

Roll No



**PRESIDENCY UNIVERSITY  
BENGALURU**

**SET B**

**SCHOOL OF INFORMATION SCIENCE  
END TERM EXAMINATION - JAN 2024**

**Semester** : Semester I - 2023  
**Course Code** : CSA2002  
**Course Name** : Computer Organization  
**Program** : BCA

**Date** : 10-JAN-2024  
**Time** : 1:00 PM - 4:00 PM  
**Max Marks** : 100  
**Weightage** : 50%

**Instructions:**

- (i) Read all questions carefully and answer accordingly.
- (ii) Question paper consists of 3 parts.
- (iii) Scientific and non-programmable calculator are permitted.
- (iv) Do not write any information on the question paper other than Roll Number.

**PART A**

**ANSWER ALL THE QUESTIONS**

**4X5M=20M**

1. Brief a short notes on the different types of computers.  
(CO1) [Knowledge]
2. Explain how the computer performance can be measured.  
(CO2) [Knowledge]
3. Elaborate the various types of ROM.  
(CO3) [Knowledge]
4. Explain how the performance of cache memory can be improved.  
(CO4) [Knowledge]

**PART B**

**ANSWER ALL THE QUESTIONS**

**5X10M=50M**

5. Elaborate Locality of Reference and its various types.  
(CO1) [Comprehension]
6. Explain the different types of instructions and the different ways of representing the instruction.  
(CO2) [Comprehension]
7. Explain 4-bit carry look-ahead adder with proper diagram.  
(CO3) [Comprehension]

8. Illustrate the memory hierarchy with proper explanation.

(CO3) [Comprehension]

9. Explain the entire process of accessing a word by CPU in the memory hierarchy.

(CO4) [Comprehension]

### **PART C**

**ANSWER ALL THE QUESTIONS**

**2X15M=30M**

10. Explain the execution of below mentioned instruction with control sequence and proper execution phases- "**ADD (R4), R2**".

(CO3) [Application]

11. Elaborate the techniques used in the multiplication of binary numbers with example.

(CO4) [Application]