

**Computer Programming (CS-104) 'C'**  
**B.SC (Honors in Mathematics) 1<sup>st</sup> Semester**

**Time Allowed: 3Hour**

**Max Marks: 40**

**Note: Attempt two Questions selecting one question from each section A, B. Section C is compulsory**

**SECTION-A**

- Q1. Discuss the different conditional statements used in programming of C language. Give syntax. 10'6
- Q2. Discuss using a program the difference between call by value, call by reference and call by pointer. 10'6
- Q3. What is a storage class? Discuss different storage classes in C language 10'6
- Q4. Discuss different types of operators used in C language with the help of examples 10'6

**SECTION-B**

- Q5. What are input and output files? Give a simple program to read and write data into file. 10'6
- Q6. Write a C program to multiply the two arrays of same size. 10'6
- Q7. What are strings? Write a program in C to count the length of a given string. 10'6
- Q8. Define function pointer. Demonstrate the concept of functions returning pointer variable 10'6

**SECTION-C**

- Q9.
- a. Define Data type
  - b. What is difference between & and && operator?
  - c. Give syntax of "Do While" statement.
  - d. What are formal arguments in functions?
  - e. Define 2D array
  - f. What is a pointer variable?
  - g. Give syntax for define a general structure.
  - h. What is the purpose of gets ( ) function?
  - i. What is a reference variable?
  - j. Define pointer to array.