



**ST. JOSEPH'S COLLEGE (AUTONOMOUS), BANGALORE- 27**

**BCA - I SEMESTER**

**SUPPLEMENTARY EXAMINATION – OCTOBER 2017**

**CA1116: COMPUTER FUNDAMENTALS AND PROBLEM SOLVING**

**Time: 2.5 Hrs**

**Max Marks: 70**

(For supplementary students of 2016 batch only)

Do not write the register number on the question paper

Please attach the question paper along with the answer script.

This question paper contains TWO pages and THREE Parts

### **PART A**

**Answer all questions.**

**2x10 = 20**

1. Explain the working of any one in a computer.
2. How are memories classified? What are their functions?
3. Explain the need for system software.
4. What is an operating system? What are the types of operating system?
5. Explain the difference between PC and IR in the CPU.
6. What is a bus? What are the different types?
7. What are the steps in problem solving?
8. What is a flowchart? What are the symbols used?
9. What is Word processing? Explain its uses.
10. Explain the need for a spreadsheet.

### **PART B**

**Answer any FIVE of the following.**

**6x5 = 30**

11. Write an algorithm to find the largest and smallest of three numbers.
12. Explain the types of ports in detail.
13. Explain the factors which affect the speed of the computer.
14. Explain how instructions are executed in a computer.

15. Write a note on computer virus.
16. Draw a flowchart to
  - a. Calculate factorial of a number and
  - b. reverse a number.
17.
  - a. Explain the structure of a spreadsheet.
  - b. Give the formatting features of a word processing system.

### **PART C**

**Answer any TWO of the following.**

**10x2 = 20**

18. Explain the components of a CPU in detail.
19. Explain the constructs sequence, selection, iteration and modularity in detail.
20. Explain the components of a motherboard.