

B.Tech II Year II Semester (R09) Supplementary Examinations May/June 2017

COMPUTER ORGANIZATION

(Common to ECC & CSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Give the operational concepts of a digital computer.
(b) Discuss the interconnection structure of a computer.
- 2 (a) Explain various addressing modes of computer with examples.
(b) Briefly explain about program control transfer instructions.
- 3 Write in detail about the design of microprogrammed control unit.
- 4 What are the essential steps required to perform addition and subtraction operation on floating point numbers. Explain in detail with help of a flow chart.
- 5 (a) What are the key characteristics of memory system and explain them in brief.
(b) List and explain the characteristics of common memory technologies.
- 6 (a) Draw and explain the various DMA configurations.
(b) Discuss the process of DMA data transfer.
- 7 (a) Discuss the concept of parallel processing.
(b) With the help of the typical format of vector instruction, explain the vector instruction fields.
- 8 (a) Explain the Inter processor communication using shared variables.
(b) What is Cache Coherence Protocol? Explain.
