. Describe the disintegration test for enteric coated tablets. 2
4. Define flocculation, coalescence and granulation. 2
5. List the quality control tests of emulsions. 2
6. Describe the LAL test for parenterals. 2
7. Define creams, ointments, pastes and gels. 2
8. List out the different types of glasses with their purpose of use in pharmaceutical packaging. 2
9. Define transdermal and implant systems. 2
10. Define Isotonicity? Give its application in parenterals. 2

PART – B (5 x 10 = 50 Marks)

11. Define the following tabletting problems with the solution to overcome. 10
    i) Picking and sticking ii) Mottling iii) Orange peel effect
    iv) Capping and Lamination

12. Discuss the preparation of soft gelatin capsules with a neat diagram. 10

Describe the preparation of emulsion with the following methods. 7
    i) Bottle method ii) Wet gum method iii) Dry gum method
b) Explain about the freeze-thaw cycle for evaluation of emulsions. 3

14. Discuss about the different suppository bases with their advantages and limitations. 10

15.a) Describe the general considerations for the preparation of eye ointments. 6
b) Add a note on preparation of eye ointment. 4

16.a) Write a note on theories of emulsification. 4
b) Discuss the principle and method of preparation of cold cream. 6

17. List out the different types of oral controlled release systems with their mechanism of drug release. 10

18.a) Differentiate between large volume and small volume parenterals. 5
b) Write about the different containers used for parenterals. 5

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