Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Mainframe Application Development using COBOL **Semester: V**
Program: B. Tech. CSE with spl. Mainframe Technology **Time : 03 hrs.**
Course Code: CSMT3001 **Max. Marks: 100**

Instructions:

SECTION A

S. No.		Marks	CO
Q 1.	Compare PERFORM and GOTO with suitable example.	**4M**	**CO3**
Q 2.	Write CORRECT/INCORRECT for following statements in COBOL and for INCORRECT give reason. a. ADD X, Y TO Z. b. SUBTRACT X AND Y FROM Z. c. MULTIPLY X BY 8. d. DIVIDE X BY Y GIVING 40.	**4M**	**CO2**
Q 3.	Illustrate the use of on size error option in COBOL program with suitable example.	**4M**	**CO5**
Q 4.	a. Identify the output of the following code: IDENTIFICATION DIVISION. PROGRAM-ID. HELLO. DATA DIVISION. WORKING-STORAGE SECTION. 01 WS-DESCRIPTION. 05 WS-NUM. 10 WS-NUM1 PIC 9(2) VALUE 20. 10 WS-NUM2 PIC 9(2) VALUE 56. 05 WS-CHAR. 10 WS-CHAR1 PIC X(2) VALUE 'AA'. 10 WS-CHAR2 PIC X(2) VALUE 'BB'. 66 WS-RENAME RENAMES WS-NUM2 THRU WS-CHAR2. PROCEDURE DIVISION. DISPLAY "WS-RENAME : " WS-RENAME. STOP RUN. b. State the range of AREA A and B in COBOL.	**2M** **2M**	**CO2** **CO1**
Q 5.	If PICTURE and Numeric value moved are like in specified data, what will be edited value?	**4M**	**CO1**

PICTURE DEFINED	NUMERIC VALUE MOVED	EDITED VALUE
ZZ99	12	
$9999	123	
99,999	1234	
+9999	-1234	

SECTION B

Q 6.	Compare the following with suitable example: a. Redefine and Rename clause b. Test and NoTest compiler option (OR) c. Search and search all d. DYNAM and NODYNAM compiler option	**10M**	**CO3, CO5**
Q 7.	a. Draw table respective to following code, populate value of your choice, and display some values using subscript. 01 EMPLOYEE-TABLE. 05 EMPLOYEE-REC OCCURS 100 TIMES. 15 EMP-NO PIC X(5). 15 NAME PIC X(20). 15 LOC-CODE. 25 TERR-NO PIC XX. 25 OFFICE-NO PIC XX.	**5M**	**CO3**
	b. Identify the output of the following code: 000100 IDENTIFICATION DIVISION. 000200 PROGRAM-ID. ADD1. 000300 DATA DIVISION. 000400 WORKING-STORAGE SECTION. 000500 01 WS-VAR1 PIC 99. 000600 01 WS-VAR2 PIC 99. 000610 01 WS-VAR3 PIC 99. 000620 01 WS-VAR4 PIC 99. 000630 01 WS-VAR5 PIC 99. 000700 PROCEDURE DIVISION. 000800 MOVE 10 TO WS-VAR1. 000900 MOVE 20 TO WS-VAR2. 000901 ADD WS-VAR1 TO WS-VAR2. 000902 DISPLAY "VAR1 TO VAR2 : " WS-VAR2. 000903 MOVE 10 TO WS-VAR1. 000904 MOVE 20 TO WS-VAR2. 000905 MOVE 15 TO WS-VAR3. 000906 MOVE 15 TO WS-VAR4.	**5M**	**CO2**

	000907 ADD WS-VAR1 WS-VAR2 WS-VAR3 TO WS-VAR4. 000908 DISPLAY "VAR1 VAR2 VAR3 TO VAR4 : " WS-VAR4. 000909 MOVE 10 TO WS-VAR1. 000910 MOVE 20 TO WS-VAR2. 000912 ADD 15 WS-VAR1 TO WS-VAR2. 000913 DISPLAY "15 VAR1 TO VAR2 : "WS-VAR2. 000914 MOVE 10 TO WS-VAR1. 000915 MOVE 20 TO WS-VAR2. 000916 ADD WS-VAR1 WS-VAR2 GIVING WS-VAR3. 000917 DISPLAY "VAR1 VAR2 GIVING VAR3 : " WS-VAR3. 000918 MOVE 10 TO WS-VAR1. 000919 MOVE 20 TO WS-VAR2. 000920 ADD WS-VAR1, WS-VAR2 GIVING WS-VAR3, WS-VAR4, WS-VAR5. 000930 DISPLAY "VAR1 VAR2 GIVING VAR3, VAR4, VAR5 : " 000940 WS-VAR3, WS-VAR4, WS-VAR5. 001100 STOP RUN.		
Q 8.	a. File needs to be open in I-O mode for REWRITE, Comment. b. Explain the use of "PERFORM paragraph-name-1 THROUGH/THRU paragraph-name-2 UNTIL condition" using suitable example.	**5M** **5M**	**CO4** **CO3**
Q 9.	Explain the significance of level numbers and picture clauses with a suitable COBOL program.	**10M**	**CO1**
	SECTION-C		
Q 10.	a. Compilation and execution of a COBOL program can be perform using a JCL. Justify. b. Can a search be perform on a table without index? Justify with suitable example. (OR) c. Write JCL code for compilation and execution for a COBOL program in which input is taking from user. d. Write a COBOL code for splitting one string, containing three words into three different strings.	**10M** **10M**	**CO5,** **CO3**
Q 11.	a. Illustrate the use of different file organization and file access modes with suitable example. b. Write a COBOL program for writing in a file with field value entered through user corresponding to following employee record attribute: Eid, Ename, Edept and Eaddress. Read the same data from file and display in spool.	**8M** **12M**	**CO4**