Code No: D-8325/CBCS

### **FACULTY OF PHARMACY**

## B. Pharmacy VI - Semester (CBCS)(Backlog) Examination, August 2022

Subject: Pharmacology - II

Time: 3 Hours Max. Marks: 70

## **Note: Answer any five questions:**

 $(5 \times 14 = 70 \text{ Marks})$ 

- 1 (a) Classify anti-fungal agents. Explain the pharmacology of any one agent.
  - (b) Explain about mechanism of action of protein synthesis inhibitors?
- 2 (a) Explain chemotherapy of Tuberculosis.
  - (b) Anti-metabolites in the cancer chemotherapy.
- 3 (a) Write about Eicosanoids.
  - (b) Write about Non-sedative antithistamines.
- 4 (a) Write about the role of Nitric oxide as a chemical mediator.
  - (b) Write in detail about anticoagulants.
- 5 (a) Explain in detail about anti-thyroid drugs.
  - (b) Write in brief about Oral contraceptives.
- 6 (a) Describe briefly about Oral hypoglycemic agents.
  - (b) Discuss about insulin and its preparations.
- 7 (a) What is bioassay? Explain various types of bioassays.
  - (b) Explain about bioassay of oxytocin.
- 8 (a) Write a note on bioassay of tuberculin vaccine.
  - (b) Explain the bioassay of heparin and adrenaline.
- 9 (a) Describe the phases of clinical trials.
  - (b) Write symptoms and treatment of Organophosphorus poisoning.
- 10 (a) Write symptoms and treatment of Digitalis toxicity.
  - (b) Write a note on Methyl alcohol toxicity.

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B. Pharmacy VI Semester (CBCS) (Backlog) Examination, August - 2022 Subject: Physical Pharmacy-II

Time: 3 Hours Max. Marks: 70

Note: Answer any five questions. Draw neat and labelled diagrams where ever necessary.

- 1. (a) Explain Solubility of solids in liquids.
  - (b) Describe the influence of foreign substances and temperature on solubility of solids in liquids.
- 2. (a) Describe the solubility of gases in liquids
  - (b) Write a note on Phase rule
- 3. (a) Derive and explain first order kinetic equation with an example
  - (b) Explain apparent zero order kinetics with an example.
- 4. (a) Explain the effect of solvents, ionic strength, dielectric constant and on reaction rates.
  - (b) Explain decomposition by Hydrolysis and how do you prevent it.
- 5. (a) Describe any one method for measurement of surface and interfacial tension.
  - (b) Write a note on Surface Free Energy.
- 6. (a) Write a note on adsorption at solid/gas interface using Freundlich and Langmuir absorption isotherms.
  - (b) Write a note on Zeta potential.
- (a) Classify dispersed systems. Add a note on particle shape and size of colloidal particles.
  - (b) Write a note on association colloids.
- 8. (a) Describe any one method for determination of particle size.
  - (b) Write a note on packing arrangements and densities.
- 9. (a) Describe pharmaceutical application of polymers.
  - (b) Classify viscometers. Add a note on rotational viscometers.
- 10.(a) Explain Plastic, Pseudoplastic and dilatant flow with examples.
  - (b) Describe different types of polymers.

B. Pharmacy VI – Semester (CBCS) (Backlog) Examination, September 2022
Subject: Pharmacotherapeutics

Time: 3 Hours Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks.

- 1 (a) Describe the etiopathogenesis and pharmacotherapy of Myocardial infarction.
  - (b) Write general prescribing guidelines for Pediatric patients.
- 2 Explain in detail management of asthma.
- 3 (a) Write about hormone replacement therapy.
  - (b) Describe the etiology for HIV and opportunistic infections.
- 4 What are the basic principles of cancer therapy? Describe chemotherapy of breast cancer.
- 5 Write short note on
  - (i) Oral contraceptives
  - (ii) Osteoporosis
- 6 Explain in detail drug induced pulmonary diseases.
- 7 (a) Write the therapeutic approach for the management of spondylitis.
  - (b) Explain the management of Type-II diabetes.
- 8 (a) What are the guidelines for rational use of antibiotics.
  - (b) Write a note on urinary tract infections.
- 9 (a) Explain the rationale for drug therapy of tuberculosis.
  - (b) Write the etiology of psoriasis.
- 10 Describe the etiology of
  - (i) Glaucoma
  - (ii) Fungal infections

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Code No: D-8329/CBCS

## **FACULTY OF PHARMACY**

# B. Pharmacy VI – Semester (CBCS) (Backlog) Examination, September 2022 Subject: Quality Assurance

Time: 3 Hours Max. Marks: 70

Note: Answer any five questions. All questions carry equal marks

- 1 Explain the quality assurance for packaging material and finished products.
- 2 Write a brief note on the following
  - a) Sources of variation.
  - b) Quality assurance of equipment.
- 3 Explain in detail the In-process quality control tests for Parenterals.
- 4 Briefly describe the following
  - a) In-process quality control tests for suspensions.
  - b) Problems encountered and trouble shooting in IPQC.
- 5 Explain the steps involved in ISO-9000 registration process.
- 6 a) Briefly describe the quality audit process.
  - b) Explain different types of audits.
- 7 Explain the following
  - a) Personnel in the QC lab
  - b) Evaluation of test results in QC lab
- 8 Explain the following:
  - a) Root cause analysis
  - b) Out of Trend and out of Specifications
- 9 Give a detailed account of general notices and monographs in Indian Pharmacopoeia.
- 10 Explain the following:
  - a) Effects of Impurities on drug stability
  - b) Sources of impurities

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B. Pharmacy VII - Semester (CBCS) (Backlog) Examination, September 2022 Subject: Biopharmaceutics and Pharmacokinetics

Time: 3 Hours Max. Marks: 70

Note: Answer any five questions.

- 1 a. Explain briefly about various theories proposed for dissolution.
  - b. Write a note on pH partition theory. Mention its importance.
- 2 a. Discuss the physicochemical factors affecting the absorption of drugs.
  - b. What are the various mechanisms of drug absorption? Discuss the mechanism of passive diffusion.
- 3 a. Explain the kinetics of protein binding.
  - b. Briefly describe the process of drug distribution in the body and enumerate the factors affecting it.
- 4. a. Name the physiological barriers for drug distribution with the help of suitable diagrams and explain them.
  - b. Explain the significance of protein binding.
- 5 a. Explain about non renal routes of excretion of drug and factors influencing them.
  - b. Write factors influencing the metabolism of drugs.
- 6 Explain Phase-I and Phase-II biotransformation reactions.
- 7 a. Discuss the method of residual for calculation of absorption rate constant.
  - b. Explain the methods of adjusting the dose and dosage regimen in patients with renal diseases with equations.
- 8 a. Explain any three methods of determing AUC.
  - b. Describe one compartment open model drug disposition with first order absorption with relevant equations and applications.
- 9 A 50 Kg woman given a single IV dose of an antibiotic at a dose level of 6 mg/kg and following data was obtained. Assume that the drug follows one compartment open model. Calculate all possible pharmacokinetic parameters.

Time Hrs	0.25	0.5	1.0	3	6	12	18
Plasma							
Concentration (mg/ml)	8.21	7.87	7.23	5.15	3.09	1.11	0.4

10. A dose of 100 mg of drug is administered by rapid IV injection. Blood samples were taken periodically after administration of drug and plasma fraction is assayed. Data is as follows:

Time Hrs	0.25	0.5	1.0	1.5	2.0	4.0	8	12	16
Plasma									
Concentration	43	32	20	14	11	6.5	2.8	1.2	0.52
(mg/ml)									

Assume that the drug follows two compartment kinetics and calculate the following.

a) A b) C<sub>max</sub>

c)  $\alpha$  d)  $\beta$  e) k12

f) k 21

## B. Pharmacy VI -Semester (Main & Backlog) Examination, September 2022 Subject: Herbal Drug Technology

Time: 3 Hours Max. Marks: 75

#### PART - A

Note: Answer all the questions.

 $(10 \times 2 = 20 \text{ Marks})$ 

- 1. Define and exemplify Ayurvedic product and herbal drug preparation.
- 2. Write principle of Unani system of medicine.
- 3. Write about Breeder's right.
- 4. Write composition and functions of ASUDTAB.
- 5. Write about spirulina as health food.
- 6. Define asavas and arishtas. Give two examples each.
- 7. Write about health foods.
- 8. What is traditional knowledge? Give examples.
- 9. Write about any two natural binders.
- 10. Classify nutraceuticals giving examples.

#### PART - B

Note: Answer any two questions.

 $(2 \times 10 = 20 \text{ Marks})$ 

- 11. Write about principles of integrated pest management. Give a detailed account of biopesticides.
- 12. Elaborate on the WHO guidelines for assessment of herbal drugs.
- 13. Write a note on: a) Phytosomes b) Herbal disintegrants.

#### PART - C

Note: Answer any seven questions.

 $(7 \times 5 = 35 \text{ Marks})$ 

- 14. Explain about the methods for identification and authentication of herbs.
- 15. Write a note on preparation and evaluation of bhasmas.
- 16. Discuss the role of nutraceuticals in the prevention, therapy and management of cancer.
- 17. Write the role of antioxidants in herbal formulations. Give a brief account of these materials.
- 18. Write a short note on schedule Z.
- 19. What is bioprospecting policy? Give an overview of the process of bioprospecting herbs as medicines.
- 20. Give a brief account of herbal hair dyes.
- 21. Write a detailed note on herb drug interactions.
- 22. List objectives of Schedule T.

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B. Pharmacy VI Semester (CBCS) (Backlog) Examination, September 2022

Subject: Pharmacognosy – II

Time: 3 Hours Max. Marks: 70

Note: Answer any five questions.

 $(5 \times 14 = 70 \text{ Marks})$ 

- 1. (a) Give biological source, chemical constituents and uses of Datura and Ephedra.
  - (b) Write the Biological sources microscopical features and adulterants of

i) Vasaka

ii) Cinchona

- 2. (a) Write the source, chemistry and therapeutic uses of Colchicum and Rauwolfia
  - (b) Define alkaloids. Write the classification, general tests and isolation methods of alkaloids
- 3. (a) What are cardiac glycosides, classify and write the chemistry, mechanism action of digitalis?
  - (b) Describe the pharmacognostic study of Indian senna
- 4. (a) Define and classify glycosides with suitable examples
  - (b) Write the pharmacognostic description of Liquorice
- 5. (a) Write the isolation and estimation of tannic acid from myrobalan
  - (b) Write the biological source, chemical nature and uses of
    - i) Fennel

ii) Cinnamon

- 6. (a) Discuss the general methods of extraction of volatile oils
  - (b) Write a brief note on chemical constituents, identification tests and uses of capsicum and Asafoetida
- 7. (a) What are callus and cell suspension cultures, give the characteristics of suspension Culture
  - (b) Discuss about nutritional requirements of an ideal plant tissue culture medium.
- 8. (a) Write about immobilization and its application in plant tissue culture
  - (b) Write a note on sterilization of explants.
- 9. (a) Write a note on quality control and standardization of raw materials used in herbal medicines.
  - (b) Write the method of preparation of Ghritams, Bhasmas.
- 10. (a) Give a note on discovery of new drugs from natural source
  - (b) Explain microscopic evaluation of crude drugs.

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Code No: D 8213/CBCS

#### **FACULTY OF PHARMACY**

# B. Pharmacy VI – Semester (CBCS) (Backlog) Examination, February 2022 Subject: Physical Pharmacy-II

Time: 3 Hours Max. Marks: 70

Note: Answer any five questions.

 $(5 \times 14 = 70 \text{ Marks})$ 

- 1 a) Explain solubility of gases in liquids and discuss the factors effecting gaseous state solubility.
  - b) Differentiate salvation and association in solutions.
- 2 a) Discuss about complete and partial miscibility. Add a note on three component systems with an example.
  - b) Write a note on solvent solute interactions.
- 3 a) Explain firstorder reaction, derive an equation for first order rate with an example.
  - b) How do you determine order of a reaction?
- 4 a) Describe Accelerated Stability studies.
  - b) Explain decomposition by hydrolysis and how do you prevent it.
- 5 a) Explain any one method for measurement of surface and interfacial tension.
  - b) Write a note on Surface Free Energy.
- 6 a) Discuss Adsorption at solid interfaces.
  - b) Write a note on Spreading Coefficient.
- 7 a) Explain any two methods for determination of particle size.
  - b) Write a note on Porosity.
- 8 a) Explain kinetic properties of colloids.
  - b) Differentiate lipophilic and lipophobic colloids.
- 9 a) Explain Non-Newtonian Systems and their flow properties.
  - b) Describe the Pharmaceutical applications of Polymers.
- 10 a) Describe the principle and working of Capillary Viscometer.
  - b) Explain Thixotropy in formulations.

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Code No: D-8216/CBCS

## **FACULTY OF PHARMACY**

## B. Pharmacy VI - Semester (CBCS)(Backlog) Examination, February / March 2022

**Subject: Forensic Pharmacy (Pharmaceutical Jurisprudence)** 

Time: 3 Hours Max. Marks: 70 Note: Answer any five questions: (5 x 14 = 70 Marks)

- 1. (a) Write the constitution and functions of Pharmacy Council of India.
  - (b) What are the objectives of consumer protection act 1986 and narrate the powers and functions of central council?
- Define Narcotic drugs as per the Narcotic psychotropic substances act 1985.
   Write about the official procedures for cultivation production of opium and sale and distribution of opium products.
- 3. (a) Write about the qualification and duties of Government Analyst.
  - (b) Write a note on sale and distribution of schedule X drugs.
- 4 (a) What are different administrative bodies under Drugs and cosmetics act 1940 and explain about the constitution and functions of DTAB.
  - (b) Define cosmetic and explain the prohibition of cosmetics for import, manufacture and sale according to D & C 1940.
- 5 Explain the labeling requirements for all categories of drugs and cosmetics according to drugs and cosmetics Act 1940 along with the specimen labels of Schedule G and Schedule X.
- 6 (a) Describe the objective of medicinal and toilet preparations and discuss layout and construction of bonded laboratory.
  - (b) Write short notes on schedule U.
- 7 (a) What is magic remedy and advertisement and discuss about prohibited advertisement related to drugs and magic remedies act 1954.
  - (b) Discuss the constitution of Central Committee for Food Standards.
- 8 Define "factory" according to factories act 1948 and describe the objectives of factories act. Discuss about the provisions provided for the Welfare of workers in a factory.
- 9 (a) What is a Patent? What are inventions according to Patent Act? Write about the procedure of obtaining patent.
  - (b) Explain briefly objectives of Pharmaceutical Policy2002.
- 10 (a) What are the objectives of DPCO 2013? And explain the formula used for the calculation of ceiling price and retail orice of a formulation as per Drug Price Control 2016. Pulla Reddy College of Pharmacy
  - (b) Define IPR and write about valid (b) Define IPR and write about valid (c) Table (c

## B. Pharmacy VI - Semester (CBCS) (Backlog) Examination, February / March 2022

**Subject: Pharmacognosy-II** 

Time: 3 hours Max marks: 70

Note: Answer any five questions.  $(5 \times 14 = 70 \text{ Marks})$ 

- 1. a) Define alkaloids and give general method used for isolation of alkaloids.
  - b) Write biological source, chemical constituents and uses of Cinchona and Ipecac.
- 2. a) Write a detail pharmacognotic study of Vinca.
  - b) Give biological source, chemical constituents and uses of Colchicum and Lobelia.
- 3. a) Write a pharmacognostic note on Liquorice.
  - b) Define and classify glycoside with various examples.
- 4. a) Give biological source, chemical constituents and uses of Gymnema, Senna and Momordica.
  - b) What do you mean by cardiotonic drugs? Write a note on chemical constituent of Digitalis with mechanism of action.
- 5. a) How will you isolate and characterize Sennoside from senna.
  - b) Give biological source, chemical constituents and uses of Cinnamon and Asafoetida.
- 6. a) Write a note on method of isolation and characterization of quinine from Cinchona bark.
  - b) Give biological source, chemical constituents and uses of Artemisia and Turmeric.
- 7. a) Write a descriptive note on biotransformation technique with example.
  - b) Explain various applications of plant tissue culture.
- 8. a) Write a note on embryo culture and single cell culture.
  - b) Explain in brief clonal propagation.
- 9. a) Write a descriptive note on physical method of crude evaluation.
  - b) Give the method of preparation for any two ayurvedic formulations.
- 10. a) Write a note on chemical and biological evaluation of crude drug.
  - b) Explain various types of ash and give their significance.

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### B. Pharmacy VI - Semester (CBCS) (Backlog) Examination, February 2022

Subject: Pharmacology - II

Time: 3 Hours Max. Marks: 70

Note: Answer any five questions.

 $(5 \times 14 = 70 \text{ Marks})$ 

- 1 (a) Discuss the basic principles involved in chemotherapy.
  - (b) Write about mechanism of action of penicillin's and cephalosporin's.
- 2 (a) Classify anti cancer agents.
  - (b) Write the mechanism of action, therapeutic uses and adverse effects of alkylating agents.
- 3 (a) Write a note on:
  - (a) H<sub>2</sub>- receptor antagonists
  - (b) Leucotrienes.
- 4 Write a note on
  - (a) 5-HT agonists and antagonists
  - (b) Thrombolytic agents.
- 5 Write short notes on:
  - (a) Anti pituitary hormones.
  - (b) Write about Oxytocics and Tocolytics.
- 6 (a) Write in brief about oral hypoglycemic agents.
  - (b) Describe brief about Sex hormones.
- 7 (a) Discuss in detail about principles of bioethics and bioassays.
  - (b) Discuss merits and demerits of Bioassay.
- 8 (a) Write a note on bioassay of insulin.
  - (b) Write a note on bioassay of oxytocin.
- 9 (a) Describe the general principles of treatment of poison.
  - (b) Write a note on heavy metal poisoning.
- 10 Write the symptoms and treatment of
  - (a) Barbiturate poisoning.
  - (b) Paracetamol poisoning.

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Code No: 12302/CBCS

## **FACULTY OF PHARMACY**

B. Pharmacy VI – Semester (CBCS) (Backlog) Examination, September 2021

Subject: Physical Pharmacy-II

Time: 2 Hours Max. Marks: 70

**Note: Answer any four questions** 

 $(4 \times 17^{1/2} = 70 \text{ Marks})$ 

- 1 a) Explain solubility of solids in liquids.
  - b) Write a note on three component systems.
- 2 a) Define partition coefficient. Add a note on its determination and applications.
  - b) Write a note on Phase rule.
- 3 a) Explain the effect of temperature and light on reaction rates.
  - b) Define Rate, order of a reaction and molecularity.
- 4 a) Describe Specific and General acid base catalysis.
  - b) Explain decomposition by oxidation and how do you prevent it.
- 5 a) Explain Capillary rise method for measurement of surface and interfacial tension.
  - b) Differentiate surface tension and Interfacial tension.
- 6 a) Discuss Electric properties of interfaces.
  - b) Write a note on Solubilisation and detergency.
- 7 a) Compare the properties of colloidal solutions
  - b) Write a note on association colloids.
- 8 a) Describe any one method for determination of surface area.
  - b) Write a note on Flow properties of powders.
- 9 a) Explain Thixotropy and negative thixotropy.
  - b) Describe Newton's law of flow with examples of Newtonian and non-newtonian systems.
- 10 a) Describe the principle and working of Falling Sphere Viscometer.
  - b) Describe different types of polymers.

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Code No: 12303/CBCS

### **FACULTY OF PHARMACY**

## B. Pharmacy VI-Semester (CBCS)(Backlog) Examination, September 2021

Subject: Pharmacology - II

Time: 2 Hours Max. Marks: 70

Note: Answer any four question.

 $(4 \times 17^{1/2} = 70 \text{ Marks})$ 

- 1 (a) Discuss the basic principles involved in chemotherapy.
  - (b) Write about mechanism of action of penicilins and cephalosporins.
- 2 (a) Classify anti cancer agents.
  - (b) Write the mechanism of action, therapeutic uses and adverse effects of alkylating agents.
- 3 Write a note on:
  - (a) H<sub>2</sub> receptor antagonists
  - (b) Leucotrienes
- 4 Write a note on
  - (a) 5-HT agonists and antagonists
  - (b) Thromobolytic agents.
- 5 Write short notes on:
  - (a) Anti pituitary hormones
  - (b) Write about Oxytocics and Tocolytics
- 6 (a) Write in brief about oral hypoglycemic agents.
  - (b) Describe brief about Sex hormones.
- 7 (a) Discuss in detail about principles of bioethics and bioassays.
  - (b) Discuss merits and demerits of Bioassay.
- 8 (a) Write a note on Bioassay of insulin.
  - (b) Write a note on bioassay of oxytocin.
- 9 (a) Describe the general principles of treatment of poison.
  - (b) Write a note on heavy metal poisoning.
- 10 Write the symptoms and treatment of
  - (a) Barbiturate poisoning
  - (b) Paracetamol poisoning

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## B. Pharmacy VI-Semester (CBCS) (Backlog) Examination, September 2021

Subject: Pharmacognosy-II

Time: 2 hours Max Marks: 70

Note: Answer any questions.

 $(4 \times 17^{1/2} = 70 \text{ Marks})$ 

- 1. a) Define alkaloids and give their classification with examples. Give general test for identification of alkaloids
  - b) Write biological source, chemical constituents and uses of Nux-vomica and Vasaka.
- 2. a) Write a detailed pharmacognotic study of Rauwolfia.
  - b) Give biological source, chemical constituents and uses of Datura and Ephedra.
- 3. a) Define glycoside and classify it with example. Give Sttas-Otto method for isolation of glycoside.
  - b) How will you differentiate various types of Aloe by chemical tests?
- 4. a) Write a detailed pharmacognostic note on Senna.
  - b) Give biological source, chemical constituents and uses of Digitalis and Shatavari.
- 5. a) How will you isolate and characterize Caffiene from tea.
  - b) Give biological source, chemical constituents and uses of Gaultheria oil and Clove.
- 6. a) Write a note on method of isolation and characterization of quinine from cinchona bark.
  - b) Give biological source, chemical constituents and uses of Pyrethrum and Taxus.
- 7. a) Write a descriptive note on immobilization technique.
  - b) Give various nutritional requirements for plant tissue culture.
- 8. a) Write a note on callus and cell suspension culture.
  - b) Explain organogenesis in brief.
- 9. a) Write a descriptive note on quality control of raw material.
  - b) How will you prepare Asava and Arishta.
- 10.a) Write a note on Lycopodium spore method and leaf constants.
  - b) Explain morphological evaluation of crude drug.

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**Code No: 12305 /CBCS** 

 $(4 \times 17^{1/2} = 70 \text{ Marks})$ 

## **FACULTY OF PHARMACY**

B. Pharmacy VI-Semester (CBCS)(Backlog) Examination, September 2021 **Subject: Forensic Pharmacy (Pharmaceutical Jurisprudence)** Time: 2 Hours Max. Marks: 70

- Note: Answer any four question. 1 (a) Enlist the objectives of pharmacy act 1948. Write the constitution and functions of State and Joint Pharmacy Councils.
  - (b) Explain about the educational regulations as per the Pharmacy Act 1948.
- 2 (a) Define Ethics and explain in detail about pharmaceutical ethics.
  - (b) Explain about the different Consumer Dispute Redressal Agencies according to Consumer Protection Act.
- 3 (a) Write about the qualification and duties of drug inspector.
  - (b) Write a note on requirements as per the drugs and cosmetics Act for the manufacture of schedule C and C I drugs.
- 4 (a) Discuss the organization and functions of Central and State level drug control authorities.
  - (b) Define cosmetic and explain the prohibition of cosmetics for import, manufacture and sale according to D & C 1940.
- 5 (a) Write about schedule Y as per the drugs and cosmetics Act 1940.
  - (b) Explain the packaging requirements for drugs and cosmetics according to Drugs and Cosmetics Act 1940.
- 6 (a) Describe the procedures for manufacture of alcohol containing products in non-bonded laboratories.
  - (b) What are the following schedules under Drugs and Cosmetic Act stand for :
    - 1. Schedule P 4. Schedule X
- - 2. Schedule F
- 5. Schedule Y 5. Schedule M
- 3. Schedule C
- 7 (a) What is magic remedy and advertisement and discuss abut prohibited advertisement related to drugs and magic remedies act 1954?
  - (b) What are the qualifications, duties and functions of food inspector?
- 8 Define "factory" according to factories act 1948 and describe the objectives of factories act. Discuss about the provisions provided for the Welfare of workers in a factory.
- 9 (a) What are inventions and non-inventions according to Patent Act? Write about the procedure for obtaining a patent.
  - (b) Define IPR and write about various types of Intellectual Property Rights.
- 10 (a) What are the objectives of DPCO 2013? And explain the formula used for the calculation of ceiling price and retail price of a formulation as per Drug Price Control 2013.
  - (b) Explain briefly objectives of Pharmaceutical Policy 2002.

## B. Pharmacy 3/4 II Semester (Non-CBCS) (Backlog) Examination, September 2021

**Subject: Bio-Statistics (Pharmacostatistics)** 

Time: 2 Hours Max. Marks: 70

Note: Answer any four questions. (4 x  $17^{1/2} = 70$  Marks)

- 1 (a) Write the significance of central tendency.
  - (b) Write a note on correlation.
- 2 (a) Explain about SD and SEM.
  - (b) Write a note on least square principle.
- 3 (a) Explain about stem and leaf plots.
  - (b) Write a note on Poisson distribution.
- 4 (a) Write a short note on scope of statistical methods and their limitations.
  - (b) Write a note on Bi-nominal distribution.
- 5 (a) Write about cluster sampling procedures.
  - (b) Write the importance of 2D plot.
- 6 (a) Explain about the systematic sampling techniques.
  - (b) Write a short note on non-sampling errors.
- 7 (a) Write a note on point estimation and interval estimation.
  - (b) Explain about the applications of parametric tests.
- 8 (a) Write a note on hypothesis testing.
  - (b) Write the advantages of non-parametric tests.
- 9 (a) Explain about the Un-paired students-t test.
  - (b) Describe about the complete block design.
- 10 (a) Discuss about the Chi-square test.
  - (b) Describe about the two way ANOVA.

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Code No: 12306/CBCS

## **FACULTY OF PHARMACY**

## B. Pharmacy VI - Semester (CBCS) (Backlog) Examination, September 2021

**Subject: Pharmacotherapeutics** 

Time: 2 hours Max. Marks: 70

Note: Answer any four questions.  $(4 \times 17^{1/2} = 70 \text{ Marks})$ 

- 1 Define Hypertension. Describe non-pharmacological and pharmacological therapy for Hypertension.
- 2 Briefly summarize the step wise management of Chronic Asthma in adults. Write a short note on pathophysiology of COPD.
- 3 Explain the management of Type2 Diabetes Mellitus. Briefly describe the Antiresorptive therapy for Osteoporosis.
- 4 Write a short note on clinical presentation and management of Thyrotoxicosis. Write a brief note on Hormone Replacement Therapy.
- 5 Give a detailed account of prescribing guidelines for Pregnancy and Lactation.
- 6 Explain the dosing in geriatric patients. Add a note on dose calculations in paediatrics.
- 7 Explain the following:
  - (a) Uncomplicated lower UTI
  - (b) Any one upper Respiratory Tract Infection
- 8 Explain the causative organisms, clinical features and treatment of Endocarditis.
- 9 Give a detailed account of chemotherapy of Breast cancer.
- 10 Explain the treatment of the following diseases:
  - (a) Eczema
  - (b) Gout

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Code No: 12307/CBCS

#### **FACULTY OF PHARMACY**

# B. Pharmacy VI – Semester (CBCS) (Backlog) Examination, September 2021 Subject: Quality Assurance

Time: 2 Hours Max. Marks: 70

**Note: Answer any Four Questions** 

 $(4 \times 17^{1/2} = 70 \text{ Marks})$ 

1 a) Define quality control and quality assurance, Explain the concept of quality assurance.

- b) Explain the quality assurance of building and facilities.
- 2 Briefly describe the quality assurance of raw materials and production controls.
- 3 What is the importance of in-process quality control? Explain the IPQC tests for tablets.
- 4 Define IPQC and explain the following
  - a) Disintegration tests for tablets
  - b) Particle size distribution on suspensions
- 5 Give a brief overview of ISO-9000 series
- 6 Explain the following
  - a) Audit policy
  - b) Internal and external audits.
- 7 Explain the following
  - a) Organization of QC laboratory
  - b) Safety guidelines in a QC lab
- 8 Explain the following:
  - a) Good documentation practices
  - b) Corrective and Preventive actions
- 9 Briefly describe the following
  - a) Sources of impurities
  - b) Analytical methods for determination of impurities
- 10 a) Explain the concept of purity angle, threshold and flag.
  - b) Write a short note on ICH guidelines on impurities

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# B. Pharmacy VI-Semester (CBCS) (Backlog) Examination, November2020 Subject: Physical Pharmacy - II

Time: 2 Hours Max. Marks: 70

Note: Answer any Four questions.

 $(4x17^{1/2} = 70 \text{ Marks})$ 

- 1. (a) Write about the distribution law and enlist applications of the distribution law.
  - (b) Write about Solubility of solids in liquids, Ideal and non ideal solutions.
- 2. (a) Explain in detail about effect of ionic dissociation and molecular association on partition and extraction.
  - (b) How to calculate the solubility of weak electrolytes as influenced by pH.
- 3. Explain Decomposition and destabilization of medicinal agents against hydrolysis and oxidation and give the preventive measures against such decomposition.
- 4. (a) Explain Specific and General acid base catalysis.
  - (b) Write different methods for determination of order of a reaction.
- 5. (a) Write a note on adsorption at solid/gas interface using Freundlich and Langmuir adsorption isotherms.
  - (b) Explain in detail about Surface active agents along with applications.
- 6. (a) Differentiate surface and interfacial tension. Explain in detail about Capillary rise method for the determination of surface tension.
  - (b) Define HLB. Give different methods of estimation of HLB value.
- 7. (a) Differentiate the three types of colloids and explain the methods of preparation of Lipophobic colloids.
  - (b) Write a note on sedimentation method for the determination of particle size using andreasen apparatus.
- 8. (a) Explain various kinetic properties of colloidal dispersions.
  - (b) Write in detail about various derived properties of powders.
- 9. (a) Explain Newton's law of flow of fluids an describe about cup and bob viscometer along with diagram.
  - (b) Explain polymers as thickening agents in detail.
- 10. (a) Write a note on measurement of Thixotropy and explain the importance of Thixotropy in formulation.
  - (b) Explain different types of non Newtonian systems with Rheograms.

# B. Pharmacy VI-Semester (CBCS) (Backlog) Examination, October 2020

**Subject: Pharmacotherapeutics** 

Time: 2 Hours Max. Marks: 70

Note: Answer any four questions.  $(4X17 \frac{1}{2} = 70 \text{Marks})$ 

- 1. (a) Write briefly the pathophysiology of Heart failure.
  - (b) Write the algorithm for management of Hypertension with compelling Indications.
- 2. Elaborate on the pharmacological management for Type-II diabetes.
- 3. Write about the prescribing guidelines to be followed in pregnancy and breast feeding.
- 4. Write briefly about Drug therapy and therapeutic approach for management for HIV and fungal infections.
- 5. Describe the etiology for Urinary infections and Protozoal infection.
- 6. Describe the etiology for Gonorrhea and Syphilis.
- 7. (a) Write a note on Pulmonary function tests.
  - (b) Write a note on Myocardial Infraction.
- 8. Write briefly about Etiopathogenesis and pharmacotherapy for Rheumatoid Arthritis.
- 9. (a) Write briefly about Oral contraceptives.
  - (b) Write a note on Psoriasis.
- 10. Write a short note on
  - (i) Gout.
  - (ii) Hormone replacement therapy.

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# B. Pharmacy VI - Semester (CBCS) (Backlog) Examination, October 2020

Subject: Quality Assurance

Time: 2 Hours Max. Marks: 70

Note: Answer any four questions.  $(4X17 \frac{1}{2} = 70 \text{Marks})$ 

- 1. (a) Write in detail Quality Assurance of Raco Material.
  - (b) Explain the concept quality.
- 2. Mention in short GMP requirements for Building and Facilities in Pharmaceutical plant.
- 3. Write short note on IPQC of parenterals.
- 4. Define IPQC and explain IPQC tests for suspension.
- 5. Write about standard guidelines and selection requirements in ISO 9000.
- 6. (a) Define and classify Quality Audits.
  - (b) Discuss in short parameters to be checked during Audits of Pharma industry.
- 7. Define Quality Control and explain responsibilities of Quality Control personal.
- 8. Explain the term
  - (i) Out of standard.
  - (ii) Out of Trend.
- 9. (a) Define and classify Impurity.
  - (b) Explain different sources of Impurity in the production of tablet. Draw cause and effect diagram for the same.
- 10. Note on Characterization, Isolation and Analytical method development for impurities in drug substances.

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B. Pharmacy VI - Semester (CBCS) (Backlog) Examination, Oct/Nov. 2020 Subject: Forensic Pharmacy (Pharmaceutical Jurisprudence)

Time: 2 Hours Max. Marks: 70 Note: Answer any four questions. (4x17½=70 Marks)

- 1. Define Ethics and explain in detail about pharmaceutical ethics.
- 2. (a) What are the objectives of consumer protection act 1986 and narrate the powers and functions of central council.
  - (b) Enlist the objectives of pharmacy act 1948. Write about the constitution and function of state pharmacy council.
- 3. (a) Write about the qualification and duties of government analyst.
  - (b) Write a short note on Drug Enquiry Committee and Central Drug Laboratory.
- 4. (a) Write a note on sale and distribution of schedule C and X drugs.
  - (b) Explain the functions of pharmacy council of India.
- 5. (a) Write a note on Schedule Y.
  - (b) Write a short note on labeling requirements for all categories of drugs and cosmetics
- 6. (a) Describe the objective of medicinal and toilet preparations and discuss layout and construction of bonded laboratory.
  - (b) Write a short note on export of alcohol preparation.
- 7. What is magic remedy and advertisement and discuss about permitted and prohibited advertisement related to drugs and magic remedies act 1954.
- 8. (a) Write the qualifications, duties and powers of food inspector.
  - (b) Discuss the right, and provisions to be provided for welfare of workers according to factories act.
- 9. (a) Discuss about various intellectual properties. Write in brief the procedure of obtaining a patent.
  - (b) Describe the terms trademark, copyright and industrial design.
- 10.(a) Write the objectives of DPCO. Explain the calculation of retail price of drug formulation.
  - (b) Discuss salient features of patent act 1970 and 2005.

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# B. Pharmacy VI-Semester (CBCS) (Backlog) Examination, November 2020 Subject: Pharmacognosy - II

Time: 2 Hours Max. Marks: 70

Note: Answer any four questions.

 $(4 \times 17 \frac{1}{2} = 70 \text{Marks})$ 

- 1. (a) Write the systematic pharmacognostic study of Opium.
  - (b) Define alkaloids and write a classification of alkaloids with suitable examples.
- 2. (a) Describe the microscopial characters of following drug (i) Vasaka (ii) Cinchona
  - (b) Write the general chemical tests for identification of alkaloids.
- 3. (a) What are cardiac glycosides? Classify and discuss the chemistry, therapeutic uses and mechanism of action of digitalis.
  - (b) Give biological source, chemical constituents and uses of (i) Senna (ii) Psoralea.
- 4. (a) How the various Aloes are different from one another?
  - (b) Write the systematic pharmacognostic study of Digitalis.
- 5. (a) Describe method of isolation and estimation of Caffeine.
  - (b) Give biological source, chemical constituents with structure and uses of (i) Fennel (ii) Cinnamon.
- 6. (a) Describe method of isolation and estimation of Sennoside.
  - (b) Give various methods of isolation for volatile oil.
- 7. Give informative note on
  - (i) Clonal propogation (ii) Immobilization technique.
- 8. (a) Write a note on Biotransformation. Discuss biotransformation of any three secondary metabolites of medicinal plant species.
  - (b) Write a note on micro and macro elements used in culture media with their significance of use.
- 9. Write in detail about various Quality control methods for raw material.
- 10. (a) Write a note on Aristas, Bhasmas.
  - (b) Mention various traditional medicinal plants as source of new drug.

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# B. Pharmacy VI - Semester (CBCS) (Backlog) Examination, November 2020

	Subject: Pharmacology - II					
Ti	me: 2 Hours		Max. Marks: 70			
No	te: Answer any Four questions.	(4:	$x17^{1/2} = 70 \text{ Marks}$			
1.	<ul><li>(a) Enumerate mechanism of action of various synthesis inhibitors.</li><li>(b) Classify antileprotic drugs. Add note on</li></ul>	-0	protein			
2.	Write the mechanism of action, adverse effollowing:  (a) Alkylating agents.  (c) Quinine.	ects and therapeutic uses ( (b) Antifungal azoles. (d) Metronidazole.	of the			
3.	<ul><li>(a) Write the biosynthesis, storage and rele pharmacological action of histamine.</li><li>(b) Write about Eicosanoids.</li><li>(c) Nitric oxide donors and inhibitors.</li></ul>	ase of histamine. Explain				
4.	<ul><li>(a) Explain the steps involved in coagulation targeting agents on coagulation.</li><li>(b) Write the pharmacology of heparin. Expherin (LMWH).</li></ul>					
5.	(a) Explain the biosynthesis, storage, release (b) Classify antithyroid drugs. Discuss the part of the	-				
6.	Write a note on following: (a) Oral hypoglycaemic agents. (c) Insulin preparations	<ul><li>(b) Sex hormones.</li><li>(d) Corticosteroids.</li></ul>				
7.	<ul><li>(a) Discuss the principles and indications of</li><li>(b) Discuss the principles and importance of</li></ul>		es.			
	Discuss the bioassay of (a) Heparin. Write notes Symptoms and treatment of (a) Digitalis Poisoning. (b) Opium Poisoning.	(b) Oxytocin.				
10	.Write a note on: (a) Principles of toxicology.	(b) Clinical Trials.				

Max. Marks: 70

## FACULTY OF PHARMACY B. Pharmacy VI-Semester (CBCS) (Main) Examination, August 2019

**Subject: Pharmacotherapeutics** 

Time: 3 Hours

Note: Answer all questions. All questions carry equal marks. 1. (a) Briefly summarize step-wise management of Asthma in adults. (b) Write a short note on lipid-lowering therapy. (10+4)2. (a) Explain about any one Heart disease or disorder and the management and treatment. (14)3. Explain management of Type-1 & Type 2 diabetes and the drugs used to treat them.(14) 4. Explain the hypothyrodism and hyperthyroidism, and the drugs used to treat hypothyrodisim. (14)5. Discuss common clinical disorders affecting elderly people and modifications of drug therapy needed. (14)OR 6. Discuss about how the dosage changes can be affected for pediatric patients. (14)7. (a) Explain the causative organisms and targeted therapies for community acquired penunonia. (10)(b) Add a note on management of cold and flu. (4) OR 8. (a) Discuss pathagenesis of HIV infection. (7)(b) Write a note on HAART therapy. (7)9. (a) Explain the general principles of cancer therapy. (b) Discuss the chemotherapy for any one organ cancer. (7)OR 10. (a) What are the differences between Osteoarthritis and Rheumatoid arthritis. (7)(b) Explain clinical features and drug treatment of Gout. (7)

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## B. Pharmacy VI-Semester (CBCS) (Main) Examination, July 2019

Subject: Forensic Pharmacy (Pharmaceutical Jurisprudence)
Time: 3 Hours

Max. Marks: 70

Note: Answer all guestions. All guestions carry equal marks. 1. Define Narcotic drugs as per the Narcotic and psychotropic substances act 1985. write about the official procedures for cultivation and production of opium and sale and distribution of opium products. (14)2. Write the constitution and functions of Pharmacy Council of India. (14)3. (a) Write about the qualification and duties of Drug Inspector. (6) (b) Explain the constitution and role of DTAB. (8) 4. (a) Discuss the requirements as per the D & C Act for the manufacture of schedule X druas. (8) (b) Define cosmetic and explain the prohibition of cosmetics for import, manufacture and sale according to D & C 1940. (6) 5. Explain the labeling and packing requirements for drugs according to drugs and cosmetics Act 1940 along with the specimen labels of Schedule G and Schedule X drugs. (14)OR 6. What is the objective of Medicinal and Toilet preparation (Excise Duties) Act 1955? Write the procedure of manufacture of drugs and toilet preparations containing alcohol in a bonded laboratory and a non-bonded laboratory. (14)7. (a) What is a magic remedy? What kind of advertisements are exempted from the provisions of the drugs and magic remedies (objectionable advertisements) Act (9)(b) Discuss the constitution of Central Committee for Food Standards. (5) 8. Define "Factory" according to Factories Act. Discuss the salient features of the Factories Act with reference to the welfare measures to be taken for workers in a factory. (14)9. (a) What is a Patent? What are various Intellectual Property Rights? (7) (b) Define and discuss the procedure to obtain a patent. (7) 10. What is NPPA and it's function? Discuss about the Drug Price Control Order and explain the formula for calculation of retail price and fixation of ceiling price for scheduled formulation as per DPCO 2013. (14)

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Max. Marks: 70

## **FACULTY OF PHARMACY**

## B. Pharmacy VI-Sem. (CBCS) (Main) Examination, July 2019

Subject: Pharmacognosy - II

Time: 3 Hours

	Note: Answer all questions. All questions carry equal marks.
1.	(a) Write a brief not on Alkaloids. (5)
	(b) Give the specific chemical test and uses of I. Cinchona II. Purine alkaloids III. Tropane Alkaloids. (9)  OR
2.	<ul><li>(a) Write a pharmacognostic note on Opium.</li><li>(b) Describe the diagnostic characters of Ephedra and Kurchi with labeled diagram.</li><li>(6)</li></ul>
3	(a) Write a brief note on ashwagandha. (4)
0.	(b) Write a detail pharmacognostic note on Senna. (10)  OR
4.	Describe the following chemical tests with their importance
	(a) Keller kiliani test (b) Borntragers test (c) Cuproloin test (9) (d) Write a note on chemistry of cardiac glycosides. (5)
5.	(a) Write about the isolation and estimation of tannic acid from Myrobalan. (6)
	(b) Explain the microscopy and Adulterants of Clove. (8)  OR
6.	<ul><li>(a) Write the method of isolation of sennosides from senna leaves.</li><li>(5)</li><li>(b) Write the biological source, chemical constituents and uses of</li></ul>
	i. Artemisia ii. Turmeric iii. Podophyllum (9)
7.	(a) Write about the nutritional requirements of the ideal plant tissue culture medium. (10) (b) Write brief note about the sterilization techniques of Explant. (4)
8.	OR Write about i. callus culture ii. Suspension culture iii. Embryo culture. (5+4+5)
9.	(a) Write about the regulations of herbal medicine practice ion India. (5) (b) Write the method of preparation of i. Bhasmas ii. Ghritams iii.Churnas. (3+3+3)
10	OR . (a) Define i. Aristas ii. Asavas iii. Churnas. (3)
	(b) Write a detailed note on Quality control and standardization parameters of Raw materials used in Herbal preparations. (11)

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## B. Pharmacy VI-Semester (CBCS) (Main) Examination, July 2019

Subject: Pharmacology - II

Time: 3 Hours Max. Marks: 70

Note: Answer all questions. All questions carry equal marks.

1.	Write the mechanism of action, adverse effects and therapeutic uses of the following (i) Pencillin (ii) Macrolide antibiotics  OR	ng (7+7)
2.	(a) Classify antiviral drugs. Write the pharmacology of reverse transcriptase	
	inhibitors.	
	(b) Write a note on anti Metabolites?	(8+6)
3	(a) Write the pharmacology of scrotonin.	
Ο.	(b) Write the pharmacology of Scrotonin.  OR	(6+8)
4.	(4) 11111 3111 3111 3111 3111 3111 3111 3	
	(i) Iron (ii) Folic acid.	(0 - 0)
	(b) Write a note on thrombolytics.	(8+6)
5.	(a) Write a note on Oxytocics and Uterine stimulants.	
	(b) Write a note on Adrenocorticosteroids.	(7+7)
6	OR Explain the pharmacology of Insulin and Glucagon.	(14)
0.	Explain the pharmacology of insalin and Glacagon.	(17)
7.	Explain the bioassay of insulin and oxytocin.  OR	(14)
8.	Write the bioassays of diphtheria antitoxin and vasopressin.	(14)
		( · · · /
9.	(-, ,	
	(b) Write a note on barbiturate poisoning.  OR	(8+6)
10	(a) Write the symptoms and treatment of paracetamol and digitalis toxicity.	(0 - 0)
	(b) Explain the phases in clinical trials.	(8+6)

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## B. Pharmacy VI-Semester (CBCS) (Main) Examination, July 2019

Subject: Physical Pharmacy - II

Tir	ne: 3 Hours Max.	Marks: 70
	Note: Answer all questions. All questions carry equal marks.	
1.	<ul> <li>(a) Define and explain Phase rule. Explain the influence of Temperature and pressure on solubility of gases in liquids.</li> <li>(b) Explain various factors influencing solubility of drugs.</li> </ul> OR	7 7
2.	<ul><li>(a) Describe the effect of ionic dissociation and molecular association on part coefficient.</li><li>(b) Explain the relationship between solubility and partition coefficient.</li></ul>	ition 10 4
3.	<ul> <li>(a) Explain about decomposition of drugs and write about the preventive method</li> <li>(b) Derive and explain first order Kinetic equation.</li> </ul>	nods. 8
4.	<ul><li>(a) Discuss and explain the Accelerated stability testing of drugs.</li><li>(b) What is a pseudo order reaction? Explain it with example.</li></ul>	10 4
5.	<ul><li>(a) Define and explain the importance of surface and interfacial tension.</li><li>(b) What is HLB? How is it useful in preparation of various formulations?</li></ul> OR	7 7
6.	<ul><li>(a) Define and explain the applications of adsorption in pharmaceuticals.</li><li>(b) Describe the capillary rise method for the determination of surface tension</li></ul>	7 1. 7
7.	<ul><li>(a) Explain the various properties of colloidal systems.</li><li>(b) Write about any one method of particle size measurement and their import in formulations.</li></ul>	7 tance 7
8.	<ul><li>(a) Define and explain colloidal system and write about the types of colloids vexamples for each class.</li><li>(b) Write about the importance of particle size and shape and explain about pasize distributions.</li></ul>	7
9.	<ul><li>(a) Define &amp; explain Newtonian &amp; Non-Newtonian systems.</li><li>(b) Write about the polymers and their application as thickening agents in formulations.</li></ul> OR	
10.	(a) What is thixotropy? Explain Thixoropy with the help Rheograms and its applications. (b) Write about any two methods of determining viscosity.  Libřářý  G.Pulla Reddy College of Pharmacy	7 7
	Hyderabnad	

## B. Pharmacy VI-Semester (CBCS) (Main) Examination, August 2019

**Subject: Quality Assurance** 

Tir	me: 3 Hours Max. Marks	: 70
	Note: Answer all questions. All questions carry equal marks.	
1.	Define Quality control and Quality assurance and write its functions. Write a short not on aseptic process control and air handling systems.  OR	ote 14
2.	Explain briefly quality assurance of raw materials, and calibration of equipment.	14
3.	Explain in detail about IPQC tests for tablets.  OR	14
4.	Explain about IPQC tests for pareneterals.	
5.	Explain in detail about ISO certification procedure.  OR	14
6.	Write briefly about internal and external audits, Second and third party audits.	14
7.	Write short notes on  (a) Desirable qualities of analyst.  (b) Safety guidelines ion QC lab.  OR	7 7
8.	Write a brief note on  (a) Good documentation practices.  (b) Out of specifications.	7 7
9.	What are the sources of impurities and their effect on drug stability and therapeutic action?  OR	14
10	. What are the guidelines as per ICH or WHO for impurity and related substances?	14

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