Exam Code: 000-042

Exam Name: Developing with IBM Enterprise PL/I

Vendor: IBM

Version: DEMO

Part: A

1: The XMLCHAR builtin function provides the ability to do which of the following?

A.Check XML for well-formedness

B.Check XML for validity

C.Create an XML buffer from a structure

D.Read an XML file into a structure

Correct Answers: C

2: Which of the following is a typical deadlock situation?

Situation 1: Transaction A waiting for resource_2 and Transaction B waiting for resource_1 while resource_1 is held by Transaction C and resource_2 is held by Transaction B

Situation 2: Transaction A waiting for resource_1 and Transaction B waiting for resource_2 while resource_1 is held by Transaction B and resource_2 is held by Transaction C

Situation 3: Transaction A Waiting for resource_2, Transaction B waiting for resource_3, Transaction C waiting for resource_1, while resource_1, resource_2 and resource_3 are held by Transactions A, B and C respectively.

Situation 4: Transaction B waiting for resource_1 and Transaction C waiting for resource_2 while resource_1 is held by Transaction C and resource_2 is held by Transaction A

A.Situation 1

B.Situation 2

C.Situation 3

D.Situation 4

Correct Answers: C

3: Requirement:

If the value of the numeric variable I is 1 it needs to be changed to 2 and vice versa.   In all other cases it must remain unchanged.

Which of the following solutions meets the requirement and does not require essential structural modifications when the requirement is changed to the following:

If the value of the numeric variable I is 512 it needs to be changed to 731 and if the value is 814 it needs to be changed to 5.   In all other cases it must be set to 111.

A.IF I = 1 ! I = 2

THEN I = 3 - I;

B.DCL ONETWO(2) BIN FIXED(15) INIT(2,1);

IF I = 1 ! I = 2

THEN I = ONETWO(I);

C.SELECT (I);

WHEN(1) I = 2;

WHEN(2) I = 1;

OTHER;

END;

D.IF I = 1 THEN I = 2;

IF I = 2 THEN I = 1;

Correct Answers: C

4: Which of the following is LEAST likely to be performed by an online application?
A.Checkpoint/restart logic
B.Transaction processing
C.End user interaction
D.Sorting
Correct Answers: A

5: Which of the following PL/I features is NOT new with Enterprise PL/I?
A.VALUE attribute for named constants.
B.UNIONs or CELLs to assign identical storage to different variables.
C.Writing numeric constants with the underscore sign as a separator.
D.Using hexadecimal constants.
Correct Answers: D

6: The lead developer on a project has just learned that Pat, a highly skilled programmer on the team, has been reassigned. The lead developer is familiar with Pat's work and is concerned because no one on the team has the necessary skills to pick up the work immediately.   A new employee with the required skills is joining the team next week, but the timeline for a mission critical milestone has been moved up to the end of this week. Which of the following is the most appropriate action for the lead developer to take to ensure that the critical milestone is met?
A.Direct the team to cover all of Pat's work until the new employee arrives.
B.Explain to the team why this change in schedule is important to the customer.
C.Personally cover the work until the new employee arrives.
D.Explore with the team whether they will be able to meet the new deadline.
Correct Answers: C

7: Given the following declarations, which statement correctly refers to X?
DCL R CHAR(10);
DCL X CHAR(10) BASED;
DCL P PTR;
DCL Z CHAR(10);
P = ADDR(R);
A.Z = P -> X;
B.P = ADDR(X);
C.Z = X;
D.X = 'THIS IS X';
Correct Answers: A

8: Prerequisite:
A sorted input dataset with record length 100 contains at least one record for each of the values '1', '2', '3' in the first byte.   The applied sort criteria is 1,100,ch,a.
Requirements:

1.) All records with '1' in the first byte must be ignored.

2.) All records with '2' in the first byte must be written to the output dataset.

3.) If there is a '3' in the first byte, the read iteration must be left.

4.) The program must not abend or loop infinitely.

If the code below does not fulfill the specifications provided above, which of the following is the most likely reason?

```
DCL   DDIN   FILE RECORD INPUT;
DCL   DDOUT FILE RECORD OUTPUT;
DCL   1 INSTRUC,
           3   A   CHAR(1),
           3   *   CHAR(99);
DCL   EOF_IN     BIT(1) INIT('0'B);
DCL (Z1,Z2,Z3,ZO)    BIN FIXED(31) INIT(0);
ON ENDFILE(DDIN)    EOF_IN = '1'B;
READ FILE(DDIN) INTO (INSTRUC);
LOOP: DO WHILE(^EOF_IN);
              SELECT(INSTRUC.A);
                  WHEN('1') DO;
                                  Z1 += Z1;
                                  ITERATE LOOP;
                              END;
                  WHEN('3') DO;
                                  Z3 = Z3+1;
                                  LEAVE LOOP;
                              END;
                  WHEN('2') DO;
                                  Z2 = Z2+1;
                                  WRITE             FILE(DDOUT)
FROM(INSTRUC);
                              END;
                  OTHER     DO;
                                  ZO = ZO+1;
                                  PUT SKIP LIST(INSTRUC.A);
                              END;
              END;/*select*/
              READ FILE(DDIN)    INTO(INSTRUC);
END;/*loop*/
```

A.The code does not fulfill the requirement because the program will loop infinitely.

B.The code does not fulfill the requirement because the last record with '2' in the first byte will be written twice to the output dataset.

C.The code does not fulfill the requirement because not all records with '2' in the first byte will be written to the output dataset.

D.The code fulfills the requirement.

Correct Answers: A

9: Given the following declarations, which code is likely to perform best and correctly initialize structure S?

```
DCL 1 S UNALIGNED,
          2 A CHAR(3),
          2 B BIN FIXED(31),
          2 C DEC FIXED(5);
DCL 1 T UNALIGNED LIKE S;
T = '';
A.S = '';
B.S = T, BY NAME;
C.CALL PLIFILL(ADDR(S),' ',STG(S));
D.CALL PLIMOVE(ADDR(S),ADDR(T),STG(S));
```

Correct Answers: D

10: Given the following declarations, a list of 100 elements must be created so that the element created last can be accessed as the first element of the list.   A new element is always inserted in front of the element created before.   The variable NEXT in the last element should contain the value NULL. Which of the following pieces of code implements this?

```
DCL 1 NODE BASED (ANCHOR),
            2 NEXT POINTER,
            2 DATA FIXED BIN (31);
DCL ANCHOR POINTER;
DCL P    POINTER INIT (NULL());
DCL I    FIXED BIN(31);
A.DO I = 1 TO 100;
ALLOCATE NODE;
NODE.DATA = I;
NODE.NEXT = P;
P = ANCHOR;
END;
B.DO I = 1 TO 100;
P = ANCHOR;
ALLOCATE NODE;
NOTE.DATA = I;
NODE.NEXT = P;
END;
C.I = 1 TO 100;
ALLOCATE NODE;
NODE.DATA = I;
NODE.NEXT = P;
ANCHOR = P;
END;
D.DO I = 1 TO 100;
```

NODE.DATA = I;

NODE.NEXT = P;

ALLOCATE NODE;

P = ANCHOR;

END;

Correct Answers: A

11: In which of the following examples will a dummy argument be passed?

A.DCL A   EXT ENTRY;

DCL (X,Y) FIXED BIN;

CALL A(X,Y);

B.DCL A EXT ENTRY (FIXED, BINARY);

DCL (X,Y) FIXED BIN;

CALL A(X,Y);

C.DCL A EXT ENTRY (FIXED BINARY);

DCL (X,Y) FIXED BIN;

CALL A(X,Y);

D.PGM: PROC OPTIONS(MAIN);

DCL (X,Y)   FIXED BIN;

CALL C (X,Y);

C: PROC (A,B);

DCL (A,B) BIN FIXED;

END C;

END PGM;

Correct Answers: B

12: Which of the following will definitely NOT cause an unresolved external entry?

A.Missing library at link time

B.The main procedure name matching the binder or load module 'name'

C.A mismatch in names between the CALL and the actual procedure

D.An incorrect DECLARE for the external entry

Correct Answers: B

13: Which of the following best describes an atomic transaction?

A.The database modifications must follow an 'all or nothing' rule

B.Only valid data will be written to database

C.If one part of the transaction fails, the remainder may still be processed

D.Referential Integrity is maintained in the database

Correct Answers: A

14: SUBSCRIPTRANGE checks which of the following?

A.The subscripts of an array are checked for conformance with iSUB defining rules.

B.The address generated for accessing an array element is checked to be sure it falls within the storage allocated to the array.

C.The value of each subscript used to refer to an array element is checked for validity after the element is accessed.

D.The value of each subscript used to refer to an array element is checked for validity before the element is accessed.

Correct Answers: D

15: A program reads a GSAM dataset sequentially, reads complementary information from DB2-Databases and uses this information to update an IMS-Database. At the end of the program statistics about how many records have been read and how many IMS-Segments have been updated should be printed. The program should write checkpoints regularly and should be restartable.   Which of the following groups of information saved when the checkpoint is written will provide enough information to be able to restart the program correctly?

A.The key of the last record read from the GSAM dataset and the key of the last IMS segment changed.

B.The number of records read from the GSAM dataset and the number of IMS segments changed.

C.The number of records read from the GSAM dataset, the key of the last record read from the GSAM dataset and the key of the last IMS segment updated.

D.The key of the last IMS segment changed and the number of segments changed.

Correct Answers: B

16: The lead developer is presenting sample code.   One of the team members identifies an error in the code.   Which of the following is the most appropriate response for the lead developer to make?

A.Apologize for the error and continue the presentation.

B.Thank the person for pointing out the error.

C.Suggest that this error be discussed in the next meeting.

D.Declare the point irrelevant because this is sample code.

Correct Answers: B

17: Given the following code:
```
DCL   INDATA    FILE RECORD INPUT;
DCL   INSTRUC   CHAR(100);
DCL   EOF        BIT(1)   INIT('0'B);
ON ENDFILE(INDATA) EOF = '1'B;
OPEN FILE(INDATA);
READ FILE(INDATA) INTO(INSTRUC);
DO WHILE (^EOF);
       CALL SR_PROCESS;
       READ FILE(INDATA) INTO(INSTRUC);
END;
CLOSE FILE(INDATA);
```
If the database (input file) changes from OS-PS to DB2 view and the necessary syntax has been changed accordingly, which of the following DB2-related steps is NOT additionally required to guarantee the same level of stability and functionality?

A.Check the SQLCODE after each EXEC SQL FETCH statement.

B.Check the SQLCODE after each EXEC SQL OPEN / CLOSE statement.

C.Set the EOF bit to '1'B, if SQLCODE = 100 (not found).

D.Check the CURRENT SQLID.

Correct Answers: D

18: What could be used when a structure is passed to a subroutine to verify that the area the structure occupies in storage has not been overwritten?

A.Structure is passed as a pointer.

B.Structure has eyecatchers at start and at end.

C.Structure has a length field at start.

D.Structure is passed as an aggregate.

Correct Answers: B

19: In the following example what value will be printed to SYSPRINT, if any, from the PUT LIST in PGM_A?

```
PGM_A: PROC;
        DCL INPARM CHAR (10) INIT('FIRST CALL');
        DCL P_OUT PTR;
        DCL OUTPARM CHAR(10) BASED (P_OUT);
        DCL PGM_B ENTRY(CHAR(10),PTR) EXTERNAL;
        CALL PGM_B (INPARM,P_OUT);

         IF OUTPARM = 'RESULT      ' THEN
            DO;
                INPARM = '';
                CALL PGM_B (INPARM,P_OUT);
            END;

         PUT LIST(OUTPARM);
END;
PGM_B: PROC(INPARM,P_OUT);
        DCL INPARM CHAR (10);
        DCL P_OUT PTR;
        DCL OUTPARM CHAR (10) INIT('');
        P_OUT = ADDR(OUTPARM);
        IF INPARM ='FIRST CALL' THEN
            OUTPARM = 'RESULT      ';
        ELSE
            OUTPARM = 'NO RESULT ';
END;
```

A.Blanks

B.'NO RESULT'

C.Unpredictable

D.'RESULT'

Correct Answers: C

20: Which of the following is NOT part of the PL/I code review?

A.Training course for the program's author

B.Attendance of people with technical expertise

C.Decision whether the review object is a appropriate solution

D.Documentation of results of the review

Correct Answers: A