

PGDCA / MCA (I Yr) / BCA

Term-End Examination

December, 2008

**CS-03 : FILE STRUCTURE AND  
PROGRAMMING IN COBOL**

Time : 2 hours

Maximum Marks : 60

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**Note :**

- (i) Question number 1 is **compulsory**.
  - (ii) Answer any **three** questions from the rest.
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1. (a) Write a program in COBOL to select the mode of mailing and rate for despatching materials as per the following rules : 10
- (i) If the priority is not high and the weight is less than or equal to 10 kg, despatch the material by normal post with the rate of Rs. 9 per kg.

- (ii) If the priority is high, distance is more than 35 km and the weight is less than or equal to 10 kg, despatch the material by speed post with rate of Rs. 15 per kg.
  - (iii) If the priority is high, distance is less than 35 km and weight is less than 100 kg, send that material through a person with rate of Rs. 25 per kg.
  - (iv) For all other cases, send the material by registered post at the rate of Rs. 12 per kg.
- (b) A table contains the details of 800 books on 12 subjects. Write the DATA DIVISION statements necessary for writing the PROCEDURE DIVISION for counting the number of books in each subject whose price is above Rs. 1,200. 5
- (c) What is the purpose of REDEFINES clause in COBOL ? Explain with the help of an example. Can this clause be used for defining variable length records ? Give reasons in support of your answer. 5

- (d) Write a program in COBOL to create a relative file from the given disk file. The format of the disk file is given below : 10

Employee Number	9 digits
Employee Name	25 characters
Date of birth	8 characters
Department	15 characters
Basic Salary	10 digits

The relative key may be assumed to be the Employee Number. Make suitable assumptions, if any are needed.

2. Write a COBOL program that converts a given date (Specified as the values of DAY and MONTH) to the equivalent Julian date and store it in the data name *Convert*. Assume 29 days in the month of February. MONTH is between 1 and 12, and DAY is date of month. 10

**Note :** A Julian date is a 3 digit date representing the number of days counted from the first of January.

3. (a) Write a program to sort a file into Student\_Rank Sequence, where Student\_Rank is calculated using Marks field according to the following rule :

Student_Rank	Marks
A+	> 90
A-	85 to 90
B+	70 to 84
B-	60 to 69
C	50 to 59
D	< 50

Also, add Student\_Rank to the sorted output records and print all the output records. Make any needed assumptions and state them. 6

- (b) Mention the purpose of using RENAME clause. Write the syntax format and list some important precautions to keep in mind while using the RENAME clause. 4

4. (a) Two sorted transaction files are to be merged on a specific key. Write the various data division and procedure division entries which are required to do this operation.

Make suitable assumptions, and state them. 5

- (b) Write a program in COBOL that takes a positive number upto 100 as input; the output should be the smallest number, which when added to the number that was input, gives the next prime number.

e.g.

Input Number = 14

Output Number = 3

as the next prime number is 17.

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5. Mention the use and write the syntax of each of the following COBOL statement/verbs/clauses with the help of an example :

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- (a) ACCEPT and DISPLAY
- (b) RELEASE and RETURN
- (c) CORRESPONDING option with MOVE and ADD verbs
- (d) PERFORM
- (e) STRING

