

II B.Tech I Semester Supplementary Examinations, November 2005
DATA PROCESSING AND FILE ORGANIZATION (COBOL)
 (Common to Computer Science & Engineering, Information Technology
 and Computer Science & Systems Engineering)

Time: 3 hours

Max Marks: 80

Answer any FIVE Questions
All Questions carry equal marks

1. ABC company has five types of products. Sales Representatives of the company get the commission on the sales of the products as per the following formulae.

Product Type	Formula for commission computation
A	$(0.15 * \text{Bill} - \text{rate}) * \text{Quantity}$
B	$(0.10 * \text{Cost} - \text{Rate} + 0.25(\text{Bill} - \text{Rate} - \text{Cost} - \text{Rate})) * \text{Quantity}$
C	$(0.30(\text{Bill} - \text{Rate} - \text{Cost} - \text{Rate})) * \text{Quantity}$
D	$(\text{Rs.}50.00 + (0.5 * \text{Cost} - \text{Rate})) * \text{Quantity}$
E	Rs.40.00

Product type, Cost-Rate, Bill-Rate and Quantity are given as inputs. Develop a COBOL program to compute the Commission-Amount as per the product type. If product type is none of the A, B, C, D or E then Commission_amount is 0. Also draw the flow chart for the same. [8+8=16]

2. (a) Give the syntax of STRING and UNSTRING verbs in COBOL. Explain their working through examples. [4+4=8]
 (b) Develop complete COBOL program with appropriate indentation to check whether a member is a prime number or not. Include appropriate comments in the program. [8]
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. [3+3+4=10]
4. A student record contains student no, name of the student and marks in three subjects as fields. Create a table of records for 20 students and enter the above information for these 20 students Write a Cobol program to find the total marks and average marks of each student and print the information in the following format. [16]

S.No.	Roll No	NAME	M1	M2	M3	TOTAL	AVERAGE
1	2001	abc	35	35	35	105	35.0
20	2020	xyz	40	40	40	160	40.0

5. Write a menu driven program to update an indexed sequential file "BANK" which contains the fields ACCNO, BALANCE, and LAST_DATE representing account number, current balance and last date of transaction respectively. The key field is ACCNO. The transactions permissible are deposit and withdrawal. [16]

6. (a) Explain DECLRATIVES and FILE STATUS clause for relative files. [8]
 (b) What is meant by data block ? Write down the important points that indicate the advantages and disadvantages of blocking. [4+4=8]
7. (a) What is an input procedure as used in the SORT VERB ? What is an an output procedure? [5+5=10]
 (b) What is meant by SORT KEY ? Is it possible to sort upon more than one key. [3+3=6]
8. A bank invests its deposits a government, social and business Projects. A catalog of theinvestments sorted in the assending order of Project codes, contain, for each investment the following data: [16]

Project code (5 digits)

Project location (10 characters)

Project restriction (50 characters)

Date of investment (2 digits each for year, month and day)

Value of investment (in format 9(6)v99)

Write a COBOL program to print monthly investment report as shown below

MONTHLY INVESTMENTS REPORT

Name of month: _____ year: _____

SR.NO.	PROJECT-CODE	LOCATION	DESCRIPTION	VALUE
1	_____	_____	_____	_____
2	_____	_____	_____	_____

TOTAL MONTH INVESTMENT_____
