

PG CBCS
M.Sc. Semester-II Examination, 2022
Computer Science
PAPER: C-COS-204

Full Marks: 40

Time: 2 Hours

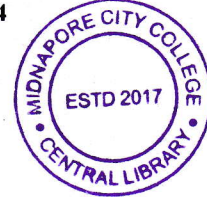
Write the answer for each unit in separate sheet

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.

C-COS 204:M-I : Computer Fundamentals

Marks: 20**GROUP-A****Answer any two question:****2×2=4**

1. What is assembly language?
2. Calculate the result using 2's complement: $(10101)_2 - (1001)_2$
3. State the postulate of Boolean algebra.
4. What is the difference between System Software and Application software?

**GROUP-B****Answer any two questions:****2×4=8**

1. State the Comparison between Assembly language, Machine language, High-level language.
2. Write down the limitations of flowchart. What are uses of virtual memory?
3. Convert 243_{10} into binary no, octal no, hexadecimal number system. State the rules for binary addition and subtraction.
4. State the difference between LAN, MAN and WAN.

GROUP-C**Answer any one questions:****1×8**

1. What is Computer? State about different types of Computer. Explain DOS.
2. Describe about the law of Boolean algebra with example. Prove the expression

$$AB + BC' + AC = AC + BC'$$

[P. T. O.]

[2]

C-COS 204 M2: Programming Concepts**Marks: 20****GROUP-A****Answer any two question:****2×2=4**

1. What is Null pointer?
2. Define the for loop structure with example.
3. What is main aim of Sorting and Searching?
4. What is byte code? Give example.

GROUP-B**Answer any two questions:****2×4=8**

1. State the difference between Array and Pointer?
2. Describe different types of data types use in c programming. What is C-Preprocessor?
3. State the difference between Linear and Non-Linear data structure?
4. How Binary search tree works? Explain with proper example.

GROUP-C**Answer any one questions:****1×8=8**

1. Draw a Flowchart for checking the no is Palindrome or not. State the difference between Flowchart and algorithms.
2. Write an algorithm for inserting an elements into an array. State the difference between Call by value and call by reference?

