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J – 2692

Reg. No. :

Name :

Second Semester B.Sc. Degree Examination, May 2020

First Degree Programme Under CBCSS

Chemistry

Foundation Course II

**CH 1221 – METHODOLOGY AND PERSPECTIVES OF SCIENCES AND
GENERAL INFORMATICS**

(2017 Admission onwards)

Time : 3 Hours

Max. Marks : 80

SECTION – A

Answer **all** questions. Answer in one word/sentence. Each question carries **1** mark.

1. What is co-precipitation?
2. What are carcinogenic substances?
3. What do you mean by cyber crime?
4. Mention about precision of data.
5. What do you mean by virtual testing in chemistry?
6. What is the early form of chemistry?
7. What do you mean by knowledge management?

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8. Name any two educational softwares.
9. Write the name of two toxic chemicals used in chemistry laboratory.
10. What are variables?

(10 × 1 = 10 Marks)

SECTION – B

(Short answer type)

Answer **any eight** questions from the following. Each question carries **2** marks.

11. What are adsorption indicators?
12. Discuss about the toxicity of inorganic reactants.
13. What are molecular visualization tools?
14. Define the terms correlation and causality.
15. Briefly discuss about the importance of models in chemistry.
16. What is the Contribution of Antoine Lavoisier in the revolution in chemistry?
17. What is the scope of chemical science?
18. What do you meant by Plagiarism?
19. Briefly discuss about the precipitation of IV group cations.
20. What is common ion effect?
21. What is post-precipitation?
22. Write a note on a chemical which is skin irritant.

(8 × 2 = 16 Marks)

SECTION – C

(Short essay type)

Answer **any six** questions from the following. Each question carries **4** marks.

23. What do you mean by solubility product?
24. Discuss about the theory of complexometric titration.
25. Discuss about internet as a knowledge repository.
26. How will you prepare projects using computers?
27. Write a note on revision of scientific theories and laws.
28. What is the background and thought of John Dalton on atom?
29. Write short notes on units and dimensions.
30. What are the features of modern personal computer?
31. What is the use of IT in teaching learning process?

(6 × 4 = 24 Marks)

SECTION – D

(Essay type)

Answer **any two** questions from the following. Each question carries **15** marks.

32. (a) What do you mean by chromatography? What are the types of partition chromatography?
(b) Discuss about the theory of redox and metallochromic indicators.
33. (a) What are the steps involved in gravimetric analysis?
(b) What are the basic concepts of IPR, copy right and patents?

34. (a) How will you analyze experimental data by statistical methods?
- (b) What are the major contributions of Friedrich Wohler and Mendeleev on atom models?
35. (a) What are the basis for scientific laws and factual truths?
- (b) Explain about the lab safety- regulatory requirements.

(2 × 15 = 30 Marks)
