QP CODE: 19101908

B.Sc./BCA DEGREE (CBCS) EXAMINATION, MAY 2019

Second Semester

Core Course **- CS2CRT05 - COMPUTER ORGANIZATION AND ARCHITECTURE**

(Common for B.Sc Computer Science Model III,B.Sc Information Technology Model III,Bachelor of Computer Application)

2017 ADMISSION ONWARDS

EDB34C67

Maximum Marks: 80   **Time: 3 Hours**

Part A

Answer any **ten** questions.

Each question carries **2** marks.

1.   What is an instruction code?

2.   Write the use of PC register.

3.   Write about fetch – decode – execute cycle.

4.   What is the prupose of program control instructions?

5.   What is stack pointer?

6.   How are memory locations addressed?

7.   Write about branch instructions.

8.   Write a note on primary memory.

9.   What is SRAM and DRAM?

10.   What is page fault?

11.   What is MISD?

12.   What is space - time diagram for a pipeline?

Part B

Answer any **six** questions.

Each question carries **5** marks.

13. Explain stored program organization.

14. Differentiate RISC and CISC.

15. Explain bus organization.

16. Explain about data transfer instructions with suitable examples.

17. Explain how magnetic tapes work.

18. Discuss the replacement algorithms for cache memory.

19. Explain address mapping using pages.

20. Explain multi processing systems.

21. Explain different types of array processors. What are the advantages provided by array processors?

(6×5=30)

Part C

Answer any **two** questions.

Each question carries **15** marks.

22. Describe general register organization with the help of neat diagram.

23. Explain memory hierarchy.

24. (a)Explain CPU internal architecture.
    (b)Write a short note on parallel system

25. Explain Instruction pipeline with eample and neat diagrm.

(2×15=30)