D 12498	Name
	Reg. No

## FIRST SEMESTER M.Sc. DEGREE EXAMINATION, JANUARY 2006

Computer Science
CS 103—COMPUTER ORGANIZATION
(2004 and earlier Aadmissions)

Time: Three Hours Maximum: 60 Marks

## Part A

Answer any **five** questions. Each question carries 3 marks.

- 1. List out the characteristics of signed magnitude number representation.
- 2. What do you mean by Decoders ? Why are they used ?
- 3. Give the various addressing modes that are being used.
- 4. Briefly explain the importance of Interrupts.
- 5. Why Ram is known as main memory? Explain.
- 6. What is an assembler? Why is it necessary?
- 7. Describe the utility of traps.

 $(5 \times 3 = 15 \text{ marks})$ 

## Part B

Answer any **three** questions. Each question carries 15 marks.

- 8. Describe in detail the history of the generation of computers.
- 9. Explain with necessary block diagrams how serial and parallel adders are implemented. Illustrate their working also.
- 10. Discuss on the various steps needed in the execution of a typical instruction. Explain each step in detail.
- 11. Give an overall view on memory hierarchy. Explain each one in detail.

 $(3 \times 15 = 45 \text{ marks})$