

GSE/M-20

1497

COMPUTER SCIENCE

(Programming in C)

Paper-I

Time : Three Hours]

[Maximum Marks : 40

Note : Attempt *five* questions in all. Question No. 1 is compulsory. Select *one* question from each unit.

Compulsory Question

1. (a) What is scanf() function ?
- (b) Explain Increment and Decrement operators.
- (c) Write the advantages of using functions.
- (d) How union is different from structure ? (4×2=8)

UNIT-I

2. (a) What is a variable in C ? Write rules for naming variable.
How is it declared and initialized ? 4
- (b) Explain basic data types with qualifiers. 4
3. Discuss unformatted I/O functions in C with examples. 8

UNIT-II

4. (a) Write a program in C to find biggest between three numbers using Conditional operator. 4
- (b) Evaluate the following expressions :
- (i) $8 - 9 \% 2 * 4$
 - (ii) $!(4 > 3) \ || \ (6 > = 6)$
 - (iii) $5 * 6 / 3 > 9 - 4 * 3$
 - (iv) $8 < 3 + 6 \ \&\& \ 7.$ 4
5. Discuss following branch control statements with examples :
- (a) Simple if statement.
 - (b) if-else statement.
 - (c) Nested- if statement.
 - (d) else- if ladder. 8

UNIT-III

6. (a) Write a program in C to print following pattern :
- 1
23
345
:
N lines 4
- (b) Differentiate the following :
- (i) while and do-while loop.
 - (ii) break and continue statement. 4

7. What is User defined function ? Explain with examples function protoyping, function definition and function calling. 8

UNIT-IV

8. What does storage class tell us ? Explain with examples auto, static and register storage class. 8
9. (a) What is an Array ? How can you declare, process and initialize one-dimensional array ? 4
- (b) Write a program in C to arrange elements of a list in ascending order. 4
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