

Code: 9A05406

R09

B.Tech III Year I Semester (R09) Supplementary Examinations June 2015

COMPUTER ORGANIZATION

(Electronics and Communication Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions

All questions carry equal marks

- 1 (a) Distinguish between high level and low level languages. What are the requirements for a good programming language?
(b) Explain in brief about Amdahl's law.
- 2 (a) Differentiate between RISC and non-RISC systems.
(b) Design a circuit for parallel load operation into one of the four 4-bit registers from a bus. Mention clearly control/selection bits and selection logic. Assume JK flip flops.
- 3 (a) What is the necessity of branching? Explain the control sequence required for branch instruction.
(b) Give the horizontal and vertical micro instructions format and compare them.
- 4 (a) Write short notes on array multiplier.
(b) Explain the operation of restoring division with flow chart.
- 5 (a) Give at least four differences between a magnetic drum and a magnetic tape unit.
(b) How many 128 x 8 RAM chips are needed to provide a memory capacity of 2048 bytes?
- 6 (a) Explain PCI bus in detail.
(b) Bring out the features of RS-232.
- 7 (a) What is pipeline? Explain.
(b) Explain arithmetic pipeline.
- 8 (a) Explain Serial arbitration logic.
(b) Give short notes on the system bus.
