

B.Tech III Year I Semester (R09) Supplementary Examinations November/December 2017

COMPUTER ORGANIZATION

(Electronics and Communication Engineering)

Time: 3 hours

Max. Marks: 70

Answer any FIVE questions
All questions carry equal marks

- 1 (a) Differentiate between multiprocessors and multi computers.
(b) What is parity bit? Explain even and odd parity bit generation and design 3-bit odd parity generator and checker.
- 2 (a) Define a micro operation. Explain clearly at least four logic micro- operations with examples.
(b) With an example, clearly explain the following address modes:
 - (i) Direct.
 - (ii) Indirect.
 - (iii) Relative.
 - (iv) Indexed.
- 3 Write short notes on:
 - (a) Microprogram sequencing.
 - (b) Microinstruction-sequencing organization.
- 4 (a) Explain the addition of numbers using 2's complement notations with an example.
(b) Draw a flowchart which explains multiplication of two signed magnitude fixed point numbers.
- 5 (a) List the specifications of floppy disks and magnetic disks.
(b) Explain disc access time and SCSI bus.
- 6 (a) Explain in detail the data communication over telephone lines.
(b) Discuss about error detection.
- 7 (a) With the help of a neat sketch, explain the basic structure of pipelining processor. Explain the different categories of the pipeline model.
(b) Explain pipeline processing, vector processing and array processors.
- 8 (a) Discuss the Polling technique in detail.
(b) List the advantages of microprocessor systems.
