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B.Sc. IT (Sem. – 1st)
PROGRAMMING IN C
SUBJECT CODE : BS - 105
Paper ID : [B0403]

Time : 03 Hours

Maximum Marks : 60

Instruction to Candidates:

- 1) Section - A is **Compulsory**.
- 2) Attempt any **Four** questions from Section - B.

Section - A

Q1)**(10 × 2 = 20)**

- a) What are data type qualifiers?
- b) What is the difference between structure and union?
- c) What is the difference between call by value and call by reference?
- d) What are preprocessor statements?
- e) Can modulus operator be applied to float variables?
- f) What is the importance of main () in C language?
- g) What do you mean by structured programming approach?
- h) What is the use of size of operator?
- i) Differentiate between array of pointers and pointer to an array.
- j) What are escape sequences?

Section - B

(4 × 10 = 40)**Q2)** What are different data types of available in C? Explain each one of them.**Q3)** a) Differentiate between while and do – while loop with an example of each.

- b) Write a program to add first n terms of the series:
 $1/1! + 2/2! + 3/3! + 4/4! + \dots + n/n!$

Q4) Explain file handling. Write a program to create a file and display its contents.**Q5)** What is a storage class? Discuss in detail the differences between all storage classes with suitable examples.**Q6)** How do you create multidimensional arrays in C? Write a program to multiply two matrices and print the result.**Q7)** Differentiate between a structure and a union. Explain in detail using suitable example program for each.