**D. PHARM PART-I (R) EXAMINATION APRIL 2023**

**QP CODE -R23042** **Reg No…….**

**PHARMACEUTICAL CHEMISTRY (ER20-12T)**

Time: 3hrs Total marks : 80

Note: Answers to questions 1-20 should be provided in the first pages as a single unit.
Give labelled diagrams/equations wherever necessary

**Answer all the following**

**(1×20=20)**

1. Isosorbide dinitrate is an …….. agent.
2. Erythromycin is a ……. antibiotic.
3. Pretomanid is used in the treatment of ……..
4. Standard potassium permanganate solution is used in ……. titrations.
5. The basic heterocyclic ring present in chlorpromazine is ……
6. Naloxone antagonises the effects of …….
7. Quinidine sulphate is used in the prophylaxis of ……
8. An example of ACE inhibitor is ……
9. Hifenac is the brand name of the drug, ……
10. 1,1- dimethyl biguanide is the chemical name of the drug ……
11. Write one use of Sertraline.
12. Name the drug which is available in the brand name Asthalin.
13. Name the antiepileptic drug which is chemically 2- propyl pentanoic acid.
14. Draw a naphthalene ring and number it.
15. How will you identify an oxygen cylinder by its colour?
16. Name the analytical method used to assay metal ions.
17. Which term is used to denote agreement among a group of measured values in analysis?
18. Name two indicators used in acid base titrations.
19. Which colour is developed in the limit test for Iron due to formation of ferrous thioglycolate in alkaline medium?
20. Give one use of Propofol.

**Answer any 10 of the following** **(3×10=30)**

21. Give the pharmaceutical formulations and uses of chloramphenicol.
22. Write a note on antifungal agents.
23. Write the structure and use of Dapsone.
24. Explain the sources of impurities in pharmacopoeial substances.
25. What is the principle involved in non-aqueous titrations?
26. Name the pharmaceutical formulations, stability and use of Aluminium hydroxide gel.
27. Write the structure and use of Propranolol.

28. Write a note on cotrimoxazole.
29. Give the storage conditions and uses of silver nitrate.
30. Define Diuretics. Give the structure of anyone.
31. Name three antineoplastic agents. Write the structure of Fluorouracil.

**Answer any 6 of the following** **(5×6 =30)**

32. Explain the principle and reactions involved in the Limit test for Arsenic.
33. Write the stability, uses and pharmaceutical formulations of Nor-Epinephrine.
34. Classify NSAIDs. Write the structure of Ibuprofen.
35. Write a note on insulin and its preparations
36. Give the chemical structure, chemical name, uses and popular brand name of Phenobarbitone
37. Define Haematinics with examples. Add a note on carbonyl iron.
38. Classify cholinergic drugs. Write the structure and uses of Neostigmine.

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Code No. S23043 Time – 3 hours

Max marks-80

Note- Answer **any eight** questions
All questions carry equal marks
Draw diagrams wherever necessary

1. a) Discuss briefly physical evaluation of crude drugs.
   b) Define glycosides. Write the chemical tests of cardiac glycosides. (5+5=10)

2. a) What are carminatives? Write biological source, chemical constituents, and uses of nutmeg
   b) Discuss the cultivation and collection of senna. (5+5=10

3. a) What are pharmaceutical aids? Write the biological source, chemical constituents, and uses of any one pharmaceutical aid.
   b) Give an account of perfumes and flavouring agents. (5+5=10)

4. a) Write the biological source, chemical constituents and uses of liquorice and garlic
   b). Describe the history of Pharmacognosy. (5+5=10)

5. a) Discuss chemical classification of crude drugs.
   b) Give an account of natural anti-hypertensives. (5+5=10)

6. a) Describe the preparation of absorbent cotton.
   b) Write the chemical tests and uses of datura. (5+5=10)

7.a) Describe the microscopy of cinnamon bark.
   b) Describe the life cycle of ergot. (5+5=10)

8. a) Write the biological source, chemical constituents, chemical tests, and uses of ispaghula.
   b) Write the biological source, chemical constituents, and uses of asafoetida. (5+5=10)

9. a) Describe the morphological characters and microscopy of cinchona bark.
   b) Distinguish between black catechu and pale catechu. (5+5=10)

10. a) Give an account of umbelliferous fruits.
    b) Describe the cultivation and collection of opium. (5+5=10)

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