

**M.Sc. 4th Semester Examination, 2021**  
**CHEMISTRY**  
**(Computer Application in Chemistry Practical)**  
**Paper: CHEM 404C (PR)**  
**Course ID: 41464**

**Time: 2 Hours**

**Full Marks: 40**

*The figures in the margin indicate full marks.*

*Candidates are required to give their answers in their own words as far as practicable.*

1. Answer *any ten* of the following questions: 1×10 = 10
- a) Which of the following is the first calculating device?
    - 1. Abacus
    - 2. Calculator
    - 3. Turing Machine
    - 4. Pascaline
  - b) Who invented mechanical calculator called Pascaline?
    - 1. Charles Babbage
    - 2. Blaise Pascal
    - 3. Alan Turing
    - 4. Lee De Forest
  - c) Who among the following considered as the ‘father of artificial intelligence’?
    - 1. Charles Babbage
    - 2. Lee De Forest
    - 3. John McCarthy
    - 4. JP Eckert
  - d) Which was the world’s first successful electronic computer?
    - 1. PARAM
    - 2. CRAY-1
    - 3. Pascaline
    - 4. ENIAC electronic numerical integrator and computer

- e) Who among the following used the term computer word for the first time?
1. John Brunner
  2. Alan Turing
  3. John McCarthy
  4. JP Eckert
- f) Which was first virus detected on ARPANET, the forerunner of the internet in the early 1970s?
1. Exe file
  2. Creeper Virus
  3. Peeper Virus
  4. Trozen Virus
- g) Find out the correct definition of Wide Area Network (WAN) –
1. It is a programming language with strong abstraction from the details of the computer.
  2. It is a collection of computers interconnected with each other through cables to share data, information and other common hardware resources.
  3. A computer network that covers a broad area (any network, whose communication links cross metropolitan, regional or national boundaries).
  4. A computer network covering a small physical area like a home, office or small groups of buildings, such as a school or an airport.
- h) Select the application software of computer from the following,
1. MS Word
  2. MS Excel
  3. Both A & B
  4. MS DOS.
- i) Which of the following is also called translator?
1. Data representation
  2. MS DOS
  3. Operating System
  4. Language Processor
- j) How the quality of printer is measured?
1. Alphabet per strike
  2. Words per inch
  3. Strike per inch
  4. Dots per inch
- k) A Computer cannot boot if it does not have the .....
1. Compiler
  2. Loader
  3. Operating system
  4. Assembler

- l) Where is RAM located?
  - 1. Mother board
  - 2. Expansion board
  - 3. External Drive
  - 4. None
- m) Which of the following is a popular programming language for developing multimedia webpages?
  - 1. COBOL
  - 2. Java
  - 3. BASIC
  - 4. Assembler
- n) USB is which type of storage device?
  - 1. Tertiary
  - 2. Secondary
  - 3. Primary
  - 4. Auxillary

2. Answer *any ten* of the following questions:

1×10 = 10

- a) Who invented Java?
- b) What is the expansion of COBOL?
- c) What do you mean by the term scareware?
- d) What is the name of super computer developed in India?
- e) Mention the name of software to insert references for your research article.
- f) Write down the full form of IP.
- g) What is the full form of PDF?
- h) Write down the full forms of RAM & ROM.
- i) Mention the name of first commercially available computer.
- j) Who developed electronic mail for the first time?
- k) Write down the name of first completely 64-bit compatible version of Android.
- l) Which motherboard form factor uses one 20 pin connector?
- m) What is the smallest unit in a digital system?
- n) Microprocessors as switching devices are for which generation computers?

3. Answer *any four* of the following questions:

5×4 = 20

- a) Write a C-programme to print the numbers between 10 and 50 except the multiples of five.
  - b) Write a C-programme to check a given year is leap-year or not.
  - c) Write a C-programme to print the upper triangle of a matrix.
  - d) Write a C-programme to input and print a matrix.
  - e) Write a C-programme to make the multiplication table of a given integer.
  - f) Write a programme to print the even numbers between given two numbers.
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