## 2005 JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY

III B.TECH I SEMESTER SUPPLEMENTARY EXAMINATIONS COMPUTER ENGINEERING (ELECTRICAL & ELECTRONIC ENGINEERING)

## MAY 2005

TIME – 3 HOUR MARK – 80

[16]

## Answer any FIVE Questions All Questions carry equal marks

1. Draw a block diagram of the computer. Explain the function of each of the blocks.

2. (a) Find the decimal values of the following binary numbers. (1011010)2, (111111)2, (111011.101)2

(b) Convert the following decimal numbers to hexadecimal. (285, 48)10, (0.5625)10

[4+4+8]

(c) Convert the following binary numbers to octal and then to decimal (100100101)2, (110.01)2

3. (a) Using a neat sketch describe the parts of a magnetic hard disk.

- (b) Explain how the data is organized on a hard disk and discuss its operating principle. [4+6+6]
- (c) What are the main differences between the floppy disk and hard disk?
- 4. (a) Explain the logical structure of HYPCOM processor.
- (b) List the operation codes of HYPCOM and their meaning.
- 5. (a) Write in detail about the UNIX operating system and windows operating system.
- (b) What are the advantages of designing a micro kernel based OS?

6. What are the main parameters used to classify computers? Write in detail about the classification. [16]

7. Explain the different types of local area networks

[16]

8. (a) Discuss in detail about the classification of computer graphics.

[16]

[8+8]

(b) Explain with diagram how a CRT display works.