

Code: 9A05406

R9

B.Tech III Year I Semester (R09) Supplementary Examinations, May 2013

COMPUTER ORGANIZATION

(Electronics and Communication Engineering)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain the block diagram of a computer with functional units.
(b) Write a brief note on exceptions.
- 2 (a) What are register transfer languages?
(b) Draw and explain the bus structure for the data transfer between various registers and the common bus.
- 3 (a) What is a pipeline register? What is the use of it? Explain in detail.
(b) Why do we need subroutine register in a control unit? Explain.
- 4 (a) Explain the flow chart for add and subtract operations.
(b) Perform the following arithmetic operations by using 2's complement representation:
(i) $(+35) + (+40)$
(ii) $(-35) + (-40)$
(iii) $(-35) - (-40)$
- 5 Explain in detail the different mapping procedures in the organization of cache memory with necessary diagram.
- 6 (a) Explain the operation of RS 232 protocol with neat sketch.
(b) Describe input-output processor serial communication.
- 7 Draw the flow chart for point addition and subtraction for pipeline operations. Explain with an example.
- 8 Define multiprocessing. What are the software implementation issues?
