UCA/CT/4006

B.C.A. DEGREE EXAMINATION, APRIL 2018 II YEAR - IV SEMESTER Major Paper VI-COMPUTER ARCHITECTURE

Time : 3 Hours

Max.marks :75

Section A $(10 \times 2 = 20 marks)$

Answer any **TEN** questions

- 1. Define the term address sequencing.
- 2. List shift micro operations.
- 3. List addressing modes.
- 4. What do you mean by pipelining?
- 5. What do you know by floating point addition?
- 6. What do you mean by dividing alignment?
- 7. Define Priority Interrupt.
- 8. List peripheral devices.
- 9. Define virtual memory.
- 10. Write any two characteristics of multiprocessors.
- 11. Write the syntax of Instruction format.
- 12. Define DMA.

Section B $(5 \times 5 = 25 marks)$

Answer any **FIVE** questions

- 13. Explain floating point representation of data.
- 14. Explain the flow of data in RISC Pipelining.
- 15. Explain the procedure for 2's complement addition and subtraction.
- 16. Explain the algorithm for binary division
- 17. Explain the principle of Dynamic Memory Access.
- 18. Explain the process of Interrupt and handling of Interrupt.
- 19. What do you mean by virtual memory? Explain.

P.T.O.

Section C $(3 \times 10 = 30 marks)$

Answer any **THREE** questions

- 20. Explain the operation of ALU with a block schematic diagram.
- 21. Discuss Vector processing and Vector Processors.
- 22. Give the algorithm and flow chart for the multiplication of floating point numbers.
- 23. Discuss I/O Interface unit with a block diagram.
- 24. Discuss any two mapping techniques of Cache memory.