2005 JAWAHARLAL NEHRU TECHNOLOGY UNIVERSITY

II B.TECH I SEMESTER SUPPLYMENTARY EXAMINATIONS

DATA PROCESSING AND FILE ORGANISATION

(COMPUTER SCIENCE ENGINEERING AND IT)

MAY 2005

TIME: 3 HOUR
MARK: 80

ANSWER ANY FIVE QUESTIONS ALL QUESTIONS CARRY EQUAL MARKS

MARK [5*16=80]

1. Explain the organization of a COBOL Program. Explain the importance of various division and section in a COBOL Program. Illustrate through an example.

2. Explain class conditions, condition-name conditions and Complex conditions with relevant examples.

3. What is the use of structured flow charts? Draw the flow chart to find the maximum and minimum elements from a given N numbers. (The flow chart must use all types of symbols). Develop - COBOL program for the base.

4. Write notes using suitable examples on the following:

(a) Master files

(b) Transaction file

(c) Report files.

5. (a) What is the difference between a direct access memory and random access memory? Is a disk drive direct access memory or random access memory?

(b) Define the following terms:

i. latency time

ii. seek time
iii. Cylinder
iv. disk controller

(c) With a neat block diagram explain magnetic disk memory organization.

6. (a) Explain with syntax and examples the WRITE and REWRITE statements for relative files.

(b) Suppose that a relative file named STATISTICS contains monthly sales data for the past years staring from January 2000. This means that the first record of STATISTICS contains sales data for January 2000, the second record con- sists of sales data for February 2000 and so on. It is required to process 10 records of this file starting from the one corresponding to the month and year indicated by the contents of data names MTH and YEAR respectively. For example If MTH contains 3 and YEAR contains 2001, then 10 records starting from the one for March 2001 are to be processed. Write a COBOL program to access the required 10 records.

7. Explain chain record sort with example. Develop COBOL program for the same.

8. (a) Why is COLUMN NUMBER clause used in the description of an elementary item in a report group.

(b) Does the Data name LINE-COUNTER need to be defined in Data division.