XT 9151 – BUSINESS DATA PROCESSING

1. List the different types of software available in a computer.

2. Differentiate between assemblers and compilers.

3. Give the four major structural elements of a COBOL program.

4. The formula to convert a temperature from Fahrenheit to Celsius is C=5/9(F-32). Draw a flow chart and write a COBOL program that will read a deck of each containing temperature in Fahrenheit in columns 1-4 and will then print the corresponding temperature in Celsius.

5. (i) Draw a flow chart to find out the prime numbers between 1 and 100.
   (ii) Discuss about the CARD-Layout used for coding a COBOL program.

6. Write short notes on
   (i)   ICOS
   (ii)   Syntax for ADD verb
   (iii)   File

7. Define major key, minor key.

8. List the modes in which a file can be opened.

9. Give the usage of Rewrite statement.

10. Explain the difference between sorting and merging a file.

11. An investor has invested in many shares available in the stock market and has the following information with him. Company name, company code, company share price, price of earnings ratio in his portfolio file. Write a COBOL program to extract the following information.
    (i)   List of companies having high price to earnings ratio.
    (ii)   List of companies having high share price.

12. Discuss the advantage of blocking.

13. List out the optional clauses in FD entry and explain the usage of each optional clause with an example.

14. Define Master File.

15. An investor has the list of all shares he has purchased so far in file named Asset. He also has the list of all the new shares purchased as well as the list of all the shares he has sold in a file called Transfer-asset. Write a COBOL program so that he can find out the shares he currently owns. (Assume suitable information.)

16. Define nesting.

17. Differentiate between subscripting and indexing.

18. Give the advantages of relative file over sequential file.

19. The sales figure of ABC company is given by the SALES table and defined in COBOL as
    01 SALES-TABLE
            02 Branch-figures OCCURS 18 TIMES
                    03 Monthly sales PIC (6) V99 OCCURS 12 TIMES
    Write a COBOL program to find the total of the 12 month sales for each branch.
    (Hint: use the verb perform….varying…after)

20. Discuss about the procedure division statements for relative files.

21. Write briefly about "Minor Break, Major Break".

22. Write a COBOL program using control break techniques to find individual salary of an employee in the department and the total salary bill for each department.

23. Define DATA NAME.

24. List the types of literals.

25. Name the three categories COBOL statements.

26. Assume the following DATA DIVISION entries
        01 BILL.
            02 A   PIC 99.
            02 FILLER   PIC X (7).
    Indicate if the following statements is correct or not in the PROCEDURE DIVISION.
    MOVE "AB" to A.

27. Describe nested loop.

28. Differentiate between major break and minor break.

29. Write the advantages of using OCCURS clause.

30. Give the benefits of using a relative file instead of a sequential file.

31. Discuss about major key.

32. Write the importance of relative key.

33. (i) Discuss about the program development process with a flow chart.
    (ii) Explain the various divisions in COBOL.

34. (i) Discuss the ADD verb in COBOL with examples.
    (ii) Indicate the contents of A, B, C, D after the execution of the following
    instruction. In each instance refer to the initial values of A,B,C and D respectively
    are A PIC 99 (05), B PIC 99V9 (29.4), C PIC 99V9(03.2), D PIC 99V9(30),
       1. ADD A,D.
       2. ADD C, B GIVING D.
       3. SUBTRACT A, C FROM B.
       4. SUBTRACT D, B FROM 80.
       5. MULTIPLY C BY 5.
       6. MULTIPLY A BY C GIVING D.
       7. DIVIDE A INTO 6.
       8. DIVIDE A INTO D GIVING C REMAINDER D
    (iii) Explain the MOVE verb in COBOL with examples.
    (iv) List the Input and output verbs used in file operations in COBOL and explain
    them.

35. (i)   Explain with the help of a COBOL program Control break processing.
    (ii)   Explain with a neat flow chart the basic control structures available in
           COBOL.
    (iii) Write a COBOL program to check the condition A=B, A>B, A<B and
           display the result.

36. (i)   Give the syntax of SEARCH verb in COBOL and explain.
    (ii)   Write a COBOL program to find the total number of persons having
           deposit of 5000/ in a Bank.
    (iii) An investment company has a master file containing information
           regarding the investments made so far. It also has a transaction file
           containing the day to day trading activities. Write a COBOL program with
           a neat flow chart to update the current master file.

37. (i) Give the syntax of SORT verb in COBOL and explain the rules for specifying
the SORT verb.
    (ii) A company has a salary file with the following records description
           FD SALARY-FILE.
           01 INPUT-RECORD.
              02 ID-NUMBER   PIC 9(6).
              02 NAME   PIC X (24).

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02   DEPARTMENT        PIC  X(10).
02   BASIC-PAY         PIC 9(5) V99.
02   ALLOWANCE         PIC 9(4) V99.
02   DEDUCTION         PIC 9(4) V99.
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    Write a COBOL program to sort the above file on DEPARTMENT in ascending order and within the each department sort in the descending sequence of BASIC-PAY.

(iii) Write short notes on
   a. Indexing
   b. Relative Files
   c. Syntax for merge verb
   d. Features of magnetic disk