

KENDRIYA VIDYALAYA SANGATHAN, CHENNAI REGION
PRE-BOARD EXAM 2022-23
MARKING SCHEME

Class :XII

Computer Science – (083)

Time : 3 hrs
Max Marks : 70

General Instructions:

1. This question paper contains five sections, Section A to E.
2. All questions are compulsory.
3. Section A have 18 questions carrying 01 mark each.
4. Section B has 07 Very Short Answer type questions carrying 02 marks each.
5. Section C has 05 Short Answer type questions carrying 03 marks each.
6. Section D has 03 Long Answer type questions carrying 05 marks each.
7. Section E has 02 questions carrying 04 marks each. One internal choice is given in Q34 against part c only.
8. All programming questions are to be answered using Python Language only.

SECTION A		
1.	State True or False: “A dictionary key must be of a data type that is mutable.” Ans: False	1
2.	What will be the datatype of d, if d = (15) ? (a) int (b) tuple (c) list (d) string Ans: (a) int	1
3.	Which of the following is a valid identifier in Python: (a) elseif (b) for (c) pass (d) 2count Ans: (a) elseif	1
4.	Consider the given expression: not 5 or 4 and 10 and 'bye' Which of the following will be correct output if the given expression is evaluated? (a) True (b) False (c) 10 (d) 'bye' Ans: (d) 'bye'	1

5.	<p>Select the correct output of the code:</p> <pre>for i in "QUITE": print([i.lower()], end= "#")</pre> <p>(a) q#u#i#t#e# (b) ['quite#'] (c) ['q']#[u]#[i]#[t]#[e]# (d) ['quite'] #</p> <p>Ans : ['q']#[u]#[i]#[t]#[e]#</p>	1
6.	<p>Which file mode can be used to open a binary file in both append and read mode?</p> <p>a) w+ b) wb+ c) ab+ d) a+</p> <p>Ans: (c) ab+</p>	1
7.	<p>Fill in the blank: The SQL built-in function _____ calculates the average of values in numeric columns.</p> <p>(a) MEAN() (b)AVG() (c) AVERAGE() (d) COUNT()</p> <p>Ans: (b) AVG()</p>	1
8.	<p>Which of the following commands will be used to select a particular database named "Student" from MYSQL Database?</p> <p>(a) SELECT Student; (b) DESCRIBE Student; (c) USE Student; (d) CONNECT Student;</p> <p>Ans: (c) USE Student;</p>	1
9.	<p>Which of the following statement(s) would give an error after executing the following code?</p> <pre>d = {"A" : 1, "B": 2, "C": 3, "D":4} #statement 1 sum_keys = 0 #statement 2 for val in d.keys(): #statement 3 sum_keys = sum_keys + val #statement 4 print(sum_keys)</pre> <p>(a) Statement 1 (b) Statement 2 (c) Statement 3 (d) Statement 4</p> <p>Ans: (d) Statement 4</p>	1

10.	<p>Fill in the blank:</p> <p>An attribute in a relation is a foreign key if it is the _____ key in any other relation.</p> <p>(a) Candidate Key (b) Foreign Key (c) Primary Key (d) Unique Key</p> <p>Ans: (c) Primary Key</p>	1
11.	<p>Which option correctly explains tell () method?</p> <p>a) tells the current position within the file. b) tells the name of file. c) moves the current file position to a different location. d) it changes the file position only if allowed to do so else returns an error.</p> <p>Ans: (a) tells the current position within the file.</p>	1
12.	<p>Fill in the blank:</p> <p>When two conditions must both be true for the rows to be selected, the conditions are separated by the SQL keyword _____</p> <p>(a)ALL (b)IN (c)AND (d)OR</p> <p>Ans: (a) AND</p>	1
13.	<p>Fill in the blank:</p> <p>_____ protocol provides access to command line interface on a remote computer.</p> <p>(a) FTP (b) PPP (c) Telnet (d) SMTP</p> <p>Ans: (c) Telnet</p>	1
14.	<p>What will the following expression be evaluated to in Python?</p> <pre>print(25 // 4 + 3**1**2 * 2)</pre> <p>(a) 24 (b) 18 (c) 6 (d) 12</p> <p>Ans: (d) 12</p>	1
15.	<p>Which statement in SQL allows to change the definition of a table is</p> <p>(a) Alter (b) Update. (c) Create (d) select</p> <p>Ans: (a) Alter</p>	1

16.	The statement which is used to get the number of rows fetched by execute() method of cursor: (a) cursor.rowcount (b) cursor.rowcount() (c) cursor.allrows() (d) cursor.countrows() Ans: (a)cursor.rowcount	1
	Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as (a) Both A and R are true and R is the correct explanation for A (b) Both A and R are true and R is not the correct explanation for A (c) A is True but R is False (d) A is false but R is True	
17.	Assertion (A):- In Python, statement return [expression] exits a function. Reasoning (R):- Return statement passes back an expression to the caller. A return statement with no arguments is the same as return None. Ans: (a) Both A and R are true and R is the correct explanation for A	1
18.	Assertion (A): CSV module allows to write a single record into each row in CSV file using writerow() function. Reason (R): The writerow() function creates header row in csv file by default. Ans: (c) A is True but R is False	1
SECTION B		
19.	Rewrite the following code in python after removing all the syntax errors. Underline each correction done in the code. num1, num2 = 10 While num1 % num2 = 0 num1+= 20 num2+= 30 Else: print('hello') Ans: num1, num2 = 10, 45 <u>while</u> num1 % num2 <u>==</u> 0: num1+= 20 num2+= 30 <u>else:</u> print('hello') (½ Mark for each correction up to any 4 corrections)	2
20.	Write two advantages and two disadvantages of circuit switching.	2

OR

Differentiate between Web server and web browser. Write any two popular web browsers.

Ans:

Advantages:

- 1) A dedicated communication channel increases the quality of communication.
- 2) Suitable for long continuous communication.

Disadvantages:

- 1) Resources are not utilized fully.
- 2) The time required to establish the physical link between the two stations is too long.

½ mark for each advantage and disadvantage

OR

Web browser	Web server
It is a type of software that we use for browsing and displaying web pages that might be available over the internet.	It is a type of software that searches, finds, and provides documents to the browsers, as requested by them.
A web browser acts as a link/ interface between a client and a server. Its primary function is to display various web documents to the clients requesting them.	A web server functions to accept browser requests, generate responses, maintain the web apps, and accept the client data

Web browsers: Google Chrome, Mozilla Firefox

1 mark for difference and 1 mark for examples

21. Write two points of difference between ALTER and UPDATE command in SQL. 2

Ans:

ALTER	UPDATE
ALTER Command is used to add, delete, modify the attributes of the relations (tables) in the database.	UPDATE Command is used to update existing records in a database.
ALTER Command by default initializes values of all the tuple as NULL. This command make changes with table structure.	UPDATE Command sets specified values in the command to the tuples. This command makes changes with data inside the table.

1 mark for each correct difference

22.	<p>(a) Given is a Python List declaration: <code>lst1= [39, 45, 23, 15, 25, 60].</code> What will be the output of : <code>print(lst1.index(23)) ?</code></p> <p>(b) Write the output of the code given below: <code>x = ["rahul", 5, "B", 20, 30]</code> <code>x.insert(1, 3)</code> <code>x.insert(3, "akon")</code> <code>print(x[2])</code></p> <p>Ans: (a) 2 (b) 5 1 mark for each correct answer</p>	2
23.	<p>(a) Write the full forms of the following: (i) FTP (ii) HTTPS</p> <p>(b)Name the protocols which are used for sending and receiving emails? Ans: (a) (i) FTP: File Transfer Protocol - ½ mark (ii) HTTPS : Hyper Text Transfer Protocol Secure – ½ mark</p> <p>(b)for sending emails – SMTP (Simple Mail Transfer Protocol)- ½ mark For receiving emails- POP3 (Post Office Protocol Version 3) - ½ mark</p>	2
24.	<p>Predict the output of the Python code given below: <code>st = "python programming"</code> <code>count = 4</code> <code>while True:</code> <code>if st[0]== "p":</code> <code>st = st[2:]</code> <code>elif st[-2]=="n":</code> <code>st = st[:4]</code> <code>else:</code> <code>count+=1</code> <code>break</code> <code>print(st)</code> <code>print(count)</code></p>	2

	<p style="text-align: center;">OR</p> <p>Predict the output of the Python code given below:</p> <pre> myvalue = ["A", 40, "B", 60, "C", 20] alpha = 0 beta = "" gama = 0 for i in range(1,6,2): alpha += i beta += myvalue[i-1]+ "#" gama += myvalue[i] print(alpha, beta, gama) </pre> <p>Ans: thon 5</p> <p style="text-align: center;">OR</p> <p>9 A#B#C# 120</p>	
25.	<p>What do you understand by the terms PRIMARY KEY and UNIQUE KEY of a relation in relational database?</p> <p style="text-align: center;">OR</p> <p>Categorize the following commands as DDL or DML: DROP, DELETE, SELECT, ALTER</p> <p>Ans: PRIMARY KEY: The PRIMARY KEY uniquely identifies each record in a table. Primary keys contain UNIQUE values, and cannot contain NULL values. A table can have only ONE primary key; and in the table, this primary key can consist of single or multiple columns (fields).</p> <p>UNIQUE KEY: It Uniquely determines a row which isn't primary key. It can accept NULL values. More than one Unique keys can be defined in one table.</p> <p>1 mark for each correct explanation</p> <p style="text-align: center;">OR</p> <p>DDL – DROP , ALTER DML- DELETE, SELECT ½ mark for each correct command</p>	2

SECTION C

26. (a) Consider the following tables – Applicants and Centre

1+2

Table: Applicants

Appno	Name	Subject
C01	Mohan	English
C02	Raju	Hindi

Table : Centre

Appno	City
C02	Madurai
C03	Chennai
C02	Jaipur

What will be the output of the following statement?

```
SELECT * FROM Applicants NATURAL JOIN Centre;
```

(b) Write the output of the queries (i) to (iv) based on the table, Car given below:

CCODE	CNAME	MAKE	COLOUR	CAPACITY	CHARGES
105	Fortuner	Toyota	White	7	1500
245	Nexon	Tata	Black	5	1000
130	Duster	Renault	Green	6	2000
225	Kwid	Renault	Grey	5	2500
120	Baleno	Suzuki	Red	5	4000
207	Nano	Tata	Blue	4	3500

(i) SELECT DISTINCT MAKE FROM CAR;

(ii) SELECT MAKE, COUNT(*) FROM CAR GROUP BY MAKE;

(iii) SELECT CNAME FROM CAR WHERE CAPACITY>5 ORDER BY CNAME;

(iv) SELECT CNAME, MAKE FROM CAR WHERE CHARGES>2500;

Ans:

(a) 1 mark

Appno	Name	Subject	City
C02	Raju	Hindi	Madurai
C02	Raju	Hindi	Jaipur

(b) ½ mark for each correct output

(i)

MAKE
Toyota
Tata
Renault
Suzuki

(ii)

MAKE	COUNT(*)
Toyota	1
Tata	2
Renault	2
Suzuki	1

(iii)

CNAME
Duster
Fortuner

(iv)

CNAME	MAKE
Baleno	Suzuki
Nano	Tata

27. Write a function in Python to read lines from a text file visitors.txt, and display only those lines, which are starting with an alphabet 'P'. 3

If the contents of file is :

Visitors from various cities are coming here.
Particularly, they want to visit the museum.
Looking to learn more history about countries with their cultures.

The output should be:

Particularly, they want to visit the museum.

OR

Write a method in Python to read lines from a text file book.txt, to find and display the occurrence of the word 'are'. For example, if the content of the file is:

Books are referred to as a man's best friend. They are very beneficial for mankind and have helped it evolve. Books leave a deep impact on us and are responsible for uplifting our mood.

The output should be 3.

Ans:

```
def rdlines():
    file = open('visitors.txt','r')
    for line in file:
        if line[0] == 'P':
            print(line)
    file.close()
```

Call the rdlines function.

```
rdlines()
```

½ mark for function header

1 mark for opening file

1 mark for correct for loop and condition

½ mark for closing file

OR

```
def count_word():
    file = open('india.txt','r')
    count = 0
    for line in file:
        words = line.split()
        for word in words:
            if word == 'India':
                count += 1
    print(count)
    file.close()
```

call the function count_word().

```
count_word()
```

½ mark for function header

1 mark for opening file

1 mark for correct for loop and condition

½ mark for closing file

28. (a) Consider the following tables EMPLOYEE and SALARY.

3

Table : EMPLOYEE

ECODE	NAME	DESIG	SGRADE	DOJ	DOB
101	Akash	Executive	S03	2003-03-23	1980-01-13
102	Rajiv	Manager	S02	2010-02-12	1987-07-22
103	Jonny	RO	S03	2009-06-24	1983-02-24
104	Naziya	GM	S02	2006-08-11	1984-03-03
105	Pritam	CEO	S01	2004-12-29	1982-01-19

Table: SAL

SGRADE	SALARY	HRA
S01	56000	18000
S02	32000	12000
S03	24000	8000

Give the output of the following SQL queries:

(i) SELECT COUNT(SGRADE), SGRADE FROM EMPLOYEE GROUP BY SGRADE;

(ii) SELECT MIN(DOB), MAX(DOJ) FROM EMPLOYEE;

(iii) SELECT NAME, SALARY FROM EMPLOYEE E, SAL S WHERE E.SGRADE=S.SGRADE AND E.ECODE<103;

(iv) SELECT SGRADE, SALARY+HRA FROM SAL WHERE SGRADE= 'S02';

(b) Write the command to view structure of table FOOD in a database.

Ans:

(i)

COUNT	SGRADE
2	S03
2	S02
1	S01

(ii)

MIN(DOB)	MAX(DOJ)
1980-01-13	2010-02-12

(iii)

NAME	SALARY
Akash	24000
Rajiv	32000

(iv)

SGRADE	SALARY+HRA
S02	44000

(b) DESCRIBE FOOD;

OR

DESC FOOD;

29.	<p>Write a function LeftShift(Numlist, n) in Python, which accepts a list Numlist of numbers and n is a numeric value by which all elements of the list are shifted to left.</p> <p>Sample input data of the list Numlist = [10, 20, 30, 40, 50, 60, 70], n=2</p> <p>Output Numlist = [30, 40, 50, 60, 70, 10, 20]</p> <p>Ans: def LeftShift(numlist, n): L = len(numlist) for x in range(0,n): y = numlist[0] for i in range(0,L-1): numlist[i] = numlist[i+1] numlist[L-1] = y print(numlist)</p> <p>or any other correct logic</p>	3
30.	<p>Write a function in Python PUSH(Num), where Num is a list of numbers. From this list push all numbers divisible by 5 into a stack implemented by using a list. Display the stack if it has atleast one element, otherwise display appropriate error message.</p> <p>For example: If the list Num is: [66, 75, 40, 32, 10, 54]</p> <p>The stack should contain: [75, 40, 10]</p> <p style="text-align: center;">OR</p> <p>Write functions in Python, MakePush(Package) and MakePop(Package) to add a new Package and delete a Package from a List of Package Description, considering them to act as push and pop operations of the Stack data structure.</p> <p>Ans: def PUSH(num): ½ mark s=[] for x in range(0, len(num)): if num[x]%5 ==0: 1 ½ mark</p>	3

```

s.append(num[x])
if len(s) == 0:
    print("Empty Stack")
else:
    print(s)

```

1 mark

PUSH([66,75,40,32,10,54])

OR

```

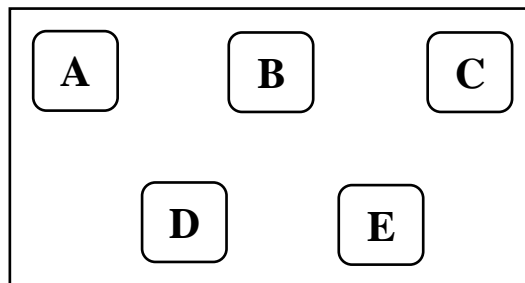
def MakePush(Package):
    a= int(input("Enter package title:"))
    Package.append(a)
def MakePop(Package):
    if(Package ==[]):
        print("Stack empty")
    else:
        print("deleted element:", Package.pop())

```

1 ½ for each function

SECTION D

31. An International Bank has to set up its new data center in Delhi, India. It has five blocks of buildings – A, B, C, D and E. 5



Distance between the blocks and number of computers in each block are as given below:

Distance Between Blocks	
Block B to Block C	30m
Block C to Block D	30m
Block D to Block E	35m
Block E to Block C	40m
Block D to Block A	120m
Block D to Block B	45m
Block E to Block B	65m

No of Computers	
Block A	55
Block B	180
Block C	60
Block D	55
Block E	70

(i) Suggest the most suitable block to host the server. Justify your answer.

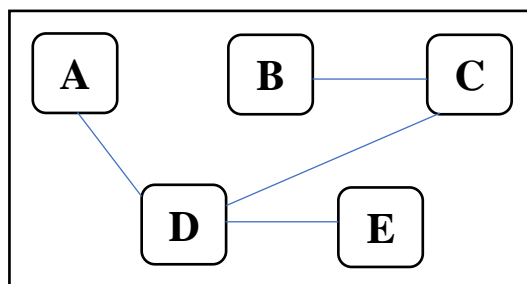
- (ii) Draw the cable layout (Block to Block) to economically connect various blocks within the Delhi campus of International Bank.
- (iii) Suggest the placement of the following devices with justification:
 (a) Repeater (b) Hub/Switch
- (iv) The bank is planning to connect its head office in London. Which type of network out of LAN, MAN, or WAN will be formed? Justify your answer.
- (v) Suggest a device/software to be installed in the Delhi Campus to take care of data security.

Ans:

(i) Block B

Justification- Block B has maximum number of computers. Reduce traffic.

(ii)



(iii) (a) between D and A blocks (b) in all the blocks

(iv) WAN

(v) Firewall

32. (a) Consider the code below and answer the questions that follow:

```

def multiply(number1, number2) :
    answer = number1 * number2
    return(answer)
    print(number1, 'times', number2, '=', answer)
output = multiply(5, 5)
  
```

(i) When the code above is executed, what gets printed?

(ii) What is variable output equal to after the code is executed?

(b) The code given below inserts the following record in the table Student:

Rollno – integer

Name – string

Age – integer

Note the following to establish connectivity between Python and MySQL:

- Username is root
- Password is sys
- The table exists in a MySQL database named school.
- The details (Rollno, Name and Age) are to be accepted from the user.

Write the following missing statements to complete the code:

Statement 1 – to form the cursor object

Statement 2 – to execute the command that inserts the record in the table Student.

Statement 3- to add the record permanently in the database

```
import mysql.connector
mydb=
mysql.connector.connect(host="localhost",user="root",passwd="sys",
database = "myschool")
mycursor = _____ #statement 1

while True:
    ch=int(input("enter -1 to exit , any other number to insert record"))
    if ch==-1:
        break
    rollno = int(input("enter Roll no:"))
    name = input("enter Name:")
    age = int(input("enter Age:"))
    qry = "insert into student values
    ({},'{}',{})".format(rollno,name,age)
    _____ #statement 2
    _____ #statement 3
    print("Data added successfully")
```

OR

(a)Write the output of the following python code.

```
def convert(line):
    n = len(line)
    new_line = ''
    for i in range(0,n):
        if not line[i].isalpha():
```

```

new_line = new_line + '@'
else:
    if line[i].isupper():
        new_line = new_line + line[i]*2
    else:
        new_line = new_line + line[i]
return new_line
new_line = convert("Be 180 HuMan")
print(new_line)

```

(b) The code given below adds a new column in the table Student, updates the data into it and displays the content of the table. Student table details are as follows:

```

Rollno – integer
Name – string
Age – integer

```

Note the following to establish connectivity between Python and MYSQL:

- Username is root
- Password is sys
- The table exists in a MYSQL database named school.

Write the following missing statements to complete the code:

Statement 1 – to form the cursor object

Statement 2 – to execute a query that adds a column named "MARKS" of type integer in the table Student.

Statement 3- to update the record permanently in the database

```

import mysql.connector
mydb=
mysql.connector.connect(host="localhost",user="root",passwd="sys",
database="myschool")
mycursor = _____ #statement1
_____ #statement2
mycursor.execute("update student set MARKS=9 where Rollno = 1")
_____ #statement3
mycursor.execute("select * from student")
for x in mycursor:
    print(x)

```

Ans:

(a)

	<p>(i) Nothing gets printed (as print() is after the return statement) (ii) 25 (b) Statement 1 : mydb.cursor() Statement 2: mycursor.execute(qry) Statement 3: mydb.commit() (1mark for each correct answer)</p> <p style="text-align: center;">OR</p> <p>(a) BBe@ @ @ @ @HHuMMan (b) Statement 1 : mydb.cursor() Statement 2: mycursor.execute(“alter table student add column MARKS int”) Statement 3: mydb.commit() (1mark for each correct answer)</p>	
33.	<p>Write the full form of ‘CSV’. What is the default delimiter of csv files? The scores and ranks of three students of a school level programming competition is given as:</p> <p>[‘Name’, ‘Marks’, ‘Rank’] [‘Sheela’, 450, 1] [‘Rohan’, 300, 2] [‘Akash’, 260, 3]</p> <p>Write a program to do the following: (i) Create a csv file (results.csv) and write the above data into it. (ii) To display all the records present in the CSV file named ‘results.csv’</p> <p style="text-align: center;">OR</p>	5

What does csv.writer object do?

Rohan is making a software on “Countries & their Capitals” in which various records are to be stored/retrieved in CAPITAL.CSV data file. It consists some records(Country & Capital). Help him to define and call the following user defined functions:

(i) AddNewRec(Country,Capital) – To accept and add the records to a CSV file “CAPITAL.CSV”. Each record consists of a list with field elements as Country and Capital to store country name and capital name respectively.

(ii) ShowRec() – To display all the records present in the CSV file named ‘CAPITAL.CSV’

Ans:

(a) CSV- Comma Separated Values , default delimiter- comma (,)

1 mark

(b)

```
import csv
```

```
f = open("results.csv", "w")
```

```
cwriter = csv.writer(f)
```

2 marks

```
examdata = [{"Name", "Marks", "Rank"},["Sheela", 450, 1],["Rohan",  
300, 2],["Akash", 260, 3]]
```

```
cwriter.writerows(examdata)
```

```
f.close()
```

with open(“results.csv”,”r”) as NF:

```
NewReader=csv.reader(NF)
```

2 marks

```
for rec in NewReader:
```

```
print(rec[0], rec[1], rec[2])
```

OR

The csv.writer object adds delimitation to the user data prior to storing data in the csv file on storage disk. –1 mark

```
import csv
```

½ mark

```
def AddNewRec(Country,Capital):
```

```
f=open(“CAPITAL.CSV”, “a”)
```

```
fwriter=csv.writer(f)
```

1½ marks

```
fwriter.writerow([Country,Capital])
```

```
f.close()
```

```
def ShowRec():
```

with open("CAPITAL.CSV","r") as NF:
 NewReader=csv.reader(NF) 1 ½ marks
 for rec in NewReader:
 print(rec[0],rec[1])
 AddNewRec("INDIA","NEW DELHI") ½ mark for calling both functions
 AddNewRec("JAPAN","TOKYO")
 ShowRec()

SECTION E

34. A company stores the records of motorbikes sold in January, February, March and April months in MOTOR table as shown below: 1+1
+2

Bcode	Bname	January	February	March	April
156	Honda	200	310	140	250
234	Pegasus	100	430	120	170
432	Ebony	250	100	280	340
876	Raven	300	150	240	430
970	Hero	250	130	190	100

Based on the data given above answer the following questions:

- (i) Identify the most appropriate column, which can be considered as Primary key.
- (ii) If 3 more columns are added and 2 rows are deleted from the table MOTOR, what will be the new degree and cardinality?
- (iii) Write the query to:
- (a) Insert the following record into the table
 Bcode- 207, Bname- TVS, January- 500, February- 450, March- 480, April - 350.
 - (b) Display the names of motor bikes which are sold more than 200 in January month.
- OR (Option for part iii only)**
- (iii) Write the query to:
- (a) Add a new column MAY in MOTOR table with datatype as integer.
 - (b) Display total number of Motorbikes sold in March Month.

Ans:

- (i) Bcode
 (ii) degree =9, cardinality =3
 (iii) 1 mark for each
 (a) INSERT INTO MOTOR VALUES(207, 'TVS', 500, 450, 480, 350);

	<p>(b) SELECT BNAME FROM MOTOR WHERE JANUARY>200; OR (iii) 1 mark for each (a)ALTER TABLE MOTOR ADD MAY INT; (b)SELECT SUM(MARCH) FROM MOTOR;</p>	
35.	<p>Sheela is a Python programmer. She has written a code and created a binary file “book.dat” that has structure [BookNo, Book_Name, Author, Price]. The following user defined function CreateFile() is created to take input data for a record and add to book.dat and another user defined function CountRec(Author) which accepts the Author name as parameter and count and return number of books by the given Author. As a Python expert, help her to complete the following code based on the requirement given above:</p> <pre> import _____ #statement1 def createFile(): fobj = open("book.dat", "_____") #statement2 BookNo = int(input("Book number:")) Book_Name = input("Book Name:") Author = input("Author:") Price = int(input("Price:")) rec = [BookNo, Book_Name, Author, Price] pickle._____ #statement3 fobj.close() def Count_Rec(Author): fobj = open("book.dat", "rb") num = 0 try: while True: rec = pickle._____ #statement4 if Author == rec[2]: num=num+1 except: fobj.close() return num </pre> <p>(i) Which module should be imported in the program? (Statement 1) (ii) Write the correct statement required to open a file named book.dat. (Statement 2)</p>	1+1 +2

(iii) Which statement should be filled in Statement 3 to write the data into the binary file, book.dat and in Statement 4 to read the data from the file, book.dat?

Ans:

(i) pickle 1 mark

(ii) ab 1mark

(iii) dump(rec, fobj) 1mark

 load(fobj) 1 mark