

FACULTY OF PHARMACY
Pharm. D (6 YDC) II-Year (Main) Examination, July 2017

Subject : Pharmacognosy and Phytopharmaceuticals

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 ergastic substances? Give examples.
- 2 Write about drying of crude drugs.
- 3 Define the terms : (a) Resin (b) Denaturation
- 4 Give the morphological classification of crude drugs with examples.
- 5 Explain the structure of calcium oxalate crystals with examples.
- 6 Explain the term : (a) Polyploidy (ii) Iodine value
- 7 Define and classify lipids with examples.
- 8 With the help of neat diagrams, give the powder characters of liquorice.
- 9 Mention the biological source and uses of sterculia.
- 10 Write about: (a) Kelles killiani test (b) Super critical fluid extraction method

PART – B (5 x 10 = 50 Marks)

- 11 (a) What are the different methods of classification of crude drugs? Write briefly about the chemical classification with examples.
(b) Explain the application of plant growth hormones.
- 12 (a) Define and mention the different methods of cultivation of medicinal plants. Mention the merits and demerits.
(b) Discuss scope of pharmacognosy.
- 13 (a) Explain how the mutation technique is helpful to improve the yield of medicinal compounds.
(b) Explain the structure of plant cell wall.
- 14 Write the pharmacognostic scheme of : (a) Ginger (b) Ergot
- 15 (a) Explain different methods of adulteration of crude drugs with examples.
(b) Write a note on natural pesticides.
- 16 With the help of neat labeled diagram explain the microscopical characters:
(a) Ephedra
(b) Datura
- 17 (a) Describe the method of preparation of cotton.
(b) What are different chemical classes of secondary metabolites? Write a short note on Tannins.
- 18 Discuss the biological source, chemical constituents and uses :
(a) Guggal (b) Ashwagandha (c) Gelatin

FACULTY OF PHARMACY
Pharm. D (6 YDC) II-Year (Main) Examination, July 2017

Subject : Pharmaceutical Microbiology

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 Fungi?
- 2 Write about virucide.
- 3 Explain Natural immunity.
- 4 What is medical microbiology?
- 5 Structure of Bacteriophage.
- 6 What is Generation time?
- 7 Define Antibody.
- 8 Write about selective media.
- 9 Write the significance of PCR.
- 10 What are Toxoids?

PART – B (5 x 10 = 50 Marks)

- 11 (a) Discuss the importance of microbes in industrial microbiology.
(b) Write a brief note on germ theory of disease with a mention of Koch's postulates.
- 12 (a) Describe the general characteristics of viruses.
(b) Write about Rickettsias.
- 13 (a) Discuss the various methods for isolation of bacteria.
(b) Write a note on bacterial stains and explain the different staining techniques.
- 14 (a) Discuss various methods for sterilization of pharmaceutical products.
(b) Write a brief note on test for sterility.
- 15 (a) What are disinfectants? Write about different classes of disinfectants with examples.
(b) Briefly explain Rideal-walker (RW) test.
- 16 (a) Describe Schick's test and mention its uses.
(b) Discuss about western blot test and its significance.
- 17 (a) Write a note on microbial assays of antibiotics.
(b) Write about pathogenesis, lab diagnosis and prevention of HIV.
- 18 (a) Describe antigen-antibody reactions.
(b) Give a brief account of infectious diseases – Tuberculosis

FACULTY OF PHARMACY
Pharm. D (6 YDC) II-Year (Main) Examination, July 2017

Subject : Community Pharmacy

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 coding. Write its importance.
- 2 Write the legal requirements to start the community pharmacy.
- 3 Define prescription. Write parts of prescription.
- 4 Define the term Lead time and Safety stock.
- 5 Write note on patient information leaflet.
- 6 Define medication adherence.
- 7 Define OTC drugs. Give any two examples.
- 8 Write the non pharmacological treatment for constipation.
- 9 Write the WHO definition of health.
- 10 Write clinical presentations of AIDS.

PART – B (5 x 10 = 50 Marks)

- 11 (a) Describe the role and responsibilities of community pharmacist.
(b) Write the staff required in community pharmacy.
- 12 Discuss the causative agents, clinical presentations and prevention of
(a) Gonorrhoea
(b) Malaria
- 13 (a) Write the space layout and design of community pharmacy.
(b) Explain the maintenance of registers in community pharmacy.
- 14 (a) Define inventory control. Write about EOQ method.
(b) Explain the role of pharmacist in family planning.
- 15 (a) Describe the methods used for screening of blood sugar.
(b) Write a note on lung function tests.
- 16 Write the pathophysiology and drug therapy for the following:
(a) Nausea and vomiting
(b) Constipation
- 17 (a) Define patient counseling. Write the stages of patient counseling.
(b) Write a note on balanced diet.
- 18 Write the code of ethics for community pharmacist.

FACULTY OF PHARMACY
Pharm. D (6 YDC) II-Year (Main) Examination, July 2017

Subject : Pharmacology-I

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 Explain the triple response of Histamine.
- 2 Write the advantages of oral route of administration.
- 3 Explain in brief about the types of Antagonism.
- 4 Write the treatment for Parkinsonism.
- 5 Write the classification of Bronchodilators.
- 6 What is the pathophysiological role of 5-HT(5-Hydroxy tryptamine)?
- 7 Write the adverse effects of Insulin.
- 8 Explain the mechanism of action of local anaesthetics.
- 9 Write the pharmacology of Nicotine.
- 10 Explain about Biotransformation reaction in brief.

PART – B (5 x 10 = 50 Marks)

- 11 Explain the factors modifying drug action.
- 12 Classify parasympathomimetics with examples. Write the mechanism of action, pharmacological actions and adverse effects of Acetyl choline.
- 13 (a) Classify the drugs used in congestive Heart failure.
(b) Explain in detail about the pharmacological actions of any one drug with adverse effects in Diabetes mellitus.
- 14 (a) What are Anti-Histamines? Classify with examples. Write the pharmacological actions of any one drug.
(b) Write a note on 5-HT antagonists.
- 15 (a) What are opioid analgesics? Write the classification with examples.
(b) Write the pharmacological actions, adverse effects and therapeutic uses of paracetamol.
- 16 (a) Classify sedatives and hypnotics with examples.
(b) Write a note on Anti-hyperlipidemic drugs.
- 17 (a) Explain Toxicity studies in detail.
(b) Write about the treatment of myasthenia gravis.
- 18 (a) Write the pharmacological actions of Insulin.
(b) Explain Drug-Drug Interactions with few examples.

FACULTY OF PHARMACY
Pharm. D (6 YDC) II-Year (Main) Examination, July 2017

Subject : Pathophysiology

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 the terms – Anaplasia and differentiation.
- 2 Write the deficiency symptoms of vitamin B.
- 3 Write a note on chemotaxis.
- 4 How do the free radicals are formed?
- 5 Represent the pathogenesis of Angina pectoris in the form of flow chart.
- 6 Write the clinical manifestations of ulcerative colitis.
- 7 How does wound healing takes place?
- 8 Write the formation of Advanced Glycation End products.
- 9 Write the etiology of parkinsonism.
- 10 What are the effects of smoking?

PART – B (5 x 10 = 50 Marks)

- 11 Write the etiopathogenesis of congestive Heart failure.
- 12 Explain the apoptosis process with a neat labeled diagram.
- 13 (a) Write the etiology of cancer.
(b) Write about the mechanism of Auto immunity.
- 14 (a) Define the term ‘bronchial Asthma’. Write the pathogenesis with a neat labeled diagram.
(b) Represent the pathogenesis of Atherosclerosis with a neat labeled diagram.
- 15 Write in brief about Type III and IV Hypersensitivity reactions.
- 16 (a) Explain the pathogenesis of AIDS.
(b) Write about different types of pneumonia.
- 17 (a) Define the term Hepatitis. Write about the etiopathogenesis.
(b) Write the pathogenesis of TB.
- 18 What are the cellular events of Inflammation? Explain in detail.

FACULTY OF PHARMACY

Pharm D (6 – YDC) II – Year (Main & Backlog) Examination, August 2016

Subject: Pathophysiology

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 Distinguish between Mania and Depression.
- 2 Enumerate different types of Angina pectoris.
- 3 Define the terms – Metaplasia and Hyperplasia.
- 4 Write the deficiency symptoms of vitamin C.
- 5 Write the pathophysiology of leprosy.
- 6 Explain the mechanism involved in Autoimmunity.
- 7 Draw a neat labelled diagram of B-Lymphocytes.
- 8 Write the clinical manifestations of Acute Renal Failure.
- 9 Write the biological effects of sulphur dioxide.
- 10 Represent the pathogenesis of peptic ulcer disease in the form of diagram.

PART – B (5x10 = 50 Marks)

- | | |
|--|----|
| 11 Write the etiopathogenesis of AIDS. | 10 |
| 12 a) Describe the structure of MHC (Major histocompatibility complex) with a neat labelled diagram. | 7 |
| b) Write the mechanism involved in transplant rejection. | 3 |
| 13 a) Write the pathogenesis of hypertension. | 6 |
| b) Differentiate between Ischemic and hemorrhagic stroke. | 4 |
| 14 a) Explain the cellular events of inflammation. | 6 |
| b) Write a note on complement system activation. | 4 |
| 15 a) Write in detail about RAS gene and P53 tumour suppressor genes. | 7 |
| b) Explain the etiology of cancer. | 3 |
| 16 Explain in detail about Type II and III Hypersensitivity reactions. | 10 |
| 17 a) Write the pathogenesis of Type I Diabetes Mellitus. | 5 |
| b) How are AGEs (Advanced Glycation End products) formed? | 5 |
| 18 a) Explain different causes of cell injury. | 3 |
| b) Explain in detail the formation of reactive oxygen species. | 7 |

FACULTY OF PHARMACY

Pharm. D II-Year (6 YDC) (Main & Backlog) Examination, August 2016

Subject : Community Pharmacy**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 Health.
- 2 Define OTC medication
- 3 Define Balance Diet
- 4 List various parts of prescription
- 5 Define patient counselling
- 6 Define Idiosyncrasy.
- 7 List out the factors to be considered during selection of appropriate site for community pharmacy.
- 8 Write the importance of coding and stocking.
- 9 Write the objectives of Inventory control.
- 10 Write the causative agents for AIDS and Typhoid.

PART – B (5 x 10 = 50 Marks)

- 11 Write about the causative agents, clinical presentation and prevention of :
(a) Tuberculosis (b) Leprosy (5+5)
- 12 (a) Explain the role of pharmacists family planning. (7)
(b) Write about the scope of community pharmacy. (3)
- 13 (a) Explain briefly about various drug interaction with relevant examples. (7)
(b) Write the legal requirements for the establishment of retail drug store. (3)
- 14 (a) Write the pathophysiology and common drug therapy of pyrexia. (6)
(b) Mention various types of cholesterol levels usually monitored in lipid profile tests and add note on the interpretation of abnormal values. (4)
- 15 (a) Write a note on the use of computers in community pharmacy. (4)
(b) Add a note on code of ethics for pharmacist and write about pharmacist in relation to his job and medical profession. (6)
- 16 (a) Define and describe various factors affecting medical adherence? (7)
(b) Write about screening of B.P. (3)
- 17 (a) Define Rational Drug use (RDU). Explain the role of pharmacist in improving RDU. (7)
(b) Define Hepatitis with their causative agents. (3)
- 18 (a) Explain various registers used in community pharmacy management. (7)
(b) Explain : (i) Lead Time (ii) Safety stock (3)

FACULTY OF PHARMACY

Pharm D (6 – YDC) II – Year (Main) Examination, August 2016

Subject: Pharmacology – I

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 Write about the Dale's vasomotor response of adrenaline.
- 2 Write the treatment for glaucoma.
- 3 Write the pathophysiological role of histamine.
- 4 Classify beta blockers with examples.
- 5 Write the adverse reactions of insulin.
- 6 Write the mechanism of action of metformin.
- 7 Explain cholinergic receptors in detail.
- 8 Write the actions of estrogens and progestins.
- 9 What is hydantoin syndrome?
- 10 Write the pharmacology of salbutamol.

PART – B (5x10 = 50 Marks)

- | | |
|--|----|
| 11 Classify adrenergic drugs with examples. Write the pharmacology of isoprenaline. | 10 |
| 12 a) Explain biotransformation reactions in detail. | 5 |
| b) How do you prolong a drug action? | 5 |
| 13 a) Write the treatment for bronchial asthma. | 7 |
| b) Write a note on nasal decongestants. | 3 |
| 14 a) Write the pharmacology of serotonin. | 7 |
| b) Write the treatment for migraine. | 3 |
| 15 a) Classify anti-anginal drugs with examples. | 3 |
| b) Write the pharmacology of quinidine. | 7 |
| 16 a) Classify sedatives and hypnotics with examples. Write their mechanism of action in detail. | 6 |
| b) Write the pharmacology of morphine. | 4 |
| 17 a) What are anti-histamines? Classify with examples. | 5 |
| b) Write the pharmacology of diuretics. | 5 |
| 18 a) Write the actions of insulin. | 3 |
| b) Explain the synthesis and regulation of thyroid hormones. | 7 |

FACULTY OF PHARMACY

Pharm. D II-Year (6 YDC) (Main & Backlog) Examination, August 2016

Subject : Pharmacognosy and Phytopharmaceuticals

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 the terms :
(a) Crude drug (b) Substitutes
- 2 List out different types of vegetative propagation methods with examples.
- 3 Write the biological source, chemical constituents of pyrethrum.
- 4 What are saponins? Give two identification tests.
- 5 With neat diagrams, give the powder characters of quassia.
- 6 Define the terms: (a) Zwitter ion (b) Swelling index
- 7 How do you distinguish Born tragger's and modified born tragger's test?
- 8 Define and classify proteins.
- 9 Write two identification tests for guar gum and sterculia.
- 10 List essential amino acids and write their structures.

PART – B (5 x 10 = 50 Marks)

- 11 (a) Give a brief account on cell inclusions with examples. (5)
(b) List out different systems of classification for crude drugs. Explain in indetail pharmacological classification with examples. (5)
- 12 (a) Discuss briefly the flavanoids with examples. (5)
(b) Write about different methods of crop improvement. Explain any one method with examples. (5)
- 13 (a) Define acid value. Explain the principle involved and method to determine it. (5)
(b) Write a note on importance of indole alkaloids with examples. (5)
- 14 (a) What are different processing parameters for the preparation of crude drugs to market. (5)
(b) Write about "lignin and pectin" as cell wall components. (5)
- 15 With a neat labelled diagram write the histological characters for
(i) clove (ii) podophyllum (5+5)
- 16 (a) Explain the structure of protein and list out different methods for its determination and explain any one in detail. (6)
(b) Define drug adulteration. Explain how to prevent it. (4)
- 17 (a) Classify natural fibres. Give the biological sources, chemical constituents and uses of hemp. (5)
(b) Write about purine alkaloids with examples. (5)
- 18 Write the biological source, chemical constituents and uses of : (4+3+3)
(a) Opium (b) Pale catehu (iii) Benzoin

FACULTY OF PHARMACY

Pharm. D II-Year (6 YDC) (Main & Backlog) Examination, August 2016

Subject : Pharmaceutical Microbiology**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 spirochetes?
- 2 Define Disinfection and Disinfectants.
- 3 What is Mckonkey's Agar media.
- 4 Write about the chemical nature of antigens.
- 5 What do you mean by Booster dose?
- 6 Write about negative staining and its applications.
- 7 What is endo toxin give examples?
- 8 Explain the term phagocytosis with examples.
- 9 Write about Indole test and its importance.
- 10 What is Widal test write its significance?

PART – B (5 x 10 = 50 Marks)

- 11 (a) Describe the history and development of microbiology. (5)
(b) Discuss the importance of microbes in medical microbiology. (5)
- 12 (a) Explain the physical conditions required for the growth of bacteria. (6)
(b) Write a note on cultivation of anaerobic bacteria. (4)
- 13 (a) Describe the general methods of classification for bacteria. (5)
(b) Explain the techniques used in bacterial and viral enumeration. (5)
- 14 (a) Discuss various methods of sterilization for pharmaceutical products. (6)
(b) Discuss in brief validation of sterilization process. (4)
- 15 (a) What are disinfectants? Explain the mode of action of common disinfectants. (5)
(b) Discuss in detail any one popular evaluation test for disinfectants. (5)
- 16 Give a brief account on
(a) blotting techniques. (6)
(b) PCR. (4)
- 17 (a) Write an essay on microbiological assays and discuss in detail the bioparameters controlling the microbiological assays. (6)
(b) Describe the process of standardization of vaccines. (4)
- 18 (a) Explain artificial immunity and how is it different from natural immunity. (5)
(b) Describe the different lab diagnostic tests and treatment for syphilis. (5)

FACULTY OF PHARMACY

Pharm. D II-Year (6 YDC) (Main & Backlog) Examination, August 2016

Subject : Pharmacotherapeutics – I

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 (a) SV Tachycardia (b) Ventricular Fibrillations
- 2 What is the role of incretins in Diabetes Mellitus?
- 3 Write briefly about rational drug use.
- 4 What are Inflammatory mediators?
- 5 What is Framingham Risk Assessment scale?
- 6 Define Teratogenicity with two examples.
- 7 Define HbA1C, along with the normal value in diabetics and pre diabetics.
- 8 What are the complications of Hormone replacement therapy?
- 9 Categorize Acute Coronary Syndrome.
- 10 Define FEV1 and Tidal volume.

PART – B (5 x 10 = 50 Marks)

- 11 Write a note on Pathophysiology and Pharmacological management of Congestive Heart Failure. (10)
- 12 (a) What is the role of Corticosteroids in treating pulmonary disorders? (5)
(b) Write a note on Viral Conjunctivitis. (5)
- 13 (a) Write a brief note on management of asthma. (5)
(b) Emergency contraception. (5)
- 14 Discuss the etiopathogenesis, risk factors of Hypertension and its management. (10)
- 15 Discuss Pharmacological and non pharmacological management of Dyslipidemia. (10)
- 16 Write notes on :
(a) Prescribing guidelines of Paediatrics (6)
(b) Myxoedema coma (4)
- 17 (a) Write a note on the role of Bisphosphonates in the treatment of osteoporosis along with its administration guidelines. (4)
(b) Write the place in therapy of the various Sulphonyl ureas and DPP4 inhibitors. (6)
- 18 Write in detail about Essential Drug concept. (10)

FACULTY OF PHARMACY

Pharm. D. II – Year (Instant) Examination, January 2014

Subject : Pathophysiology**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 the terms-Necrosis and Metaplasia. | 2 |
| 2 | Write a note on Benign tumors. | 2 |
| 3 | Differentiate Depression and Mania. | 2 |
| 4 | Write a note on Adhesion Molecules in inflammation. | 2 |
| 5 | Write the pathogenesis of Alcoholic Liver Disease. | 2 |
| 6 | Explain different types of Angina pectoris. | 2 |
| 7 | Write the deficiency symptoms of Vitamin C and Vitamin D. | 2 |
| 8 | What are the different biological effects of radiation? | 2 |
| 9 | Write the pathogenesis of chronic bronchitis. | 2 |
| 10 | Write the symptoms of Dysentery. | 2 |

PART – B (5 x 10 = 50 Marks)

- | | | |
|----|---|----|
| 11 | Explain the vascular events of Acute Inflammation. | 10 |
| 12 | a) Explain in detail shock management. | 6 |
| | b) Write a note on chemical mediators of Acute Inflammation. | 4 |
| 13 | a) Explain Immediate (Type-I) Hypersensitivity reaction. | 7 |
| | b) Write about the 'Arthus Reaction'. | 3 |
| 14 | a) Write the Etiopathogenesis of Bronchial Asthma. | 6 |
| | b) Explain different types of stroke. | 4 |
| 15 | a) Explain the Etiopathogenesis of Hypertension. | 6 |
| | b) Write about Hypertrophy in congestive cardiac failure. | 4 |
| 16 | Explain in detail about STDs (Sexually Transmitted Diseases). | 10 |
| 17 | a) Explain in detail about p53 tumor suppressor gene. | 6 |
| | b) Write about the process of Metastasis. | 4 |
| 18 | a) Write the Etiopathogenesis and Symptoms of Tuberculosis. | 6 |
| | b) Write the pathogenesis of Cirrhosis. | 4 |

FACULTY OF PHARMACY

Pharma. D. II Year (Instant) Examination, January 2014

Subject: Community Pharmacy

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 community pharmacy | 2 |
| 2 | Define pharmaceutical care | 2 |
| 3 | Define prescription and write the parts of prescription. | 2 |
| 4 | Write the causative organism for syphilis and gonorrhoea. | 2 |
| 5 | Write the drug therapy to dyspepsia. | 2 |
| 6 | Explain about VED analysis. | 2 |
| 7 | Define OTC medication. Give at least two examples. | 2 |
| 8 | Define safety stock. | 2 |
| 9 | Define health and health promotion. | 2 |
| 10 | Write the composition of balanced diet. | 2 |

PART – B (50 Marks)

- | | | |
|----|---|----|
| 11 | Write the role and responsibilities of community pharmacist. | 10 |
| 12 | Differentiate the terms administration and management and organization with their role in community pharmacy. | 10 |
| 13 | Define inventory control. Explain in detail about EOQ Method. | 10 |
| 14 | Define medication adherence. Explain the role of pharmacist in improving the adherence. | 10 |
| 15 | Explain the etiology, clinical presentations and prevention of | |
| | (a) AIDS | 5 |
| | (b) Malaria | 5 |
| 16 | Write the role of pharmacist in family planning. | 10 |
| 17 | Write in detail about care of geriatric patients. | 10 |
| 18 | Write the pathophysiology and drug therapy of the following: | |
| | (a) Pain | 5 |
| | (b) Constipation. | 5 |

FACULTY OF PHARMACY

Pharma. D. II Year (Instant) Examination, January 2014

Subject: Pharmacology – I

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 the terms tachyphylaxis and teratogenicity. | 2 |
| 2 | What is vasomotor reversal of Dale? | 2 |
| 3 | Give a note on insulin analogues. | 2 |
| 4 | What is triple response? | 2 |
| 5 | Write about the role of prostaglandins on kidney. | 2 |
| 6 | Give the differences between local anaesthetics and general anaesthetics. | 2 |
| 7 | What are Non-steroidal anti inflammatory agents? Classify them. | 2 |
| 8 | Write a note on Platelet activating factor. | 2 |
| 9 | Define Epilepsy and write the mechanism of action of phenytoin. | 2 |
| 10 | Explain about cholinesterases. | 2 |

PART – B (50 Marks)

- | | | |
|----|---|---|
| 11 | (a) Write in detail about factors modifying drug action. | 7 |
| | (b) Write a note on biotransformation reactions. | 3 |
| 12 | (a) What is congestive heart failure? Write in brief about drugs used in the treatment of congestive heart failure. | 7 |
| | (b) Classify hypolipidemic agents. Write a note on statins with examples. | 3 |
| 13 | (a) Give the pharmacology of adrenaline. | 7 |
| | (b) Write a note on mydriatics and miotics. Give examples. | 3 |
| 14 | (a) Write a note on 5-HT antagonists with examples. | 5 |
| | (b) Give a detailed note on pharmacological actions of histamine. | 5 |
| 15 | (a) What are hypoglycaemics? Classify oral hypoglycaemics and write in detail about them. | 6 |
| | (b) Enumerate the actions of insulin. | 4 |
| 16 | Write notes on | |
| | (a) Central nervous system stimulants. | 5 |
| | (b) Pharmacological actions of Levodopa. | 5 |
| 17 | (a) Define and classify bronchodilators. | 3 |
| | (b) Explain in detail any two classes of bronchodilators. | 7 |
| 18 | Write short notes on: | |
| | (a) Drug Interactions | 5 |
| | (b) Anti thyroid drugs | 5 |

FACULTY OF PHARMACY

Pharma. D. II Year (Instant) Examination, January 2014

Subject: Pharmacognosy and Phytopharmaceuticals

Time: 3 Hours

Max.Marks: 70

Note: Answer all questions from Part A. Answer any five questions from Part B.**PART – A (2 x 10 = 20 Marks)**

- 1 Explain the terms:
(a) Secondary metabolite (b) Rancidity
- 2 What is Enfleurage? Write about it.
- 3 Draw a neat labelled diagram of plant cell.
- 4 Explain (a) Gunmosis (b) Rolled Towel test.
- 5 Define 'Glycosides'. Classify with examples.
- 6 Diagrammatically explain powder characters of fennel.
- 7 How does starch differ from cellulose?
- 8 Write any two identification tests for alkaloids.
- 9 Write about and functions of proteins.
- 10 Define 'Lipid'.

PART – B (50 Marks)

- | | |
|--|----|
| 11 (a) Write a note on structural composition of plant cell wall | 5 |
| (b) Write about morphological classification of crude drugs with examples. | 5 |
| 12 (a) Write histological characters of (i) Digitalis (ii) Cinnamon. | 6 |
| (b) What are (i) Liebermann Buchard test (ii) Borntrager's test. | 4 |
| 13 (a) Write various merits of obtaining drugs from cultivated plants. | 5 |
| (b) What are the various benefits of using natural pesticides. Write about Pyrethrum and Nicotine. | 5 |
| 14 Write important pharmacognostic details of ISAPGOL & TRAGACANTH. | 10 |
| 15 (a) Write various qualitative tests for amino acids and proteins. | 5 |
| (b) Discuss procedure for determination of primary structure for protein. | 5 |
| 16 (a) Write ideal conditions for storage of crude drugs. | 4 |
| (b) Write a note on drug adulteration. | 6 |
| 17 (a) Write a note on plant growth stimulators. | 4 |
| (b) Define iodine value and saponification value. Write procedure for determination of iodine value. | 6 |
| 18 (a) Write in detail extraction method for Olive Oil. | 5 |
| (b) Write about any two methods for estimation of proteins. | 5 |

FACULTY OF PHARMACY

Pharm. D. II – Year (Instant) Examination, January 2014

Subject : Pharmaceutical Microbiology

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)

Write about

- | | | |
|----|---|---|
| 1 | Relationship between Aquatic and Medical Microbiology | 2 |
| 2 | Bacteriophages | 2 |
| 3 | Autotrophs and Heterotrophs | 2 |
| 4 | Spore staining | 2 |
| 5 | Membrane Filters | 2 |
| 6 | Definition of immunity | 2 |
| 7 | Definition of Antiseptic | 2 |
| 8 | PCR Widal | 2 |
| 9 | Definition of Vaccines | 2 |
| 10 | T.B. Vaccine | 2 |

PART – B (5 x 10 = 50 Marks)

- | | | |
|----|---|---|
| 11 | a) Write about the Historic developments of Microbiology. | 5 |
| | b) Discuss the Major Divisions of Microbiology. | 5 |
| 12 | a) Discuss general characteristics of Fungi. | 5 |
| | b) Discuss about general properties of bacteria. | 5 |
| 13 | a) Describe Cultivation of Virus. | 5 |
| | b) What are the nutritional requirements of bacteria? | 5 |
| 14 | a) Describe the different staining methods of bacteria. | 5 |
| | b) Discuss the chemical methods of sterilization. | 5 |
| 15 | a) Discuss classification of Immunity. | 7 |
| | b) Discuss about fungicidal agents. | 3 |
| 16 | a) Describe the Microbiological Assay of Streptomycin. | 6 |
| | b) Describe standardization of Vaccines. | 4 |
| 17 | a) Discuss cultivation, pathology and diagnosis (Lab) of typhoid causing bacteria | 5 |
| | b) Discuss cultivation, pathogenicity, lab diagnosis of cholera bacteria. | 5 |
| 18 | a) Discuss about toxoids and their significance | 5 |
| | b) Discuss about the Immunization programme | 5 |

FACULTY OF PHARMACY

Pharm D. II – Year (Instant) Examination, January 2014

Subject : Pharmacotherapeutics – I

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 Rational Drug use. | 2 |
| 2 | Write about diagnosis and treatment for Gestational Diabetes mellitus. | 2 |
| 3 | Write about drug induced pulmonary diseases. | 2 |
| 4 | Explain the applications of hormone replacement therapy. | 2 |
| 5 | Define and write the causes of unstable angina. | 2 |
| 6 | What is Corpulmonale and write the causes for it? | 2 |
| 7 | What is meant by diabetic coma? | 2 |
| 8 | Write briefly about the pharmacokinetic changes that occur in a pregnant woman. | 2 |
| 9 | Write a short note on Essential drug concept. | 2 |
| 10 | Write the role of β -Blockers in the treatment of glaucoma. | 2 |

PART – B (5 x 10 = 50 Marks)

- | | | |
|----|---|-----|
| 11 | a) Describe the pathophysiology of myocardial infarction.
b) Explain the ECG changes in Arrhythmias. | 7+3 |
| 12 | a) Explain the management of hypothyroidism.
b) Explain the treatment for diffuse toxic goiter. | 7+3 |
| 13 | a) Explain the drug therapy for Type II diabetes mellitus.
b) Explain the glucose tolerance test. | 6+4 |
| 14 | a) Explain the pathophysiology of primary hypertension.
b) Describe the role of ACE inhibitors on hypertension. | 7+3 |
| 15 | a) Explain in detail about osteoporosis.
b) Write short notes on oral contraceptives. | 6+4 |
| 16 | a) Write in detail about the clinical manifestation of Chronic Obstructive Pulmonary Disease.
b) Write the role of Methylxanthines in the treatment of COPD. | 7+3 |
| 17 | a) Define hyperlipidemia and write the causes of atherosclerosis.
b) Explain the drug therapy for hypelipedemic conditions. | 4+6 |
| 18 | a) Explain the prescribing guidelines for pediatrics.
b) Explain the treatment for open angle glaucoma. | |
