

AJ-1547

M. A./M. Sc. (Final)

Term End Examination, 2021-22

Mathematics (Paper-III)

(Programming in 'C' : With ANSI Features)

Time : 3 hrs.]

[Maximum Marks : 100

Note – Answer any *five* questions. All questions carry equal marks.

1. (a) What is function ? Write its types with examples.
(b) Describe the structure of a 'C' Program.
2. (a) Write a program for explicit type casting.
(b) What is an unsigned integer constant ? What is the significance of declaring a constant unsigned?
3. (a) What is loop ? Write the difference between for loop and do..... while loop.
(b) Write a program to compute the real roots of a quadratic equation .

$$ax^2 + bx = 0$$

4. What is switch statement ? Write a program that reads a value in the range of 1 to 12 and print the name of that month and the next month. Print error for any other input value.
5. Write the algorithm, flowchart and the complete C program to find the two's complement of a binary number.
6. What is pointer ? How can it be initialised?
7. What is structure ? Write the difference between structure and union.
8. (a) Write a program using pointer to compute the sum of all elements stored in an array .
(b) What is conditional statement ? Write a program to find the largest value between two variable.
9. What is file handling technique in C ? Write about opening and closing method.
10. Write short notes of the following :
 - (a) MACRO Substitution
 - (b) Linked Lists.