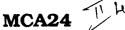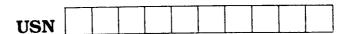MCA24

NEW SCHEME

USN ☐☐☐☐☐☐☐☐☐☐

Second Semester M.C.A Degree Examination, January/February 2005
Master of Computer Applications
COBOL Programming and Applications

Time: 3 hrs.] [Max.Marks : 100

Note: 1. *Answer any FIVE full questions.*
2. *Assume any missing data.*

1. (a) What is a data name ? List the rules followed to devise data names. **(7 Marks)**

   (b) What are literals ? Give examples for each type. **(6 Marks)**

   (c) What are the advantages of figurative constants ? List different figurative constants used in COBOL. **(7 Marks)**

2. (a) List different divisions in a COBOL program. Name the division that

   i) Only paragraphs

   ii) Requires tailoring from programmer. **(6 Marks)**

   (b) Write an FD clause and give significance of each description in the clause. **(7 Marks)**

   (c) List the picture characters and illustrate their usage with an example for each character. **(7 Marks)**

3. (a) A deck of cards is being read as a file called RESULT. Each card contains the following information :

Columns	Description
1-6	Roll-No
7-30	Name
31-33	Marks of COBOL lab
34-36	Marks of COBOL subject
37-39	Marks of Mathematics

   Print all the information of a card and total marks of a student in one line giving the proper spacing. Describe data division and procedure division for the above. **(15 Marks)**

   (b) Describe input and output verbs with an example for each. **(5 Marks)**

4. (a) What is a compute verb ? Explain with an example the following clauses

   i) ROUNDED   ii) ON SIZE ERROR **(8 Marks)**

   (b) Write a COBOL program to compute the sum of digits and reverse of a given integer number. **(12 Marks)**

5. (a) Explain with two examples for each of the following

     i)   OCCURS clause

     ii)   PERFORM statement (simple)   **(6 Marks)**

    (b) Write a COBOL program to MULTIPLY two $N \times N$ matrices. Make your program interactive. Each entry in the matrix is a two digit number.   **(14 Marks)**

6. (a) What are the different types of file organizations ? List the different types of access modes and give examples for their usage.   **(6 Marks)**

    (b) Create a sequential file that holds student records. Each record contains Name, age, marks and date of birth of a student. Make your program interactive. Display the contents of the file.   **(14 Marks)**

7. (a) Briefly illustrate the usage of the following statements

     i)   I - O   ii) Rewrite   iii) Delete   **(6 Marks)**

    (b) Write a COBOL program to create an indexed sequential file of records containing employee number, employee name, employee salary and percentage of bonus. Compute the bonus of each employee. Give provision for additional bonus to the selected employees. Make your program interactive.   **(14 Marks)**

8.   Write adequate notes on any FOUR of the following :

     i)   Calling of subroutines

     ii)   Report section

     iii)   SORT verb and MERGE VERB

     iv)   REDEFINE and RENAME CLAUSES

     v)   SPECIAL NAMES   **(5 × 4 = 20 Marks)**

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NEW SCHEME

MCA24

USN

Second Semester M.C.A Degree Examination, July/August 2005

Master of Computer Applications

COBOL Programming and Applications

Time: 3 hrs.]

[Max.Marks : 100

Note: *Answer any FIVE full questions.*

1. (a) Explain the various divisions of COBOL program including their sections in order. Also indicate their positions on COBOL coding sheet.   **(8 Marks)**

   (b) Describe COBOL literals with examples.   **(6 Marks)**

   (c) Explain any three arithmetic verbs.   **(6 Marks)**

2. (a) Explain the GOTO.... DEPENDING ON verb with an example.   **(6 Marks)**

   (b) Write a COBOL program to accept twenty numbers and then display them in ascending order.   **(10 Marks)**

   (c) Explain the RENAME clause with an example.   **(4 Marks)**

3. (a) Explain the following with example

   i) Value clause   ii) Picture clause
   iii) Level numbers   iv) Special names

   (12 Marks)

   (b) Explain condition names conditions with examples and list its advantages and disadvantages.   **(8 Marks)**

4. (a) Explain different formats of MOVE verb.   **(6 Marks)**

   (b) Explain ROUNDED and ON-SIZE-ERROR options with examples.   **(4 Marks)**

   (c) Discuss the different forms of PERFORM verb in detail.   **(10 Marks)**

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5. (a) Write a COBOL program to merge two sequential files.   (10 Marks)

   (b) Given that record format of an employee sequential file as below :

Col. Nos.	Field Names
1– 6	Emp-no
7–36	Emp-name
37–44	Basic
45–48	DA (60% of basic)
49–51	Deductions

   Write a COBOL program to accept N number of employees record and write them into file.   (10 Marks)

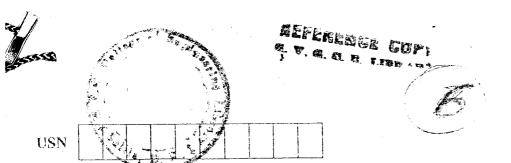6. (a) Explain the procedure to create increased sequential file with a suitable program.   (12 Marks)

   (b) Write a COBOL program to illustrate the use of SEARCH verb.   (8 Marks)

7. (a) How are arrays handled in COBOL? Explain OCCURS clause with DEPENDING UPON OPTION.   (10 Marks)

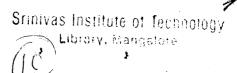   (b) Write a COBOL program to perform matrix addition.   (10 Marks)

8.   Write short notes on :

   a) SORT verb

   b) Report generator

   c) Screen section

   d) Subroutines   (4×5=20 Marks)

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07MCA21

Second Semester MCA Degree Examination, June / July 08
Business Data Processing with COBOL

Time: 3 hrs.   Max. Marks:100

Note : *Answer any FIVE full questions.*

1 a. Describe the various divisions of COBOL program, including their sections and paragraphs in order. Specify their positions.   **(10 Marks)**
   b. What are literals? Explain the different types of literals supported by COBOL.   **(10 Marks)**

2 a. What do you mean by an editing character? Explain any five editing characters with examples.   **(12 Marks)**
   b. What do you mean by picture clause? Explain the four general characteristics described by picture clause.   **(08 Marks)**

3 a. Explain with examples the various arithmetic verbs available in COBOL.   **(08 Marks)**
   b. Write a COBOL program to accept ten numbers and display it in ascending order.   **(06 Marks)**
   c. Explain any three INPUT OUTPUT verbs.   **(06 Marks)**

4 a. Discuss ROUNDED and ON-SIZE-ERROR options, with suitable examples.   **(10 Marks)**
   b. What is condition? What are different types of conditions? Explain any four conditions.   **(10 Marks)**

5 a. Explain the various forms of PERFORM statement in detail.   **(12 Marks)**
   b. Write a program to search an element in an array using SEARCH verb.   **(08 Marks)**

6 a. Explain the following verbs which are used to process files.
      i) OPEN ii) CLOSE iii) READ iv) WRITE v) REWRITE.   **(10 Marks)**
   b. Explain the SORT verb and MERGE verb with respect to sequential files.   **(10 Marks)**

7 a. What are the advantages of Indexed sequential files? List the characteristics of the same. Explain how READ and WRITE operations are performed.   **(10 Marks)**
   b. Write a simple program to CALL a subroutine by passing parameters from one to another.   **(05 Marks)**
   c. Illustrate the general format of a REPORT.   **(05 Marks)**

8 Write short notes on the following:
   a. REDEFINES   **(05 Marks)**
   b. RENAMES   **(05 Marks)**
   c. CONDITION NAME CONDITION   **(05 Marks)**
   d. SPECIAL NAMES.   **(05 Marks)**

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USN

NEW SCHEME

MCA24

Second Semester MCA Degree Examination, July 2007
COBOL Programming and Applications

Time: 3 hrs.]   [Max. Marks:100

Note : *Answer any FIVE full questions.*

1 a. Explain the various divisions of COBOL program including their sections and paragraphs in order. Also indicate their positions in order.   (12 Marks)
   b. Describe the different types of literals supported in a COBOL program with examples.   (08 Marks)

2 a. Explain four general characteristics described by the picture clause.   (08 Marks)
   b. Explain the following edit characters with examples:
      i) Z   ii) $ iii) CR   iv) B   v) 0   vi) 1   (12 Marks)

3 a. Give the syntax of different Arithemetic verbs. Explain.   (12 Marks)
   b. Write a COBOL program to find prime number between 1 to N.   (08 Marks)

4 a. Explain usage clause.   (08 Marks)
   b. What is condition? What are different types of conditions? Explain any 2 of them.   (12 Marks)

5 a. Explain
      i) Perform with until option.
      ii) Perform with varying option.   (08 Marks)
   b. Write a COBOL program to find addition and subtraction of two matrices A and B of order M × N and P × Q respectively. Print the given and resultant matrices.   (12 Marks)

6 a. Explain the following verbs which are used to process file:
      i) Open   ii) Close   iii) Delete   iv) Rewrite.   (08 Marks)
   b. Explain the sort verb and merge verb with respect to sequential files.   (06 Marks)
   c. Write a COBOL program to find a element using linear search (without using search verb).   (06 Marks)

7 a. What are Indexed sequential files? Explain the file – control paragraph for indexed files.   (10 Marks)
   b. Write a COBOL program to find factorial of a number using subroutine.   (10 Marks)

8 Write short notes on:
   a. Data description entries.
   b. Sequential control verbs.
   c. ALTER statement.
   d. Report – Description entry.   (20 Marks)

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07MCA21

Second Semester MCA Degree Examination, June-July 2009
Business Data Processing with COBOL

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1   a. Explain the various divisions of COBOL along with their sections and paragraphs. **(12 Marks)**
    b. Explain COBOL coding sheet in detail. **(05 Marks)**
    c. Give the character set of COBOL. **(03 Marks)**

2   a. Explain the following editing characters with examples:
       i) Z   ii) $ iii) φ   iv) B   **(12 Marks)**
    b. Write a COBOL program to find the largest of three numbers along with sample output. **(08 Marks)**

3   a. Give the syntax of the following verbs with examples:
       i) ADD   ii) SUBTRACT   iii) DIVIDE   iv) MULTIPLY   v) MOVE   **(10 Marks)**
    b. Write a COBOL program to accept three subjects marks and to display the total of marks and percentage of marks. **(10 Marks)**

4   a. What are REDEFINES and RENAMES clauses? Explain with an example. **(08 Marks)**
    b. Explain ROUNDED and ON-SIZE-ERROR options with an example. **(06 Marks)**
    c. Explain :
       i)   Relational condition.
       ii) Compound condition. **(06 Marks)**

5   a. Explain IF and Nested IF statements used in COBOL with an example. **(10 Marks)**
    b. List various types of PERFORM statements. Explain any two of them in detail. **(10 Marks)**

6   a. What are arrays? Explain the OCCURS clause and subscripting with respect to arrays. Give example. **(08 Marks)**
    b. Explain the use of INDEXED by phrase of an occurs clause with an example. **(04 Marks)**
    c. Explain with examples : i) SET verb   ii) SEARCH verb **(08 Marks)**

7   a. Explain SORT and MERGE verbs of COBOL with an example. **(10 Marks)**
    b. Explain the following verbs which are used to process files:
       i) OPEN   ii) CLOSE   iii) WRITE   iv) REWRITE **(10 Marks)**

8   a. Explain briefly the various report groups used by a report writer in COBOL. Give an example. **(12 Marks)**
    b. With suitable program example, explain the concept of subroutine in COBOL. **(08 Marks)**

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07MCA21

Second Semester MCA Degree Examination, May/June 2010
Business Data Processing with COBOL

Time: 3 hrs.

Max. Marks:100

Note: *Answer any FIVE full questions.*

1 a. Explain the four divisions of a COBOL program, with sections and paragraphs. **(12 Marks)**
   b. What is the difference between literals and figurative constants? Explain the types of figurative constants. **(08 Marks)**

2 a. Write a COBOL program to generate prime numbers upto n-terms. **(08 Marks)**
   b. What is picture clause? Explain four characteristics of picture clause. **(06 Marks)**
   c. What is level number? Explain different level numbers in COBOL. **(06 Marks)**

3 a. Describe all arithmetic verbs used in COBOL, with example to each. **(08 Marks)**
   b. Write a COBOL program to find the sum and the difference of two given matrices. **(12 Marks)**

4 a. Discuss different forms of PERFORM statement with example to each. **(10 Marks)**
   b. Explain SORT and MERGE verb, with example to each. **(10 Marks)**

5 a. Explain following clauses, with example to each :
      i) USAGE
      ii) SYNCHRONIZED
      iii) JUSTIFIED
      iv) REDEFINES. **(10 Marks)**
   b. Write a COBOL program to prepare the pay-roll of employees, with following information to create sequential file.
      Input file fields :   i) Emp-id   ii) Emp-name   iii) Basic
      Output file fields : i) Emp-id   ii) Emp-name   iii) Basic   iv) DA   v) HRA
      Consider DA as 70% of basic
                HRA as 50% of basic **(10 Marks)**

6 a. Explain PROCEDURE DIVISION statements in relative files, with example to each. **(10 Marks)**
   b. Write a COBOL program to create an indexed sequential file, with following fields:
      i) Branch   ii) USNO   iii) Name (USNO as RECORD-KEY).
      Enter student records on to file till user presses 'N'. **(10 Marks)**

7 a. Explain FILE-CONTROL paragraph for indexed sequential files. **(05 Marks)**
   b. Describe the structure of COBOL subroutine and also write a complete program to illustrate the same. **(10 Marks)**
   c. Explain general format of report in COBOL. **(05 Marks)**

8   Write short notes on:
   a. Any five editing characters.
   b. COBOL search verb.
   c. ACCEPT verb.
   d. MOVE verb. **(20 Marks)**

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