17U614	(Pages: 2)	Name:
		Reg No

SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, APRIL 2020

(CUCBCSS-UG)

(Regular/Supplementary/Improvement)

CC15U CHE6 E03 - MEDICINAL AND ENVIRONMENTAL CHEMISTRY

Chemistry - Elective Course (2015 Admission onwards)

Time: Three Hours Maximum: 80 Marks

Section A

Answer *all* questions. Each question carries 1 mark.

- 1. ----- is the main protein present in plasma of blood.
- 2. What is the pH range of Blood?
- 3. Define the term The LD_{50}
- 4. What is MSDS for toxic substances?
- 5. Name the microbial agent responsible for Cholera.
- 6. Which metal ion is involved in Winkler's titration test?
- 7. What is TDS?
- 8. Write an example for coagulant used sedimentation process.
- 9. Which is the main constituent of biogas?
- 10. Name the pollutant involved in London smog.

 $(10 \times 1 = 10 \text{ Marks})$

Section B

Answer any ten questions. Each question carries 2 marks.

- 11. What are the common symptoms for Hepatitis A?
- 12. How is therapeutic index of a drug calculated?
- 13. What is COD?
- 14. What is meant by desalination?
- 15. What is USAB process? What are the merits?
- 16. How will you determine the concentration of CO in air?
- 17. What are the toxicological effects of Mercury?
- 18. What are the major lifestyle factors leading to hypertension?
- 19. What is blood transfusion?
- 20. What do you meant by drug abuse?

- 21. Give any 2 medicinal uses of Aloe Vera & Thulasi.
- 22. What is terminal cancer?

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

Section C

Answer any five questions. Each question carries 6 marks.

- 23. What are the risk, causes, diagnostic method, treatment and prevention of Anthrax?
- 24. Explain the various health standards fixed by WHO.
- 25. What are anion & cation exchangers? How does it function in the process of water purification?
- 26. Explain the chemistry behind Cottrell electrostatic precipitator.
- 27. What are prodrugs? Give examples.
- 28. What is Thalidomide tragedy?
- 29. Explain the role of catalytic converters in the air pollution control measures.
- 30. How will you determine the concentration of dissolved oxygen by Winkler's titration test?

 $(5 \times 6 = 30 \text{ Marks})$

Section D

Answer any two questions. Each question carries 10 marks.

- 31. Discuss the causes, symptoms & drugs used for the treatments of Influenza, Tuberculosis, Dysentery & Typhoid fever.
- 32. Explain the toxicological effect of Asbestose, CCl₄, dioxins & Endosulphan.
- 33. Write an essay on air pollution control measures.
- 34. Write an essay on different types of water purification processes.

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