MARKING SCHEME

Question No	Part A	Marks Allocated
	Section-I **Select the most appropriate option out of the options given for each question. Attempt any 15 questions from question no 1 to 21.**	
1	if	1
2	[23,2,9,75]	1
3	**Comma**	1
4	**<**	1
5	T.sort()	1
6	D1={ }	1
7	str or string	
8	isalnum()	1
9	FTP (File Transfer Protocol)	1
10	Identity Theft	1
11	DISTINCT	1
12	BETWEEN	1
13	Ans. A NULL value in a table is a value in a field which is blank. This means that a field with a NULL value is a field with no value; not even zero is entered.	1
14	B. Insert	1
15	The type of network that shall be formed to link the sale counters situated in various parts of the same city would be a MAN, because MAN (Metropolitan Area Networks) are the networks that link computer facilities within a city.	1
16	(C) .tuple	1
17	GITA	1
18	DROP TABLE student	1
19	Advanced Research Project Agency Network	1
20	PRIMARY KEY	1
21	PAN<LAN<MAN<WAN	1
	Section-II	
22	a) DRINKCODE b) Degree- 4 Cardinality- 6 c) INSERT INTO SOFTDRINK (DRINKCODE,DNAME,PRICE) VALUES (107,'PEPSI',30); d) DELETE FROM SOFTDRINK; e) DESCRIBE SOFTDRINK **OR** DESC SOFTDRINK	1 1 1 1 1(any four)

23	1. csv
	2. read mode
	3. reader
	4. 2,Scott,4000
	   5,Sam,4200
	  Number of "S" names are 2/5
	5. myreader
		1
		1
		1
		1
		
		1(any four)

	Part – B	

	Section-I	
24	(a) 27.2 Explanation: The expression shown above is evaluated as: 2+9*(36-8)/10, which simplifies to give 2+9*(2.8), which is equal to 2+25.2 = 27.2. Hence the result of this expression is 27.2. (b) True	1 1
25	How are Trojan horses different from Worms? Mention any one difference. Ans. A Trojan horse is a term used to describe malware that appears to the user to perform a desirable function but which, in fact, facilitates unauthorized access to the user's computer system. A computer Worm is a self-replicating program. It uses a network to send copies of itself to other nodes and that too without human intervention. **OR** Differentiate between cracking and hacking. Cracking is defined as an attempt to remove the copy protections inserted into software programs. A program successfully stripped of protections is then known as having been "Cracked". Hacking can be ethical/legal but cracking is a totally illegal method and is also called piracy.	2
26	POP= Post Office Protocol TCP/IP=Transmission Control Protocol / Internet Protocol PPP= Point to Point Protocol SLIP = Serial Line Internet Protocol	2
27	Mutable vs Immutable Objects in Python Every variable in python holds an instance of an object. There are two types of objects in python i.e. **Mutable** and **Immutable objects**. Whenever an object is instantiated, it is assigned a unique object id. The type of the object is defined at the runtime and it can't be changed afterwards. However, it's state can be changed if it is a mutable object. To summarise the difference, mutable objects can change their state or contents and immutable objects can't change their state or content. **Immutable Objects :** These are of in-built types like **int, float, bool, string, unicode, tuple**. In simple words, an immutable object can't be changed after it is created. **Mutable Objects :** These are of type **<u>list, dict, set</u>** . Custom classes are generally mutable. **OR** You can also send arguments with the key = value syntax. This way the order of the arguments does not matter. def my_function(child3, child2, child1): print("The youngest child is " + child3) my_function(child1 = "Emil", child2 = "Tobias", child3 = "Linus")	2

28	To = 30
	for K in range(0,To) :
	    if K%4==0:
	       print (K*4)
	    else:
	        print (K+3)
		2

	½ mark for each correction	
29	(ii) 33#44#55# Maximum value of Lower: 3 Maximum value of Upper: 4	2
30	A **foreign key** is a **key** used to link two tables together. This is sometimes also called as a referencing **key**. A **Foreign Key** is a column or a combination of columns whose values match a Primary **Key** in a different table.	2
31	cursor.fetchall() fetches all the rows of a query result. It returns all the rows as a list of tuples. An empty list is returned if there is no record to fetch. cursor.fetchmany(size) returns the number of rows specified by size argument. When called repeatedly this method fetches the next set of rows of a query result and returns a list of tuples. If no more rows are available, it returns an empty list. records = cursor.fetchall() records = cursor.fetchmany(size)	2
32	**DDL:** DDL is Data Definition Language which is used to define data structures. For example: create table, alter table are instructions in SQL. **DML:** DML is Data Manipulation Language which is used to manipulate data itself. For example: insert, update, delete are instructions in SQL.	2
33	250 # 150 250 # 100 130 # 100	2
Section-II		
| 34 | ```python
def printWords(s):
    # split the string
    s = s.split(' ')
    # iterate in words of string
    for word in s:
        # if length is even
        if len(word)%2==0:
            print(word)
# Driver Code
s = "i am muskan"
printWords(s)
```<br>Note : any other correct code is also accepted. | 3 |
| 35 | Write a program to write those lines which have the character 'p' from one text file to another text file.<br>```python
fin=open("E:\\book.txt","r")
fout=open("E:\\story.txt","a")
s=fin.readlines( )
for j in s:
    if 'p' in j:
        fout.write(j)
fin.close()
``` | 3 |

	fout.close()
	
	OR
	
	Write a program to count the number of times the occurrence of 'is' word in a text file
	fin=open("D: \\Book.txt",'r')
	 str=fin.read( )
	 L=str.split( )
	 count=0
	for i in L:
	     if i=='is':
	          count=count+1
	print(count)
	fin.close( )	

36	1) DELHI 3 MUMBAI 2 MADRAS 1 2) 50000, 70000 3) MOBILE MUMBAI 70000 MOBILE MUMBAI 25000	3

37	def DELQ(queue):
	 if (queue == []):
	    print ("Queue is empty .")
	 else:
	 print("Deleted element is", queue[0])
	 del queue[0]
	
	                    OR
	
	def POP(Book):
	 if (Book ==[]):
	 print("Stack empty")
	 else:
	  print("Deleted element")
	  Book.pop()
		3

38	(a) Production Unit (b) MAN and LAN. (c)Switch/Hub. (d)Optical fibre. (e) An effective method/technology for connecting the company's office in Delhi and Chennai is broadband connection.	5

39	(a) SELECT TEACHERNAME,PERIODS FROM SCHOOL WHERE PERIODS>25;
	(b) SELECT * FROM SCHOOL;
	(c) SELECT DISTINCT DESIGNATION FROM ADMIN;
	(d) SELECT TEACHERNAME.CODE, DESIGNATION FROM SHOOL.CODE=ADMIN.CODE WHERE GENDER='MALE'
	(e) UPDATE SCHOOL
	    SET PERIODS=PERIODS+2
	    WHERE EXPERIENCE>10;
		5

40	A binary file "Employee.dat" has structure [EmpNo, EmpName, Designation, Salary].	5
	i. Write a user defined function CreateFile() to input data for a record and add to Book.dat .	
	ii. Write a function CountRec(Designation) in Python which accepts the Designation as parameter and count and return number of employees by the given Designation are stored in the binary file "Employee.dat"	

```python
import pickle
def CreateFile():
    fob=open('Employee.dat','ab')
    EmpNo=int(input('"Employee Number"'))
    EmpName=input('"Employee Name"')
    Designation=input('Designation')
    Salary=int(input('Salary'))
    rec=[EmpNo,EmpName,Designation,Salary]
    pickle.dump(rec,fob)
    fob.close()
def CountRec(Designation):
    fobj=open("Employee.dat","rb")
    num = 0
    try:
        while True:
            rec=pickle.load(fobj)
            if Designation==rec[2]:
                num=num+1
    except:
        fobj.close()
    return num
CreateFile()
a=CountRec("pgt")
print(a)
```

OR

A binary file "Employee.dat" has structure [EmpNo, EmpName, Designation, Salary]. Write a function CountRec() in Python that would read contents of the file "Emp.dat" and display the details of those employees whose salary is above 25000. Also display number of employees who are getting salary above 25000.

```python
def CountRec():
    fobj=open("Employee.dat","rb")
    num = 0
    try:
        while True:
            rec=pickle.load(fobj)
            if rec[3]>25000:
                print(rec[0],rec[1],rec[2],rec[3],sep="\t")
                num=num+1
    except:
        fobj.close()
    return num
a=CountRec()
print(a)
```