NAME..... ROLL NO.....

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY-2008

III B.TECH SUPPLIMENTARY EXAMINATIONS
SYSTEM PROGRAMMING
(COMPUTER SCIENCE&SYSTEM ENGINEERING)

AUG/SEP -2008

TIME-3 HOUR
MARK-80

ANSWER ANY FIVE QUESTIONS. ALL QUESTIONS CARRY EQUAL MARKS.

1. (a) Define INT instruction. Explain with examples.

(b) How does the INT instruction affect the stack?

(c) How does IRET instruction affect the stack?

2. Briefly explain all the Boolean operations with examples.

3. Write an Assembly Language Program that asks the user to input an integer and check whether that integer is a multiple of three, printing its conclusion to the screen. The Program should work with input integers having as many as 79 digits.

4. Compare and contrast IFNDEF and IFIDN conditions in macros.

5. Describe the features of the following BIOS Interrupt 10H for graphics functions with example code:

(a) Read Light Pen Position (04H)

(b) Set Palette Registers (10H)

(c) Set Color Palette (0BH)

(d) Display a character at cursor position (0AH).

6. Explain the following with help of an example:

(a) Pointer entries in the FAT.

(b) Sample FAT entries.

(c) Handling 12-bit FAT entries in Reversed-byte sequence.

(d) Handling 16-bit FAT entries.

7. (a) Explain about High-Memory Area.

(b) Code the instructions to reset the diskette controller.

(c) Code the instructions to reset the Disk System.

8. Explain the general design procedure for an assembler.