

5200124

**GOVERNMENT OF KARNATAKA
BOARD OF EXAMINING AUTHORITY
D. Pharm Part-I Examination (ER-2020) JANUARY 2024**

PHARMACEUTICAL CHEMISTRY

Time: 3 Hours

Max marks: 80 M

Note: i) Answer 6 questions from section A, 10 questions from section B and all questions from section C.
ii) Draw diagram wherever necessary.

iii) Answer to the point for objective type.

Long Essay (Answer any six)

SECTION -A

6X5=30 M

1. Write the Principle and procedure involved in the limit test for Arsenic and draw a neat labeled sketch of Gutzeit apparatus
2. Write the principle and various steps involved in the Gravimetric analysis
3. Define sedative and hypnotics. Classify them with examples. Write the structure, chemical name, use, stability and storage conditions and brand name of Alprazolam.
4. What is Para sympatholytic agent. Classify them with examples. Give the chemical structure, chemical name and uses of Dicyclomine hydrochloride.
5. Define Antihypertensive agents. Classify them with examples. Write the structure and chemical name, uses and brand names of Captopril.
6. a. What are sulfonamides? Classify them with examples write the structure and brand name of sulfacetamide.
b. Classify Anti tubercular agents giving suitable examples.
7. Classify Antibiotics according to chemical structure with examples. Draw and explain the structure of basic nucleus of Pencillins. Also write structure of Amoxicillin with its chemical name.

SECTION -B

10X3=30 M

Short Essay (Answer any ten)

8. What are medicinal gases? Write the storage, labeling and uses of Nitrous oxide.
9. Define Topical agents. Write the preparation, uses and pharmaceutical formulations of Silver nitrate.
10. What are Neuroleptics? Classify with examples. Write the structure of Chlorpromazine Hydrochloride.
11. Classify adrenergic drugs with examples. Write the structure and pharmaceutical formulation of Norepinephrine
12. Write a note on Antiarrhythmic agents. Write the structure of Phenytoin sodium with its brand names.
13. What are diuretics. Draw the chemical structure of Frusemide. Give its chemical name and uses.
14. Explain Diabetes mellitus. Classify hypoglycemic agents with examples.
15. Write the structure, properties, uses and brand names of Ibuprofen.
16. What are antimalarial agents. Classify them with examples, write the structure of Chloroquine phosphate.
17. Write the structure, properties pharmaceutical formulations and brand name of Chloramphenicol
18. Define antineoplastic agents? Write the structure, chemical name, pharmaceutical formulation and brand names of Cisplatin.

SECTION -C

20X1= 20M

Objective type (Answer all questions)

19. Define Precision and Accuracy.
20. Define Normality and Molarity
21. Define Isomers
22. Write example for Anticaries agents
23. Phenytoin is an --- a. Antidepressant b. Stannous fluoride c. Calcium carbonate d. Zinc chloride
24. Neostigmine is used as
25. Give example non selective beta blocker
26. Give the example of Loop diuretics
27. Write the brand name of Glimepiride
28. Write the example for nonselective COX-2 Inhibitor.
29. Write the antibiotic used in the treatment of multidrug resistant tuberculosis
30. Name the pencillin derivative which is used to treat infections produced by gram positive bacteria.
31. Write the example for an alkylating agent
32. Write the chemical name of Chlorinated lime
33. --- suffix for -oate is a. -CN b. -OH c. -COOR d. -CHO
34. --- is a Beta Adrenoreceptor antagonist a. Atenolol b. Amlodipine c. Verapamil d. Bepridil
35. Match the following

A

- 1) Frusemide
- 2) Zinc chloride
- 3) Selective COX-2 Inhibitor
- 4) Ferrous fumarate

B

- a) Celecoxib
- b) To treat Iron deficiency
- c) Dentifrices
- d) Diuretics