

**15U614**

(Pages: 2)

Name: .....

Reg. No.....

**SIXTH SEMESTER B.Sc. DEGREE EXAMINATION, MARCH 2018**

(CUCBCSS-UG)

**CC15U CHE6 E03 - MEDICINAL AND ENVIRONMENTAL CHEMISTRY**

Chemistry - Elective Course

(2015 Admission)

Time: Three Hours

Maximum: 80 Marks

**Section A**

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

1. Define health according WHO's definition.
2. What is Rh factor?
3. What is LD<sub>50</sub> value of drugs?
4. What is myocardial infarction?
5. Name one drug for the treatment of cholera.
6. What is threshold limiting value (TLV) of a pollutant?
7. What is cold trapping?
8. What is the difference between a thermal precipitator and an electrostatic precipitator?
9. What are the advantages of using diluted sea water for agriculture?
10. What is COD?

**(10 x 1 = 10 Marks)**

**Section B**

Answer any *ten* questions. Each question carries 2 marks.

11. Why sterilization of surgical instruments is very important?
12. What are the different blood groups available for humans? Draw a chart that explains the matching and non-matching blood transfusion.
13. Write notes on the abuse of drugs.
14. What are the different ways by which drugs are administered in to the body?
15. What is the full form of AIDS?
16. What are the sources by which H<sub>2</sub>S is released in to the atmosphere?
17. What are the toxicological effects of chlorine gas?
18. How mercury pollution affect humans?
19. Suggest some reasons for the occurrence of air pollution in Delhi.
20. What is known as Respirable suspended particulate matter (RSPM)?

21. What is the difference between total suspended solids and total dissolved solids?
22. What are the characteristics of industrial waste water?

**(10 x 2 = 20 Marks)**

### **Section C**

Answer any *five* questions. Each question carries 6 marks.

23. What are the different components in blood and explain the roles of each component?
24. What is kidney stone chemically? What are the reasons for kidney stone? How it can be treated?
25. What are the causes, symptoms and treatment methods for lung cancer?
26. Explain persistent organic pollutants (POP). What are its effects on ecosystem?
27. Explain the function of thermal precipitators for SPM analysis.
28. Discuss the method of analysis of CO pollutant in air.
29. Explain the methods by which dissolved oxygen in a water sample is determined.
30. Write notes on the different rain water harvesting systems.

**(5 x 6 = 30 Marks)**

### **Section D**

Answer any *two* questions. Each question carries 10 marks.

31. Explain the major bioactive compounds of any five Indian medicinal plants. Discuss its medicinal uses.
32. Discuss the causes, symptoms and drugs used for the treatment of anthrax, chickenpox, measles and typhoid fever.
33. Discuss the following types of air pollution control measures. a) Gravity settling chambers b) wet scrubbers c) catalytic convertors and d) electrostatic precipitators
34. Describe the systematic method for the treatment of industrial waste water.

**(2 x 10 = 20 Marks)**

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