Exam.Code:0003 Sub. Code: 0291

#### 2031

# B.A./B.Sc. (General) Third Semester Computer Science

CS-05: Computer Organization

Time allowed: 3 Hours

Max. Marks: 30

(6)

**NOTE:** Attempt <u>five</u> questions in all, including Question No. IX (Unit-V) which is compulsory and selecting one question each from Unit 1 - IV.

X-X-X

## <u>UNIT - I</u>

- I. How information is represented with various codes? Explain error detection & correction codes. (6)
- II. Convert

$$(1975)_{10} = (?)_2 = (?)_8 = (?)_{16}$$

#### UNIT - II

- III. What are Decoders and Encoders? Describe them with the help of example. (6)
- IV. What is Registers? Explain in brief different shift registers. (6)

#### **UNIT - III**

- V. Design architecture of 8086 processor & its instructions set (6)
- VI. Write about various addressing modes available. (6)

### **UNIT-IV**

- VII. Write various important physical components of computer. (6)
- VIII. What do you understand by a virus? Explain different types of virus attacks. How can you prevent your PC from virus attack? (6)

#### UNIT - V

- IX. Explain the following:
  - a) What is an Instruction Format? (1)
  - b) What are Pseudo Instructions? (1)
  - c) What are counters & its types? (2)
  - d) Explain different types of internal cards. (2)