

II B. Tech II Semester (R09) Supplementary Examinations, November/December 2012

COMPUTER ORGANIZATION

(Common to ECC & CSE)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 Explain in detail the single bus structure.
- 2 List and explain different types of computer instructions. Also provide their formats.
- 3
 - (a) What is a pipeline register? What is the use of it? Explain in detail.
 - (b) Why do we need some bits of current microinstruction to generate address of the next microinstruction? Support with a live example.
- 4
 - (a) Explain about normalization in floating point representations.
 - (b) Write an algorithm for multiplication of two unsigned numbers using shift and add method.
- 5
 - (a) Draw a flowchart and explain the organizations of ROM and PROM.
 - (b) Write in detail and compare EPROM and EEPROM.
- 6 Explain in detail the data transfer process to and from peripherals.
- 7
 - (a) List the techniques used to avoid data conflicts.
 - (b) Explain the advantages of the loop buffer.
- 8 Discuss in detail about Inter processor communication and synchronization.
