Code No: G-13105/PCI

# FACULTY OF PHARMACY

## B. Pharmacy (PCI) VI - Semestar Backlog) Examination, March 2025 Subject: Quality Assurance

Time: 3 Hours Max. Marks: 75

#### PART - A

### Note: Answer all the questions.

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

- 1. What is TQM?
- 2. Mention elements of QbD.
- 3. List out the benefits of ISO accreditation.
- Name different personnel records in a pharmaceutical industry.
- 5. Name few equipment used in pharmaceutical industry.
- 6. Why GLP is necessary?
- 7. What are to be mentioned in a complaint to a pharma industry?
- 8. What is quality audit? Write different types of audits?
- 9. Write the significance of validation.
- 10. Mention different distribution records?

#### PART - B

Note: Answer any two questions

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

- 11. Discuss about ICH guidelines.
- 12. Discuss about different components of master formula.
- 13. What is Calibration? Write its significance and explain calibration of pH meter.

#### PART - C

## Note: Answer any seven questions

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

- 14. Write the procedure for NABL accreditation.
- 15. Explain the location, construction and sanitation of plant.
- 16. Write notes on maintenance of stores for raw materials.
- 17. Write quality control tests for glass containers.
- 18. Write notes on general provisions required to maintain GLP.
- 19. Discuss on recalling and waste disposal in pharma industry.
- 20. Explain about validation master plan.
- 21. Discuss on qualification of UV-Visible spectrophotometer.
- 22. Give informative notes on good warehousing practices.

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Code No: G-13102/PCI

# FACULTY OF PHARMACY

### B. Pharmacy (PCI) VI - Semester (Backlog) Examination, March 2025 Subject: Herbal Drug Technology

PART - A

Time: 3 Hours

Note: Answer all the questions.

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

Max. Marks: 75

- 1. What are the objectives of IPR?
- 2. Define the term Nutraceuticals.
- 3. What are antioxidants and give their importance.
- 4. Write the significance of natural excipient.
- 5. Define Aristas and Asawas.
- 6. List the plant based the research institutes in India.
- 7. What are the advantages of Farmers rights?
- 8. Give the source and health benefits of Amla
- 9. Give the source and interactions of Pepper.
- 10. Write a note on Authentication of plants.

PART - B

Note: Answer any two questions.

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

- 11. Explain the Good Agricultural practices in cultivation of Medicinal plants.
- 12. Elaborate the health benefits and role of Nutraceuticals in management of Diabetes.
- 13. List the skin care products. Explain the raw materials of herbal origin used in skin care products.

PART - C

Note: Answer any seven questions.

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

- 14. Define the term patent. Give its objectives and criteria for patent award.
- 15. What are the objectives of Schedule T. Write a note on Infrastructural requirements?
- 16. Write a note on patenting aspects of Traditional knowledge.
- 17. Classify the Excipients. Write the advantages and disadvantages of herbal Excipients.
- 18. Explain the Curcumin case study.
- 19. Give an informative note on scope and future prospects of Herbal Industry.
- 20. Write the health benefits of Spirulina and Honey.
- 21. Describe the role of colorants. Elaborate different colorants of natural origin.
- 22. Give the sources and sode effects and interactions of Hypercium.

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Code No. G-13100/PCI

# FACULTY OF PHARMACY

B. Pharmacy VI - Semester (PCI) (Backlog) Examination, March 2025 Subject: Medicinal Chemistry - III

Time: 3 Hours

Max. Marks: 75

PART - A

Note: Answer all the questions.

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

- 1. Write the mechanism of action of Pencillins?
- 2. Write the structure and uses of Chlortetracycline?
- 3. What are Macrolides, give few examples?
- 4. Give the applications of Prodrugs?
- 5. Write the structure and uses of Ciprofloxacin?
- 6. Write the mechanism of action of Acyclovir?
- 7. What are folate reductase inhibitors, give few examples?
- 8. Give the structure and uses of metronidazole?
- 9. Write the applications of combinatorial chemistry?
- 10. Define Partition coefficient, Hansch analysis?

PART - B

Note: Answer any two questions.

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

- 17. (a) Define antibiotics? Write the classification and SAR of Cephalosporins?
  - (b) Write the synthesis and uses of Chloramphenicol?
- 12. (a) Give the classification of antiviral agents with examples?
  - (b) Write the synthesis and uses of Nitrofurantion?
- 13. (a) Write the classification and SAR of Sulphonamides?
  - (b) Give the synthesis and mode of action of Diethylcarbamazine citrate?

PART - C

Note: Answer any seven questions.

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

- 14. Give a note on epimerization of Tetracyclines?
- 15. Write a note on β-Lactamase inhibitors?/
- 16. Write the synthesis, mode of action and uses of Chloramphenicol?
- 17. Give the classification of Antimalarial agents with examples (write any one structure for each class)?
- 18. Write the synthesis, MOA and uses of Isoniazid?
- 19. What are antifungal agents? Write the synthesis of Miconazole?
- 20. Give a note on combinatorial chemistry?
- 21. Write the classification of Anti-protozoal agents? Write the structure and uses of Tinidazole and Ornidazole?
- 22. Write the structure, synthesis and uses of Dapsone?

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Code No. G-13104/PCI

## FACULTY OF PHARMACY

## B. Pharmacy (PCI) VI - Semester (Backlog) Examination, March 2025 Subject: Pharmaceutical Biotechnology

Time: 3 Hours

Max. Marks: 75

(10 x 2 = 20 Marks)

#### PART - A

#### Note: Answer all the questions.

1. Define biosensors. Write the main components of biosensors.

- 2. Write a brief note on penicillinase.
- 3. Write about types of aerators in Fermenter.
- 4. What is protein engineering?
- 5. Differentiate exonucleases and endonucleases.
- 6. Describe the importance linkers and adapters.
- 7. Differentiate between exotoxins and endotoxins.
- 8. Define the following:
  - a. Cosmid b. Toxoid.
- 9. Write a note on DNA ligase.
- 10. What are monoclonal antibodies? Mention its uses.

PART - B

Note: Answer any two questions

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

- 11. Write the significance of microbial biotransformation, Explain various methods of biotransformation.
- 12. Discuss the production of Penicillin by fermentation process.
- 13. Discuss the preparation & purification of Dextran, Plasma substitute.

#### PART - C

#### Note: Answer any seven questions.

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

- 14. Discuss about PCR.
- 15. Describe in brief about cloning vectors.
- 16. Discuss type II Hypersensitivity and type III Hypersensitivity reactions.
- 17. Explain basic principles of genetic engineering.
- 18. What are mutations? Explain the types of mutations.
- 19. Write about IgG and IgE antibodies.
- 20. Describe the process of conjugation.
- 21. Explain the preparation of dried human plasma.
- 22. Explain the methods for immobilization of enzymes.