ANANDALAYA
PERIODIC TEST – 2
Class : XII

Subject: Computer Science.	MM :70
Date :23-09-2022	Time: 3 Hrs.

General Instructions:
1. There are 40 questions in this question paper. All questions are compulsory.
2. Q.No. 1 to 5 are short answer questions and carry 1 mark each.
3. Q.No. 6 to 26 are multiple choice question and carry 1 mark each.
4. Q.No 27 to 30 are short answer question and carry 2 mark each.
5. Q.No 31 to 37 are short answer question and carry 3 mark each.
6. Q.No 38 to 40 are long answer question and carry 5 mark each.
7. There is no overall choice.

1. What will be output of the following code?   (1)
    def fn(x):

            Value = [1, 2, 3, 4]

            try:

               data = value[x]

            except IndexError:

               print("Index Block Block")

            else:

               print("Except Block")

            finally:

               print("Finally Block")

    fn(0)

2. Does every try block must have an else block in Python?   (1)

3. What is the use of seek () and tell () in Python?   (1)

4. What operations can be performed on stack?   (1)

5. Which command is used to view list of tables in the MySql database?   (1)

6. How many except statements can a try-except block have?   (1)
    (A) zero   (B) one   (C) more than one   (D) more than zero

7. When is the finally block executed?   (1)
    (A) when there is no exception   (B) when there is an exception
    (c) only if some condition that has been specified is satisfied (D) always

8. What happens when '1' == 1 is executed?   (1)
    (A) we get a True   (B) we get a False   (C) an TypeError occurs   (D) a ValueError occur

9. To read two characters from a file object infile, we use _____   (1)
    (A) infile.read(2)   (B) infile.read()   (C) infile.readline()   (D) infile.readlines()

10. Trying to add an element to a full stack results in an exception called _____   (1)
    (A) overflow   (B) Underflow   (C) Full flow   (D) Full stack

11. Queue is an ordered linear data structure, following _____ strategy.   (1)
    (A) LIFO   (B) FIFO   (C) Both   (D) none

12. When comma is used to separate the values stored in a files. These files are known as _____.   (1)
    (A) Common value files   (B) Command Separated (CSV) files
    (C) Comma Separated Values(CSV) Files   (D) All of These

13. Which command is used for opening of the file? (1)
    (A) read() (B)write() (C)open() (D) append()

14. Which is the subset of SQL commands used to manipulate Oracle Database structures, (1)
    including tables?
    (A) Data Definition Language(DDL) (B) Data Manipulation Language(DML)
    (C) Both of above (D) None

15. What does DML stand for? (1)
    (A) Different Mode Level (B) Data Model Language
    (C) Data Mode Lane (D) Data Manipulation Language

16. The term _____ is use to refer to a record in a table. (1)
    (A) Attribute (B) Tuple (C) Row (D) Instance

17. A relational database consists of a collection of (1)
    (A) Tables (B) Fields (C) Records (D) Keys

18. Which is the subset of SQL commands used to manipulate database structure including (1)
    tables?
    (A) Data Definition Language (DDL) (B) Data Manipulation Language (DML)
    (C) Both (a) and (b) (D) None

19. In SQL, which command is used to SELECT only one copy of each set of duplicable rows (1)
    (A) SELECT DISTINCT (B) SELECT UNIQUE
    (C) SELECT DIFFERENT (D) All of the above

20. What operator tests column for the absence of data? (1)
    (A) EXISTS operator (B) NOT operator (C) IS NULL operator (D) None of these

21. Which SQL statement is used to delete data FROM a database?
    (A) COLLAPSE (B) REMOVE (C) ALTER (D) DELETE (1)

22. Which SQL keyword is used to sort the result-set? (1)
    (A) SORT BY (B) ORDER (C) ORDER BY (D) SORT

23. Which of the following function is used to FIND the largest value from the given data in (1)
    MYSQL?
    (A) MAX () (B) MAXIMUM () (C) LARGEST () (D) BIG ()

24. An attribute in a relation is foreign key if it is the _____key in any other relation. (1)
    (A) Candidate (B) Primary (C) Super (D) Sub

25. What SQL statement do we use to display the record of all students whose last name (1)
    contains 5 letters ending with "A"?
    (A) SELECT * FROM STUDENTS WHERE LNAME LIKE '_ _ _ _A';
    (B) SELECT * FROM STUDENTS WHERE LNAME LIKE ' _ _ _ _ _';
    (D) SELECT * FROM STUDENTS WHERE LNAME LIKE ' ????A';
    (D) SELECT * FROM STUDENTS WHERE LNAME LIKE '*A';

26. What is the meaning of "HAVING" clause is SELECT query? (1)
    (A) To filter out the summary groups (B) To filter out the column groups
    (C) To filter out the row and column values (D) None of the mentioned

27. Write a function in Python PUSH(Arr), where Arr is a list of numbers. From this list push all (2)
    numbers divisible by 5 into a stack implemented by using a list. Display the stack if it has at
    least one element, otherwise display appropriate error message

28. Write a function in Python POP(Arr), where Arr is a stack implemented by a list of numbers. (2)
    The function returns the value deleted from the stack.

29. Which of the following types of table constraints will prevent the entry of duplicate rows? (2)
    (A) Unique (B) Distinct (C) Primary Key (D) NULL

30. Consider the table MOVIEDETAIL given below : (2)

Table : MOVIEDETAILS

MOVIEID	TITLE	LANGUAGE	RATING	PLATFORM
M001	Minari	Korean	5	Netflix
M004	MGR Magan	Tamil	4	Hotstar
M010	Kaagaz	Hindi	3	Zee5
M020	Avengers :Endgame	English	4	Hotstar

(a) Identify the degree and cardinality of the table.
(b) Which field should be made primary key ? Justify your answer.

31. Differentiate between DDL and DML Drop command. (3)

32. Differentiate between file modes rb+ and w+ with respect to Python. (3)

33. Write a program that copies a text file "Source.txt" onto "target.txt" barring the lines starting with a "@" sign. (3)

34. Alam has a list containing 10 integers. You need to help him create a program with separate user defined functions to perform the following operations based on this list. (3)
   • Traverse the content of the list and push the even numbers into a stack.
   • Pop and display the content of the stack.
   For Example:
   If the sample Content of the list is as follows: N=[12, 13, 34, 56, 21, 79, 98, 22, 35, 38]
   Sample Output of the code should be: 38 22 98 56 34 12

35. Ranjan Kumar of class 12 is writing a program to create a CSV file "user.csv" which will contain user name and password for some entries. He has written the following code. As a programmer, help him to successfully execute the given task. (3)

```
import _____ # Line 1
def addCsvFile(UserName,PassWord): # to write / add data into the CSV file
        f=open(' user.csv','_____') # Line 2
       newFileWriter = csv.writer(f)
       newFileWriter.writerow([UserName,PassWord])
       f.close()
#csv file reading code
def readCsvFile(): # to read data from CSV file
        with open(' user.csv','r') as newFile:
               newFileReader = csv._____(newFile) # Line 3
              for row in newFileReader:
                       print (row[0],row[1])
       newFile.close()
addCsvFile("Test", "123@456")
readCsvFile()
```

(a) Name the module he should import in Line 1.
(b) In which mode, Ranjan should open the file to add data into the file Line 2
(c) Fill in the blank in Line 3 to read the data from a csv file.

36. Write the output of the queries (a) to (c) based on the table Furniture Given Below: (3)

Table: Furniture

FID	NAME	DATEPURCHASE	COST	DISCOUNT
B001	Double Bed	03-Jan-2018	45000	10
T010	Dining Table	10-March-2020	51000	5
B004	Single Bed	19-Jul-2021	22000	0
C003	Long Back Chair	30-Dec-2016	12000	3
T006	Console Table	17-Nov-2019	15000	12
B006	Bunk Bed	01-Jan-2021	28000	14

(a) SELECT SUM(DISCOUNT) FROM FURNUTURE WHERE COST >15000;
(b) SELECT MAX(DATEPURCHASE) FROM FURNITURE;
(c) SELECT * FROM FURNITURE WHERE DISCOUNT > 5 AND FID LIKE 'T%'

37. Convert the following Infix expression, *P + (Q - R) * S / T* , to its equivalent Postfix (3) expression, showing the stack contents for each step of conversion.

38. A binary file "STUDENT.DAT" has structure (admission_number, Name, Percentage). (5) Write a function **countrec()** in Python that would read contents of the file "STUDENT.DAT" and display the details of those students whose percentage is above 75. Also display number of students scoring above 75%.

39 A text file named MESSAGE.TXT contains some text. Write a program to create a (5) dictionary that contains all the unique characters in the file with their count (No of occurrence).
Example : If MESSAGE.TXT file contains:
HELLO HOW ARE YOU!
Then the dictionary should contain:
{'H':2, 'E':2, 'L':2, 'O':3, 'W':1, 'A':1, 'R':1, 'Y':1, 'U':1, '!':1,' ':3}

40. Write SQL queries for (a) to (e) on the basis of tables APPLICANTS and COURSES. (5)

Table: APPLICANTS

No.	NAME	FEE	GENDER	C_ID	JOINYEAR
1012	Amandeep	30000	M	A01	2012
1102	Avisha	25000	F	A02	2009
1103	Ekant	30000	M	A02	2011
1049	Arun	30000	M	A03	2009
1025	Amber	30000	M	A02	2011
1106	Ela	40000	F	A05	2010
1017	Nikita	35000	F	A03	2012
1108	Arluna	30000	F	A03	2012
2109	Shakti	35000	M	A04	2011
1101	Kirat	25000	M	A01	2012

TABLE:COURSES

CID	COURSE
A01	FASHION DESIGN
A02	NETWORKING
A03	HOTEL MANAGEMENT
A04	EVENT MANAGEMENT
A05	OFFICE MANAGEMENT

(a) To display NAME, FEE, GENDER, JOINYEAR about the APPLICANTS, who have joined before 2010.
(b) To display the names of applicants , who are paying FEE more than 30000.
(c) To display the names of all applicants in ascending order of their join year.
(d) To display the year and the total number of applicants joined year from the table APPLICANTS.
(e) To display applicant's name with their respective course's name from the tables APPLICANTS and COURSES.