NATIONAL UNIVERSITY OF SCIENCE AND TECHNOLOGY
FACULTY OF APPLIED SCIENCE
COMPUTER SCIENCE DEPARTMENT
MAY EXAMINATIONS 2001

SUBJECT: **INTRODUCTION TO COMPUTER SCIENCE – ENGINEERING STUDENTS**
CODE: SCS 1007

INSTRUCTION TO CANDIDATES
1. Answer three (3) questions from part A and (3) questions from Part B
2. Clarity of answer carries marks.
3. Maximum marks - 100

Time: 3 hours

QUESTION 1

a) What are the features of third generation and fourth generation computers? Write their advantages and disadvantages? [5]

b) Define the following terms with two examples for each :

i) Hardware ii) Software iii) Input device

iv) Output device v) High level language

vi) Assembly level language [12]

QUESTION 2

a) Explain with a block diagram the working of a Digital Computer. [8]

b) How the computers are classified and name them? [8]

QUESTION 3

a) What is meant by a primary memory and a secondary memory? Give at least three examples for each. [6]

b) What are the applications of computers? Explain any two of them in detail? [6]

c) What is a computer virus? How do you prevent or cure the computer virus? [4]

QUESTION 4

a) Explain the difference types of operating systems? Give at least two examples for each? [8]

b) Bring out the differences between single user operating system and multi-user operating system? Give examples for each? [8]

QUESTION 5

a) What is meant by booting of a system? Name the type of booting methods? [6]

b) Write the commands to perform the following on MS-DOS:

i) Change Directory [2]
ii) To create a directory [2]
iii) To check date and time [2]
iv) Types of directory commands [2]
v) Copy a file from "A" drive to "c" drive [2]

PART B

QUESTION 1

a) What is a flow chart? Write the different types of symbols used to develop a flow chart? [6]

b) Bring out the comparison between an Interpreter and a compiler? [4]

c) What are the characteristics of a program? [4]

d) Write the procedure to logon to Windows NT Operating system? [3]

QUESTION 2

a) What is an identifier and a keyword, give two examples for each? [6]

b) What are the data types supported by 'C' programming language, give examples to each? [6]

c) Write an algorithm, flowchart and program to find sum, division and average of four real numbers? [5]

QUESTION 3

a) Explain the functions getchar( ) and putchar ( )function with an example? [6]

b) Write the Relational and Logical operators supported by 'c' with their Syntax? [5]

c) What is the output of the following program?

```
# include,stdio.h.
# include <math.h>
main( )
        {
                int a=4, b=8, c=10;
        printf ("a*b/c*b = %d", a*b/ / c*b);
printf ( "b%a = %d",  b%a);
printf (" (a*b+c) – 10/c = %d ",(a*b+c) – 10/c);
printf (" (a+b) *c/ b+c) = %d", (a+b) *c/(b+c));
}
```

[6]

QUESTION 4

a) What are the control statements supported by "C". Write their syntax? [10]

c) Write a program to print the multiplication table using do-----while loop? [5]

QUESTION 5

a) What is an array and a function? Give examples? [6]

b) Write a program to find the smallest number in an array? [5]

c) Write a program to find the addition of two matrices A & B. [6]

END OF QUESTION PAPER