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Reg. No. :

Name :

Second Semester B.Sc. Degree Examination, July 2015 First Degree Programme under CBCSS CHEMISTRY Foundation Course – II CH 1221 : Methodology and Perspectives of Sciences and General Informatics (2013 Admission)

Time : 3 Hours

Max. Marks : 80

SECTION-A

Answer **all** questions. Answer in **one** word or maximum of **two** sentences. **Each** question carries **one** mark.

- 1. Name the branch of chemistry which encourage the design of experiments which reduce or eliminate the use of hazardous chemicals.
- 2. Who proposed the periodic law of elements for the first time?
- 3. How many byte in one kilo byte?
- 4. Give an example of a presentation software.
- 5. Write the SMILE notation of methane.
- 6. What is variance ?
- 7. Which network under UGC is involved in modernising university libraries?
- 8. Give an example of a chemistry software under RISC.
- 9. Who proposed the law of conservation of mass?
- 10. What does PDB stands for ?

P.T.O.

(10×1=10 Marks)

SECTION - B

Answer any 8 questions from the following. Each question carries 2 marks.

- 11. What is the difference between precision and accuracy of an experiment ?
- 12. Mention some sources of primary data.
- 13. What do you mean by supra molecular chemistry?
- 14. Write two defects of Rutherford' model of atom.
- 15. What is the difference between RAM and ROM?
- 16. What do you mean by operating system in a computer ?
- 17. Explain the term plagiarism.
- 18. What do you mean by sampling?
- 19. What is the difference between mean deviation and standard deviation in an experiment ?_____
- 20. What is histogram?
- 21. Write the name of two major international publishers in chemistry.
- 22. Mention the name of two structure drawing softwares in chemistry.

(8x2=16 Marks)

SECTION-C

Answer any 6 questions. Each question carries 4 marks.

- 23. What are primary and secondary data?
- 24. Explain laws, hypothesis, postulate and assumption in science.
- 25. Write the SI units of seven base units used in chemistry.
- 26. Explain inductive and deductive methods used in chemistry.
- 27. Discuss briefly the major contributions of Friedrich Wohles to modern chemistry.
- 28. What are the functions of an operating system?

- 29. How network classified on the basis of physical scope ?
- 30. Explain the terms copy right and patent.
- 31. Write a note on virtual lab.

SECTION - D

Answer any 2 questions. Each question carries 15 marks.

- 32. Discuss briefly the documentation of results in an experiment.
- 33. Write a note on history, scope and applications of chem informatics.
- 34. Explain the use of IT in teaching and learning.
- 35. Write briefly on various branches of chemistry and show the role of chemistry as a central science connecting other branches of science. (2×15=30 Marks)

(6×4=24 Marks)