



PG (CBCS)
M.SC Semester- II Examination, 2023
COMPUTER SCIENCE
PAPER: C-COS 204

(COMPUTER FUNDAMENTALS & PROGRAMMING CONCEPTS)

Full Marks: 40

Time: 2 Hours

The figures in the right-hand margin indicate full marks.
 Candidates are required to give their answers in their own words as far as practicable.

Write the answer for each unit in separate sheet

M1: COMPUTER FUNDAMENTALS

GROUP-A

1. Answer any **TWO** from the following questions: 2×2=4
- Differentiate between Magnetic disk & Magnetic Tape?
 - Differentiate between the characteristic of primary and secondary memory of computer.
 - Write algorithm to find factorial of a given number?
 - Define the terms: Compiler and interpreter

GROUP-B

2. Answer any **TWO** from the following questions: 2×4=8
- What is RAM & ROM? Differentiate between them.
 - Differentiate between High level, Machine & Assembly level programming language.
 - Convert the following:
 - $(110.111)_2 = (?)_{10}$
 - $(2AF)_{16} = (?)_{10}$

GROUP-C

3. Answer any **ONE** from the following questions: 1×8=8
- Define Computer? Draw a block diagram of basic components of a computer system. Explain each component in detail. 2+2+4
 - What is flow chart? Draw a flow chart for find out maximum no. among three numbers. 1+3
 - What is Cache Memory? How it reduces the mismatch of processor and main memory speed? 2+2

(P.T.O)

(2)

**M2: PROGRAMMING CONCEPTS****GROUP-A**

4. Answer any **TWO** from the following questions: 2×2=4
- a) What does static variable mean?
 - b) What is a pointer?
 - c) What is the difference between '=' and '==' operator?
 - d) What is the difference between if and while statement?

GROUP-B

5. Answer any **TWO** from the following questions: 2×4=8
- a) Differentiate between a for loop and a while loop? What are its uses?
 - b) What is global variable? What is the difference between ++a and a++?
 - c) Write a program in C language to print a string and copy into another string.
 - d) What are the different types of functions in C Programming? Give Example.

GROUP-C

6. Answer any **ONE** from the following questions: 1×8=8
- a) Write the limitations of getchar() and scanf() functions for reading strings. 4+4
Explain different types of operators used in C language with suitable examples.
 - b)
 - i) Write a C program to check whether a given number is palindrome or not. 4
 - ii) Write C program to print the following outputs using for loops. 4
- 1
22
333
4444
55555
