

SEMESTER EXAMINATION 2021

CLASS: M.Sc. SEMESTER I

SUBJECT: CHEMISTRY

PAPER CODE: MCH- E104

PAPER TITLE: COMPUTER APPLICATION IN CHEMISTRY

Time: 3 Hrs.

Max.Marks:70

Min.Pass%:40

Note: Question paper is divided into two sections: **A and B**. Attempt both the sections as per given instructions.

SECTION-A (SHORT ANSWER TYPE QUESTIONS)

Instructions: Answer any five questions in about 150 words each. Each question carries six marks. 5X6=30Marks

Question-1. Explain Algorithm and Flowchart with suitable examples.

Question-2. Define getchar() and putchar() in C with example.

Question-3. Write a C program to determine the Normality of 120 gms NaOH dissolve in 1L solution.

Question-4. Discuss the advantage and Disadvantage of INTERNET.

Question-5. Give a brief note on nonprintable characters and keywords used in C.

Question-6. Discuss scope and applications of Microsoft Office with suitable examples.

Question-7. Convert $(1011011)_2$ and $(7477)_8$ into decimal numbers.

Question-8. Write the merits of High-Level Language language.

Question-9. Write the Rules for naming a variable in C with suitable examples.

Question-10. Write the program for Perimeter of rectangle in C language.

SECTION-B (LONG ANSWER TYPE QUESTIONS)

Instructions: Answer any four questions in detail. Each question carries ten marks. 4X10=40Marks

Question-11. Write a program in C to read 10 integer numbers and then display in reverse order.

Question-12. Write notes on:

- i. Relational operators
- ii. Logical operators
- iii. Arithmetic operators

Question-13. Write a program in C to determine the Normality of Oxalic acid and Sodium hydroxide solution.

Question-14. Draw a block diagram of computer and explain its each unit in detail.

Question-15. Write a program in C to determine the rate constant of the First order reaction.

Question-16. Write a program in C to determine the average life and the half-life of 10 radioactive Nuclei.

Question-17. Write a program in C to determine the molecular weight of organic compound by ebullioscopic method.

Question-18. (A) Write a note on 'storage classes' in C

(B)Application software

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