

M.C.M. - I CBCS Pattern Semester-I
PCMCMT104.1 - Elective-I Paper-IV : Programming Techniques with C

P. Pages : 2

Time : Three Hours



GUG/S/24/10760

Max. Marks : 80

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- Notes : 1. All questions are compulsory and carry equal marks.
2. Draw neat and labeled diagrams wherever necessary.
3. Avoid vague answers and write answers relevant and specific to questions only.

Either:

1. a) What is Data types? Explain different data types available in 'C'. 8
b) Explain the following. 8
i) Interpreter. ii) Compiler.

OR

- c) What is problem analysis? Explain how it is different from process analysis. 8
d) Explain arithmetic and Bitwise operators with example. 8

Either:

2. a) What is looping? Explain for loop and while loop with proper syntax and suitable example. 8
b) Write a program to check number is prime or not. 8

OR

- c) What is conditional statement? Write any two types with suitable example. 8
d) Write a program to check whether the 3 digit number is Armstrong or not. Armstrong number is a 3 digit number abc then $abc = a^3 + b^3 + c^3$.
(Sum of cube of each digital is equal to the original number). 8

Either:

3. a) Define Array? Explain types of Array with suitable example of two dimensional array. 8
b) Explain the following with proper syntax and suitable example. 8
i) Strcmp() ii) Strlen()

OR

- c) Define function. Explain the need and advantages of function. 8

d) Write a program to find factorial of a number using recursive function. **8**

Either:

4. a) Define pointer. Explain in detail declaring and initializing of pointer in detail. **8**

b) Explain in detail command line Argument? With suitable example. **8**

OR

c) Explain the concept of file. What are the various operation performed on file. **8**

d) What do you understand by 'call by value' and 'call by reference'? **8**

5. Solve all the questions.

a) What is algorithms? Explain. **4**

b) What do you mean by nested if? Explain with suitable example. **4**

c) What do you mean by structure explain. **4**

d) Explain calloc () and malloc (). Functions. **4**
