

SUBJECT CODE: 19CH/ME/PH45

B.Sc. DEGREE EXAMINATION, APRIL 2023
BRANCH IV - CHEMISTRY
FOURTH SEMESTER

COURSE : MAJOR-ELECTIVE
PAPER : PHARMACEUTICAL CHEMISTRY
TIME : 3 HOURS

MAX. MARKS : 100

SECTION – A
ANSWER ALL THE QUESTIONS

(30x1=30)

I. Choose the correct answer:

1. The macromolecular tissue constituents with which drugs combine reversibly are ----.
(a) cellular site (b) antagonist (c) receptors (d) metabolites
2. The drug used in sublingual route is _____.
(a) nitroglycerin (b) heparin (c) aspirin (d) metformin
3. An example for antihypertensive drug is _____.
(a) heparin (b) aldomet (c) barbiturate (d) chlorambucil
4. Which of the following is used as vasodilator?
(a) Sodium nitroprusside (b) papaverin (c) nicotinic acid (d) all the above.
5. Drugs that produce depression on CNS are _____.
(a) narcotic analgesics (b) non-narcotic analgesics
(c) antipyretics (d) anti inflammatory
6. Penicillin is effective against _____ infection.
(a) Pneumococcal (b) staphylococcal (c) streptococcal (d) all the above.
7. An alkaloid obtained from plants which is used as local anaesthetics is _____.
(a) benzocaine (b) cocaine (c) procaine (d) amethocaine
8. Sodium benzoate is used as _____.
(a) antioxidant (b) sequestrants (c) emulsifying agents (d) preservatives
9. An example for flavouring agent is _____.
(a) saccharin (b) gelatin (c) vanillin (d) pectin
10. Streptomycin is obtained from _____.
(a) streptomyces griseus (b) Streptomyces aureofaciens
(c) pseudomonas putida (d) bacillus megaterium

II. Fill in the blanks:

11. The therapeutic index must be _____ 1, if the drug is to have clinical utility.
12. The difference between systolic and diastolic pressure is known as _____.

13. Plague is caused by a germ known as _____.
14. The drugs which lower the blood sugar are known as _____.
15. The metal atom present in haem is _____.
16. Phenformin is used in the treatment of _____.
17. AIDS is caused by the virus _____.
18. Chlorambucil is used as _____.
19. An example for permitted colourant is _____.
20. Sorbitol is used as _____.

III. Match the following:

- | | | |
|-----------------------|---|------------------------------|
| 21. Antidote | - | (a) halothane |
| 22. Cardiac glycoside | - | (b) sodium citrate |
| 23. Anaesthetic | - | (c) Digoxin |
| 24. Sequesterant | - | (d) calcium disodium edetate |
| 25. Anticoagulant | - | (e) EDTA |

IV. Answer in a line or two:

26. Pharmacopeia
27. Jaundice
28. HIV
29. Anesthetic
30. Sweetening agent

SECTION – B

ANSWER ANY FIVE QUESTIONS:

(5x6=30)

31. Discuss about the various routes of administration of drugs.
32. Name any two airborne, waterborne diseases and mention their source of infection, treatment methods.
33. What are antianginal agents? Give examples.
34. Write the synthesis and uses of (i) aspirin (ii) ibuprofen.
35. Discuss the therapeutic uses of tetracycline.
36. Write short notes on (i) colouring agents (ii) flavouring agents (iii) sweetening agents
37. Define the following : (a) Pharmacology (ii) Pharmacokinetics (iii) Toxicology

SECTION – C

ANSWER ANY TWO QUESTIONS:

(2x20=40)

38. (a) Explain about the biological classification of drugs. (10+10)
(b) Discuss the causes and treatment of anemia.
39. (a) What are analgesics? Explain about narcotic and non-narcotic analgesics with examples. (15+5)
(c) Give examples for antineoplastic drugs and their uses.
40. (a) Discuss the following – (i) preservatives (ii) antioxidants. (10+10)
(b) Describe the symptoms, prevention and treatment for diabetes.
