CBSE EXAMINATION PAPER-2025
COMPUTER SCIENCE
Class-12th
(Solved)
(Delhi & Outside Delhi Sets)

Time : 3 Hours **Max. Marks : 70**

General Instructions:

(i) *Please check this question paper contains **37** questions.*

(ii) ***All** questions are **compulsory**. However, internal choices have been provided in some questions. Attempt only one of the choices in such questions.*

(iii) *The paper is divided into 5 sections—**A, B, C, D** and **E.***

(iv) ***Section A** consists of **21** questions **(1 to 21).** Each question carries **1** mark.*

(v) ***Section B** consists of **7** questions **(22 to 28).** Each question carries **2** marks.*

(vi) ***Section C** consists of **3** questions **(29 to 31).** Each question carries **3** marks.*

(vii) ***Section D** consists of **4** questions **(32 to 35).** Each question carries **4** marks.*

(viii) ***Section E** consists of **2** questions **(36 & 37).** Each question carries **5** marks.*

(ix) ***All** programming questions are to be answered using Python language only.*

(x) *In case of **MCQs**, text of the correct answer should also be written.*

Delhi Set-1 **56/1/1**

SECTION – A

1. State True or False:
"A Python List must always contain all its elements of same data type."

2. What will be the output of the following statement?
```
print (14%3**2*4)
```
(A) 16 **(B)** 64
(C) 20 **(D)** 256

3. Identify the correct output of the following code snippet:
```
game = "olympic2024"
print(game. index("c"))
```
(A) 0 **(B)** 6
(C) -1 **(D)** ValueError

4. Which of the following is the correct identifier:
(A) global **(B)** Break
(C) def **(D)** with

5. Identify the invalid Python statement out of the following options:
(A) `print("A",10,end="*")`
(B) `print("A",sep="*",10)`
(C) `print("A",10,sep="*")`
(D) `print("A"*10)`

6. Consider the statements given below and then choose the correct output from the given options:
```
L=['TIC','TAC']
print(L[::-1])
```
(A) ['CIT', 'CAT'] **(B)** ['TIC', 'TAc']
(C) ['CAT', 'CIT'] **(D)** ['TAC', 'TIC']

7. Which of the following operator evaluates to **True** if the variable on either side of the operator points towards the same memory location and **False** otherwise?
(A) is **(B)** is not
(C) and **(D)** or

8. Consider the statements given below and then choose the correct output from the given options:
```
D={'S01':95, 'S02':96}
for I in D :
    print(I,end='#')
```
(A) S01#S02# (B) 95#96#
(C) S01,95#S02,96# (D) S01#95#S02#96#

9. While creating a table, which constraint does not allow insertion of duplication value in the table?
(A) UNIQUE **(B)** DISTINCT
(C) NOT NULL **(D)** HAVING

10. Consider the statement given below and then choose the correct output from the given options:
```
def Change(N):
    N=N+10
    print (N, ends='$$')
N=15
Change(N)
print(N)
```

(A) 25$$15 **(B)** 15$$25
(C) 25$$25 **(D)** 2525$$

11. Consider the statements given below and then choose the correct output from the given options:

```
N='5'
try:
   print('WORD' + N, end='#')
except:
   print('ERROR',end='#')
finally:
   print('OVER')
```

(A) ERROR# **(B)** WORD5#OVER
(C) WORD5# **(D)** ERROR#OVER

12. Which of the following built-in function/method returns a dictionary?

(A) dict() **(B)** keys()
(C) values() **(D)** items()

13. Which of the following is a DML command in SQL?

(A) UPDATE **(B)** CREATE
(C) ALTER **(D)** DROP

14. Which aggregate function in SQL displays the number of values in the specified column ignoring the NULL values?

(A) len() **(B)** count()
(C) number() **(D)** num()

15. In MYSQL, which type of value should not be enclosed within quotation marks?

(A) DATE **(B)** VARCHAR
(C) FLOAT **(D)** CHAR

16. State True or False:

If table **A** has 6 rows and 3 columns, and **B** has 5 rows and 2 columns, the Cartesian product of **A** and **B** will have 30 rows and 5 columns.

17. Which of the following networking devices is used to regenerate and transmit the weakened signal ahead?

(A) hub **(B)** Ethernet Card
(C) Repeater **(D)** Modem

18. Which of the following options is the correct protocol used for phone calls over the internet?

(A) PPP **(B) FTP**
(C) HTTP **(D) VoIP**

19. Expand ARPANET.

Q. 20 and 21 Assertion (A) and Reason (R) based questions. Mark the correct choice as

(A) Both Assertion (A) and Reason (R) are True and Reason (R) is the correct explanation for Assertion (A).

(B) Both Assertion (A) and Reason (R) are True and Reason (R) is not the correct explanation for Assertion (A).

(C) Assertion (A) is True but, Reason (R) is False.

(D) Assertion (A) is False but, Reason (R) is True.

20. **Assertion (A):** For a binary file opened using **'rb'** mode, the **pickle.dump()** method will display an error.
Reason (R): The pickle.dump() method is used to read from a binary file.

21. **Assertion (A):** We can retrieve records from more than one table in MYSQL.
Reason (R): Foreign key is used to establish a relationship between two tables.

SECTION – B

22. What does the return statement do in a function? Explain with the help of an example.

23. Write one example of each of the following in Python:

(i) Syntax Error

(ii) Implicit Type Conversion

24. Consider the following dictionaries, D and D1:

```
D={"Suman": 40, "Raj": 55, "Raman": 60}
D1={"Aditi": 30, "Amit":90.,"Raj":20}
```

(Answer using built-in Python functions only)

(i) **(a)** Write a statement to display/return the value corresponding to the key "Raj" in the dictionary D.

OR

(b) Write a statement to display the length of the dictionary D1.

(ii) **(a)** Write a statement to append all the key-value pairs of the dictionary D to the dictionary D1.

OR

(b) Write a statement to delete the item with the given key "Amit" from the dictionary D1.

25. What possible output from the given options is expected to be displayed when the following code is executed?

```
import random
Cards=["Heart","Spade","Club","Diamond"]
for i in range(2):
   print (Cards [random. randint(1,i+2)], end="#")
```

(A) Spade#Diamond# **(B)** Spade#Heart#
(C) Diamond#Club# **(D)** Heart#Spade#

26. The code given below accepts N as an integer argument and returns the sum of all integers from 1 to N. Observe the following code carefully and rewrite it after removing all syntax and logical errors. Underline all the corrections made.

```
def Sum(N)
    for I in range (N):
        S=S+I
    return S
print(Sum(10)
```

27. Nisha is assigned the task of maintaining the staff data of an organization. She has to store the details of the staff in the SQL table named `EMPLOYEES` with attributes as `EMPNO`, `NAME`, `DEPARTMENT`, `BASICSAL` to store Employee's Identification Number, Name, Department, and Basic Salary respectively. There can be two or more Employees with the same name in the organization.

(i) **(a)** Help Nisha to identify the attribute which should be designated as the PRIMARY KEY. Justify your answer.

OR

(b) Help Nisha to identify the constraint which should be applied to the attribute `NAME` such that the Employee's Names cannot be left empty or `NULL` while entering the records but can have duplicate values.

(ii) **(a)** Write the SQL command to change the size of the attribute `BASICSAL` in the table `EMPLOYEES` to allow the maximum value of `99999.99` to be stored in it.

OR

(b) Write the SQL command to delete the table `EMPLOYEES`.

28. **(a)** Expand and explain the term URL.

OR

(b) Expand the term PPP. What is the use of PPP ?

SECTION – C

29. **(a)** Write a Python function that displays all the lines containing the word `'vote'` from a text file `"Elections.txt"`. For example, if the file contains:

In an election many people vote to choose their representative.

The candidate getting the maximum share of vote stands elected.

Normally, one person has to vote once.

The process of voting may vary with time and region.

Then the output should be:

In an election many people vote to choose their representative.

Normally, one person has to vote once.

OR

(b) Write a Python function that displays all the words starting and ending with a vowel from a text file `"Report.txt"`. The consecutive words should be separated by a space in the output. For example, if the file contains:

Once there was a wise man in a village.

He was an awesome story-teller.

He was able to keep people anchored while listening to him.

Then the output should be:

Once a a awesome able

30. **(a)** A stack, named `ClrStack`, contains records of some colors. Each record is represented as a tuple containing four elements – `colorName`, `RED`, `GREEN`, `BLUE`. `ColorName` is a string, and `RED`, `GREEN`, `BLUE` are integers. For example, a record in the stack may be `('Yellow', 237, 250, 68)`

Write the following user-defined functions in Python to perform the specified operations on `ClrStack`:

(i) `push_Clr(ClrStack, new_Clr)`: This function takes the stack `ClrStack` and a new record `new_Clr` as arguments and pushes this new record onto the stack.

(ii) `pop_Clr(ClrStack)`: This function pops the topmost record from the stack and returns it. If the stack is already empty, the function should display the message `"Underflow"`.

(iii) `isEmpty(ClrStack)`: This function checks whether the stack is empty. If the stack is empty, the function should return `True`, otherwise the function should return `False`.

OR

(b) Write the following user-defined functions in Python:

(i) `push_trail(N,myStack)`: Here `N` and `mystack` are lists, and `myStack` represents a stack. The function should push the last 5 elements from the list `N` onto the stack `MyStack`. For example, if the list `N` is `[1,2,3,4,5,6,7]`, then the function `push_trail()` should push the elements `3, 4, 5, 6, 7` onto the stack. Therefore the value of stack will be `[3,4,5,6,7]`.

Assume that `N` contains at least 5 elements.

(ii) `pop_one(mystack)`: The function should pop an element from the stack `myStack`. and return this element. If the stack is empty, then the function should display the message `'Stack Underflow'`. and return `None`.

(iii) `display_all(mystack)`: The function should display all the element of the stack `myStack`, without deleting them. If the stack is empty, the function should display the message `'Empty stack'`.

31. **(a)** Predict the output of the following code:

```
def ExamOn(mystr) :
    newstr = ""
    count = 0
    for i in mystr:
        if count%2 ! = 0:
            newstr = newstr +
            str(count-1)
```

```
            else:
                newstr = newstr + i.
                lower()
        count+= 1
    newstr = newstr + mystr[:2]
    print("The new string is:", newstr)
ExamOn("GenX")
```

OR

(b) Write the output on execution of the following Python code:

```
def Change(X)"
    for K,V in X. items():
    L1.append(K)
    L2.append(V)
D= {1: "ONE", 2:"TWO", 3:"THREE"}
L1=[]
L2=[]
Change(D)
print(L1)
print(L2)
print(D)
```

SECTION – D

32. Suman has created a table named WORKER with a set of records to maintain the data of the construction sites, which consists of WID, WNAME, WAGE, HOUSE, TYPE, and SITEID. After creating the table, sh entered data in it, which is as follows:

WID	WNAME	WAGE	HOURS	TYPE	SITEID
W01	Ahmed J	1500	200	Unskilled	103
W11	Naveen S	520	100	Skilled	101
W02	Jacob B	780	95	Unskilled	101
W15	Nihal K	560	110	Semiskilled	NULL
W10	Anju S	1200	130	Skilled	103

(a) Based on the data given above, answer the following questions:

(i) Write the SQL statement to display the names and wages of those workers whose wages are between 800 and 1500.

(ii) Write the SQL statement to display the record fo workers whose SITEID is not known.

(iii) Write the SQL statement to display WNAME, WAGE and HOURS of all those workers whose TYPE is "skilled".

(iv) Write the SQL statement to change the WAGE to 1200 of the workers where the TYPE is "Semiskilled".

OR

(b) Considering the above given table WORKER, write the output on execution of the following SQL commands:

(i) `SELECT WNAME, WAGE*HOURS FROM WORKER WHERE SITEID = 103;`

(ii) `SELECT COUNT (DISTINCT TYPE) FROM WORKER;`

(iii) `SELECT MAX (WAGE), MIN (WAGE), TYPE FROM WORKER GROUP BY TYPE;`

(iv) `SELECT WNAME, SITEID FROM WORKER WHERE TYPE="Unskilled" ORDER BY HOURS;`

33. A csv file "P_record.csv" contains the record of patients in a hospital.

Each record of the file contains the following data:

- Name of a patient
- Disease
- Number of days patient is admitted
- Amount

For example, a sample record of the file may be:

`["Gunjan", "Jaundice", 4,15000]`

Write the following Python functions to perform the specified operations on this file:

(i) Write a function `read_data()` which reads all the data from the file and displays the details of all the `'Cancer'` patients.

(ii) Write a function `count_rec()` which counts and returns the number of records in the file.

34. Assume that you are working in IT Department of a Creative Art Gallary (CAG), which sells different forms of art creations like Paintings, Sculptures etc. The data of Art Creations and Artists are kept in tables Articles and Artists respectively. Following are few records from these two tables:

Table : Articles

CODE	A_Code	Article	DOC	Price
PL001	A0001	Painting	2018-10-19	20000
SC028	A0004	Sculpture	2021-01-15	16000
QL005	A0003	Quilling	2024-04-24	3000

Table : Artists

A_Code	Name	Phone	Email	DOB
A0001	Roy	595923	r@CrAG.com	1986-10-12
A0002	Ghosh	1122334	ghosh@CrAG.com	1972-02-05
A0003	Gargi	121212	Gargi@CrAG.com	1996-03-22
A0004	Mustafa	33333333	Mf@CrAg.com	2000-01-01

Note : • The tables contain many more records than shown here.

• DOC is Date of creations of an Article.

As an employee of CAG, you are required to write the SQL queries for the following:

(i) To display all the records from the Articles table in descending order of price.

(ii) To display the details of Articles which were created in the year 2020.

(iii) To display the structure of `Artists` table.

(iv) **(a)** To display the names of all artists whose Articles is `painting` through Equi Join.

OR

(b) To display the name of all Artists whose Article is `'Painting'` through Natural Join.

35. A table, named `THEATER`, in `CINEMA` database, has the following structure:

Field	Type
Th_ID	char(5)
Name	varchar(15)
City	varchar (15)
Location	varchar (15)
Seats	int

Write a function `Delete_Theatre()`. to input the value of `Th_ID` from the user and permanently delete the corresponding record from the table.

Assume the following for Python-Database connectivity:

Host : `localhoat`, User : root, Password : `Ex2025`

SECTION – E

36. A file, `PASSENGER.DAT`, stores the records of passengers using the following structure :

`[PNR, PName, BRDSTN, DESTN, FARE]`

where:

`PNR` – Passenger Number (string type)

`PName` – Passenger Name (string type)

`BRDSTN` – Boarding Station Name (string type)

`DESTN` – Destination Station Name (string type)

`FARE` – Fare amount for the journey (float type)

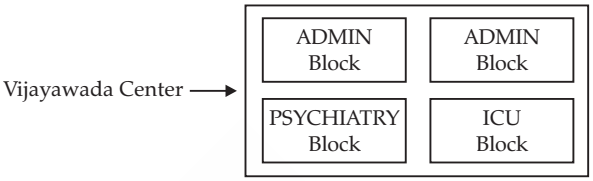
Write user defined functions in Python for the following tasks:

(i) `Create ()` – to input data for passengers and write it in the binary file `PASSENGERS. DAT.`

(ii) `SearchDestn(D)` — to read contents from the file `PASSENGERS.DAT` and display the details of those Passengers whose `DESTN` matches with the value of `D`.

(iii) `UpdateFare()` – to increase the fare of all passengers by 5% and rewrite the updated records into the file `PASSENGERS.DAT`.

37. 'Swabhaav' is a big NGO working in the field of Psychological Treatment and Counselling, having its Head Office in Nagpur. It is planning to set up a center in Vijayawada. The Vijayawada Center will have four blocks — ADMIN, PSYCHIATRY, PSYCHOLOGY, and ICU. You, as a Network Expert, need to suggest the best network-related solutions for them to resolve the issue/problems mentioned in questions (i) to (v), keeping the following parameters in mind:



Block to Block distances(in metres):

From	To	Distance
ADMIN	PSYCHIATPY	65 m
ADMIN	PSYCHOLOGy	65 m
ADMIN	ICU	65 m
PSYCHIATRY	PSYCHOLOGY	100 m
PSYCHIATRY	ICU	50 m
PSYCHOLOGY	ICU	50 m

Distance of Nagpur Head Office from Vijayawada center = 700 km

Block	No. of Computers
ADMIN	16
PSYCHIATRY	40
PSYCHOLOGY	19
ICU	20

(i) Suggest the most appropriate location of the server inside the Vijayawada Center. Justify your choice.

(ii) Which hardware device will you suggest to connect all the computer within each block of Vijayawada Center?

(iii) Draw a cable layout to efficiently connect various blocks within the Vijay wada Center.

(iv) Where should the router be placed to provide internet to all the computer in the Vijayawada Center?

(v) **(a)** The Manager at Nagpur wants to remotely access the computer in Admin block in Vijayawada. Which protocol will be used for this?

OR

(b) Which type of Network (PAN, LAN, MAN or WAN) will be set up among the computers connected with Vijaywada Center?

ANSWERS

SECTION – A

1. **False**
   ***Explanation*:** Python lists allow the storage of different types of data.
   Example : `L=[1,2,3,4]`
   `L1 = ["Abc",12,15.5,True]`
2. **Option (C) is correct**
   ***Explanation*:** `14%3 **2*4`
   `=14%9*4`
   `=5*4`
   `=20`
   `(** has the highest priority)`
3. **Option (D) is correct**
   ***Explanation*:** Since the character 'C' is not present in the string `"Olympic2024"`, the index() function returns a `ValueError`.
4. **Option (B) is correct**
   ***Explanation*:** In Python, keywords are case-sensitive, and break is a keyword, but Break (capitalized) is not. Since identifiers cannot be Python keywords, but Break (uppercase) is not a keyword, it can be used as an identifier.
5. **Option (B) is correct**
   ***Explanation*:** To print certain values with a separator, all the values should be specified first and then the sep keyword has to be used.
6. **Option (D) is correct**
   ***Explanation*:** The statement `L[: :-1]` means to print from end index to index 0 decrementing by 1. Hence the list is printed in reverse.
7. **Option (A) is correct**
   ***Explanation*:** The 'is' identity operator returns True by checking the variables on either side of it, that whether they are pointing towards the same memory location, otherwise it returns False.
8. **Option (A) is correct.**
   ***Explanation*:** Explanation: The statement "for I in D" means, for I in D.keys(), hence the statement picks each of the keys of the dictionary and prints them with the end as '#'
9. **Option (A) is correct.**
   ***Explanation*:** The UNIQUE constraint restricts duplicate values in the column where it is applied.
10. **Option (A) is correct.**
    ***Explanation*:** The value of the formal parameter to the function is incremented by 10 inside the Change() function and printed as 25. Outside the function the actual value of N is printed, which is 15.
    Hence the output is `25$$15`
11. **Option (B) is correct.**
    ***Explanation*:** Since there is no exception here, the try and finally blocks are executed, therefore print("WORD"+ N, end='#') and print('OVER') are executed giving "WORD5#OVER"
12. **Option (A) is correct.**
    ***Explanation*:** The dict() function creates a blank dictionary and returns the memory handle of the dictionary created to the variable on the left.
13. **Option (A) is correct.**
    ***Explanation*:** Update is a data manipulation command that makes changes to the data of the table. Create, Alter and DROP are all data definition commands to create, change or remove a table.
14. **Option (B) is correct.**
    ***Explanation*:** The count() function is an aggregate function that counts the number of NON NULL values in a column.
15. **Option (C) is correct.**
    ***Explanation*:** Float is purely real numeric values, hence should not be enclosed in quotes. DATE, varchar and char should be enclosed in quotes.
16. True
    ***Explanation*:** In case of the Cartesian product of tables A,B
    Degree of resultant= DegreeA + DegreeB
    Cardinality of resultant= CardinalityA x CardinalityB
    Here Degree = 3+2=5
    Cardinality= $6 \times 5=30$
17. **Option (C) is correct.**
    ***Explanation*:** A Repeater is a network device that regenerates and amplifies the source signal, so that it can travel to a larger distance.
18. **Option (D) is correct.**
    ***Explanation*:** The VOIP – Voice Over Internet Protocol – is used for video and voice transmission over internet.
19. ARPANET: Advanced Research Projects Agency Network
20. **Option (C) is correct.**
    ***Explanation*:** pickle.dump() method writes data to a binary file, hence for files opened with "rb" (read binary) mode the above method will give error.
21. **Option (B) is correct.**
    ***Explanation*:** A foreign key establishes a relationship between tables, which helps retrieve data from multiple tables; however, the stated reason does not justify the assertion.

SECTION – B

22. The return statement either returns the control to the calling function or returns a value from the called function to the calling function.

```
def sum(A,B):
    return A+B
s=sum(10,20)
```

Here the sum() function receives A, B and returns the sum of A,B to s.

23. (i)

```
Syntax Error :   if x> 50
   print("Hello')
```

Missing ":" after the if statement and mismatched quotes in print()

Corrected code:

```
if x > 50:
   print("Hello")
```

(ii) Implicit type conversion

```
x=55
y=6.76
y=x
```

The integer value of x is automatically converted to float type value in y.

24. (i) (a) `D.get("Raj")`

OR

(b) `len(D1)`

(ii) (a) `D1.update(D)`

OR

(b) `D1.pop("Amit")`

Explanation: The `get()` method returns the value for the key specified in a dictionary.

The `len()` method returns the number of items in a dictionary.

The `update()` method updates the values of a dictionary by another

The `pop()` method removes a `key:value` pair from the dictionary.

25. Option (A) is correct.

Explanation: The range function returns the values 0,1, hence the values of i will be 0 and 1 in the two iterations. Therefore the parameters to the randint() function will be 1,2 and 1,3 thereby giving the values "Spade" in the 1st iteration and "Club" or "Diamond" in the 2nd iteration. Therefore the possible option is (A).

26. Corrected code

```
def Sum(N):     Colon missing
  S = 0
   for I in range(1,(N+1)):    Incorrect
   loop
                  S=S+I
   return S
print(Sum(10)) Braces missing.
```

27. (i) (a) EMPNO : As name of employee can be duplicate.

OR

(b) NOT NULL : Restricts input of NULL values but allows duplicate values.

(ii) (a) Alter table Employees Modify Basicsal Decimal (8,2);

OR

(b) Drop table Employees;

28. (a) URL: Uniform Resource Locator

The term URL refers to the unique address identified by an IP address. Simply speaking, it is the complete path to a website or web address.

OR

(b) PPP: Point-to-Point Protocol.

It is a data link layer protocol used to establish a direct connection between two network nodes, commonly used for dial-up and DSL internet connections, enabling authentication, encryption and data compression.

SECTION – C

29. (a)

```
def vote():
   f=open("Elections.txt")
   slst=f.readlines()
   for line in slst:
        wordlst=line.split()
        if "vote" in wordlst:
              print(line)
   f.close()
```

OR

(b)

```
def votvowele():
    f=open("Report.txt")
    slst=f.readlines()
    for line in slst:
         wordlst=line.split()
         for w in wordlst:
           if w[0] in "aeiouAEIOU" and
              w[-1] in "aeiouAEIOU":
              print(w,"  ")
  f.close()
```

30. (a)

(i)

```
def push_Clr(ClrStack,new_Clr):
     ClrStack.append(new_Clr)
     print("1 element pushed…")
```

(ii)

```
def pop_Clr(ClrStack):
     if ClrStack==[]:
          print("Underflow")
     else:
          print(ClrStack.pop())
```

(iii)

```
def isEmpty(ClrStack):
     if ClrStack==[]:
          return True
        else:
              return False
```

OR

(b)

(i)

```
def push_trail(N,myStack):
    for  i in range(-5,  0 , 1) :
          myStack.append(i)
```

(ii)

```
def pop_one(myStack):
    if myStack==[] :
         print("Stack Underflow")
         return None
     else:
          myStack.pop()
```

(iii)
```
def display_all(myStack):
    if myStack==[] :
        print("Empty Stack")
    else:
        print(myStack[::-1],sep="→")
```

31. (a) Output : " The new string is : g0n2Ge

OR

(b) [1,2,3]

['ONE','TWO','THREE']

[{1: 'ONE' ,2 : 'TWO' , 3: 'THREE' }]

32. (a) (i)
```
Select WNAME,WAGE from WORKER where WAGE Between 800 and 1500;
```

(ii)
```
Select * from WORKER where SITEID IS NULL;
```

(iii)
```
Select WName, Wage, Hours from WORKER where Type="Skilled";
```

(iv)
```
Update Worker Set Wage=1200 where Type="SemiSkilled";
```

OR

(b) (i)
```
WNAME                WAGE*HOURS
Ahmed J              300000
Anju S               156000
```

(ii)
```
Count(Distinct(Type))
3
```

(iii)
```
Max(Wage)    Min(Wage)  Type
1500         780        Unskilled
1200         520        Skilled
560          560        SemiSkilled
```

(iv)
```
WNAME                SITEID
Jacob B              101
Ahmed J              103
```

SECTION – D

33.
```
import csv
def read_data():
    f=open("P_record.csv","r")
    cr=csv.reader(f)
    for rec in cr :
        if rec[1]=="Cancer":
            print(rec)
  f.close()
def count_rec():
    count=0
    f=open("P_record.csv","r")
    cr=csv.reader(f)
    for rec in cr :
        count+=1
    print("No. of records :" ,count)
    return count
    f.close()
```

34. (i)
```
Select * from Articles order by Price desc;
```

(ii)
```
Select * from Articles where year(DOC) =2020;
```

(iii)
```
Describe Artists;
```

(iv) (a)
```
Select t2.Name from Articles t1, Artists t2 where t1.A_Code=t2.A_Code and t1.Article="Painting";
```

OR

(b)
```
Select t1.Name from Articles t1 NATURAL JOIN Artists t2 where
        t1.Article="Painting";
```

SECTION – E

35.
```
import mysql.connector
def Delete_Theatre():
  tid=input("Enter theatre id to delete :")
  con=mysql.connector.connect(user="root",password="Ex2025", host="localhost",database="cinema")
  cursor=con.cursor()
  sql="Delete from Theatre where Th_id='%s'"  %(tid)
  cursor.execute(sql, (tid,))
    con.commit()
    if cursor.rowcount > 0:

      print("Record deleted successfully.")
  else:
    print("No matching record found.")
  except mysql.connector.Error as err:
    print("Error:", err)

    con.rollback()  # Rollback changes in case of error

  finally:
    if cursor:
      cursor.close()
    if con:
      con.close()
```

36.
```
import pickle
import os
def Create():
    pnr=input("Enter passenger number :")
    pname= input("Enter passenger name :")
    brdstn= input("Enter boarding station :")
    destn= input("Enter destination station :")
    fare=float(input("Enter fare :"))
    prec=[pnr,pname,brdstn,destn,fare]
    f=open("passengers.dat","ab")
    pickle.dump(prec,f)
    f.close()
```

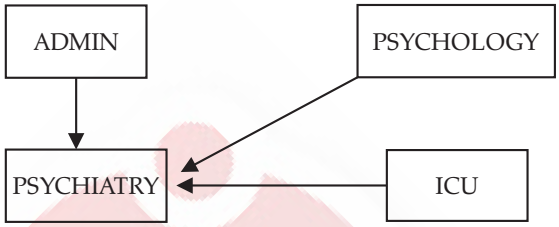
```
def SearchDestn(D)
    found = False
    f=open("passengers.dat","rb")
    try:
        while True:
            prec=pickle.load(f)
            if  D==prec[3]:
                print(prec)
                found=True
        except:
            if found==False:
            print("Record not found")
        f.close()

def UpdateFare():
        f1=open("passengers.dat","rb")
        f2=open("temp.dat","wb")
    try:
        while True:
            prec=pickle.load(f)
            fr=int(prec[4])
            fr=fr+fr*0.05
            prec[4]=str(fr)
            pickle.dump(prec,f2)
        except:
            f1.close()
            f2.close()
            os.rename("temp.
            dat","passengers.dat")
```

37. (i) PSYCHIATRY : As it has the largest number of computers.

(ii) Switch/Hub

(iii) Cable Layout



(iv) PSYCHIATRY : as it already hosts the server and has the most computers.

(v) **(a)** Telnet

OR

(b) LAN

OSWAAL 360