

**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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