

[07 – 2219]

II/IV B.Tech. DEGREE EXAMINATION.

Second Semester

Computer Science and Engineering

COMPUTER ORGANIZATION

(Common with I.T and Dual Degree Programme in CSE)

(Effective from the admitted batch of 2006–2007)

Time : Three hours

Maximum : 70 marks

Question No. 1 is compulsory.

Answer any FOUR from the remaining.

All questions carry equal marks.

1. (a) Explain various types of shift micro operations with examples.
- (b) What is firmware?
- (c) Explain briefly about Direct Memory Access.
- (d) Differentiate between RAM and ROM.
- (e) What is handshaking?
- (f) What is Synchronous Data Transfer? Explain.
- (g) What is meant by Hit rate?

2. (a) Describe about Register Transfer language.
(b) Define an Interrupt. Explain various types of interrupts with examples.
3. (a) Explain the architecture of memory unit. Describe each unit in detail.
(b) What do you mean by a Microprogram? Write a microprogram to show that a number is an even number (or) odd number.
4. (a) Define a Register. Explain briefly the organization of General Registers.
(b) Explain in detail about Instruction formats.
5. (a) Write a microprogram which takes two variables for addition, subtraction, multiplication and division and store the results using registers.
(b) Explain various types of addressing modes with examples.
6. (a) Explain briefly about Asynchronous Data Transfer with a neat diagram.
(b) Discuss about various types of peripheral devices.

7. (a) Explain about Memory reference instructions.
- (b) Discuss about Timing and control signals.
8. Explain about the following in detail :
- (a) Associative memory
- (b) Virtual memory
- (c) Main memory.