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Question Paper Code : 95297

5 Year M.Sc. DEGREE EXAMINATION, NOVEMBER/DECEMBER 2015.

Second Semester

Software Engineering

ESE 024 — COBOL AND DATA PROCESSING

(Common to 5 Year M.Sc. Software Systems)

(Regulations 2010)

Time : Three hours Maximum : 100 marks

Answer ALL questions.

PART A — (10 × 2 = 20 marks)

1. Define the structure of a COBOL program.
2. How will you find the size of data items in a COBOL program?
3. State the usage of OCCURS clause with an example.
4. What level numbers are used for Renames and Redefines clauses?
5. What parameters are to be considered for selecting file organization?
6. State how the relative files are created and manipulated in COBOL.
7. List down the steps involved in data processing of a file in COBOL.
8. Compare and contrast modular programming with Object oriented programming.
9. Mention the methods of screen handling in COBOL programming.
10. List down the steps involved in merging two files using COBOL programming.

PART B — (5 × 16 = 80 marks)

11. (a) (i) What are the rules to be followed while forming a COBOL word? Give examples.

(ii) Write a simple COBOL program to illustrate the use of ADD verb.

Or

(b) (i) Enumerate on the role of String, Unstring and Inspect statements in COBOL with an example.

(ii) Write a simple program in COBOL to illustrate ON- SIZE error option.

12. (a) (i) Explain the role and rules of RENAMES and REDEFINES clause with an illustration.

(ii) Explain in detail about the different types of IF statements with examples.

Or

(b) (i) Discuss in detail about the editing picture clause of COBOL.

(ii) Write a short note on subroutines and linkage section with respect to COBOL programming.

13. (a) (i) Write a program to create an Indexed Sequential File in dynamic mode for Student particulars. Assume just 3 fields: Rno (Roll Number), cl (Class) and m (Mark). Read the file and display the records.

(ii) Discuss in detail about the creation and rewriting of a sequential file in COBOL.

Or

(b) (i) Write a simple COBOL program to illustrate the usage of MERGE Verb and SORT verb with an example.

(ii) Explain in detail about procedure division statements for indexed sequential files.

14. (a) (i) Enumerate the role of flow charts and modular programming in the design of COBOL programs.

(ii) Write a short note on coding style, efficiency and testing of COBOL programs.

Or

(b) (i) State and explain the benefits of designing good programs using modular programming.

(ii) Discuss in detail about the data processing cycle and data organization.

15. (a) (i) Create a sequential file with the following record layout using the SCREEN SECTION using COBOL.

FIELDS	PICTURES
Order number	9(6)
Customer number	9(5)
Salesman number	9(4)
Date	9(6)
Number of items	9
Product code	x (6)
Quantity	9(5) v99

(ii) Implement a program using COBOL for the following scenario: Accept from the terminal the age and name of a student and if he is over 21, display that he is eligible to vote; else display the number of years he must wait before he can vote. Also check whether the last ACCEPT was terminated by pressing f2 key or not, if f2 key was used as the terminating key, transfer control to the paragraph known as FUNC- TWO.

Or

(b) (i) Write a short note on master and transaction file with it pros and cons.

(ii) The telephone department maintains the following information regarding the subscribers in a file as follows:

Columns	Field
1- 5	Subscriber number
6- 25	Subscriber name
26- 41	Address
42- 48	Phone-no

The above information about new subscribers is stored in a new file. Assuming the records are already stored in both the files, merge them and create a new file using COBOL.