PG/IIS/COS/204(M1 & M2)/23 (CBCS)

M.Com. 2nd Semester Examination, 2023

COMPUTER SCIENCE

PAPER – COS-204(M1 & M2)(CBCS)

Full Marks : 50

Time : 2 hours

The figures in the right hand margin indicate marks

Candidates are required to give their answers in their own words as far as practicable

PAPER – COS 204(M1)

(*Computer Fundamentals*)

[*Marks* : 20]

GROUP – A

Answer any **two** questions : 2×2

1. What is mnemonic code ?

2. What is a storage device ? Explain with example.

3. What is the disadvantage of 1's complement ?

4. Convert $(11001011)_2$ to $()_{16}$.

5. Explain input and output devices.

6. Write down the difference between linear and nonlinear data structure.

GROUP – B

Answer any **two** questions : 4×2

7. What are array and linked list ?

8. What is the difference between system and Application Software ?

9. Represent $(-7.5)_{10}$ in IEEE754 single precision representation.

10. Write the difference between SRAM and DRAM. Why DRAM needs refreshing ? $2 + 2$

11. Write the name of different special purpose registers and their rask.

12. Subtract 5_{10} from 12_{10} using 2's complement.

GROUP – C

Answer any **one** question : 8×1

13. What is memory ? Explain different type of memory. Differentiate between primary and secondary memory. $4 + 4$

14. What is top down and bottom-up approach of programming ? What is modular programming ? $4 + 4$

[*Internal Assessment* – 5 Marks]

PAPER – COS 204(M2)

(*Programming Concept*)

[*Marks* : 20]

GROUP – A

Answer any **two** questions : 2×2

15. Write the rules to define an identifier.

16. What do you mean by control statement ?

17. Define 2D array ?

18. Why we use a function ? Give an example.

GROUP – B

Answer any **two** questions : 4×2

19. What are different types of operators used in C ? Describe increment/decrement operator with proper example.

20. Why we use loop ? Explain while loop with a proper diagram.

21. What is user-define function ? What are the steps to use user-define function in a program ?

22. Write a C program to check whether a number is prime or not.

GROUP – C

Answer any **one** question : 8×1

23. Write a C program to display armstrong numbers between a range.

24. Write a C program to perform matrix multiplication using 2D array.

[*Internal Assessment* – 5 Marks]
