

STELLA MARIS COLLEGE (AUTONOMOUS) CHENNAI – 600086
(For candidates admitted from the academic year 2015-16 & thereafter)
SUBJECT CODE: 15CH/ME/PH55
B.Sc. DEGREE EXAMINATION, APRIL 2021
BRANCH IV - CHEMISTRY
FOURTH SEMESTER

COURSE: MAJOR ELECTIVE
PAPER: PHARMACEUTICAL CHEMISTRY
TIME: 90 MINUTES

MAXIMUM MARKS: 50

SECTION A

ANSWER ALL THE QUESTIONS

(15x1 =15 marks)

I. Choose the correct answer.

1. Salmonella typhi causes _____.
a) Cholera b) Typhoid c) Jaundice d) Dysentery
2. _____ are drugs that cause expansion of blood vessels.
a) Vasoconstrictors b) Vasodilators
c) Antianginal agents d) Hypertensive agents
3. _____ is a local anaesthetic.
a) Morphine b) Amyl nitrate c) Cocaine d) Nitrous oxide
4. EDTA is an example of a _____.
a) Antioxidant b) Preservative c) Flavouring agent d) Sequestrant
5. The disease that causes complete damage to the immune system is
a) HIV b) Plague c) Pertussis d) Jaundice

II. State whether true or false.

6. A pharmacophore is responsible for the physiological activity of a drug molecule.
7. Calcium antagonists lower blood pressure.
8. Morphine is a synthetic substitute of Pethidine.
9. Sodium benzoate is preferred as a preservative due to its poor solubility.
10. Pharmacognosy is the study of crude drugs.

III. Fill in the blanks.

11. Aldomet is used as a _____.
12. Penicillin consists of a thiazolidine ring fused with _____.
13. The chemical name of Vanillin is _____.
14. _____ is a condition where bones become weak and brittle.
15. Insulin and Glucagon are examples of _____ hormones.

SECTION B

Answer any three questions

(3 x 5 = 15 marks)

16. Discuss the causes and treatment for measles and whooping cough.
17. Discuss the role of sweetening agents as pharmacological aids.
18. Explain the biological role of copper and zinc.
19. Why are tetracyclines considered broad spectrum antibiotics? Discuss the general structure of tetracyclines with their therapeutic uses.
20. What is HIV? Discuss its causes, treatment and prevention methods.

SECTION C

Answer any two questions

(2x10= 20 Marks)

21. a) Discuss the role of alkylating agents as antineoplastic drugs with suitable examples. (6 marks)
b) What are the different types of cancer? (4 marks)
22. Explain the mechanism of blood coagulation. (10 marks)
23. a). Explain the role of insulin and glucagon in regulation of blood glucose. (8 marks)
b) What are antiarrhythmic drugs? (2 marks)
