

R09**Code: 9A05406**

B.Tech III Year II Semester (R09) Supplementary Examinations December/January 2015/2016

COMPUTER ORGANIZATION

(Common to EIE and E.Con.E)

Time: 3 hours

Max Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Explain with the help of flowchart showing the sequence of execution of a high level language program.
(b) Define the following:
(i) Execution time.
(ii) Response time.
- 2 (a) Explain the operation of arithmetic logic shift unit.
(b) Discuss in brief about data transfer and manipulation instructions.
- 3 (a) What is nano programming? Explain nano-instruction sequencing organization.
(b) Compare microprogramming and nano programming.
- 4 (a) Derive an algorithm and flow chart for the non restoring method of fixed point binary division.
(b) List four alternative methods of rounding the result of a floating point operation.
- 5 (a) Describe the basic concepts of Semiconductor RAM memories.
(b) Give short notes on Cache memories.
- 6 (a) Explain in brief the different modes of transfer.
(b) Explain the CPU-IOP communication in detail.
- 7 (a) What is parallel processing? What is meant by Instruction stream and data stream?
(b) How the Synchronization problems can be solved by using a semaphore?
- 8 (a) Explain the crossbar switch organization.
(b) Describe SISD Multiprocessing with aid of diagram.
