

**SET-3****KENDRIYA VIDYALAYA SANGATHAN LUCKNOW REGION****II - PRE-BOARD EXAMINATION 2023-24**

Class: XII Session: 2023-24

Computer Science (083)

Question Paper (Theory)

Time allowed: 3 Hours

Maximum Marks: 70

**General Instructions:**

- Please check this question paper contains 35 questions.
- The paper is divided into 4 Sections- A, B, C, D and E.
- Section A, consists of 18 questions (1 to 18). Each question carries 1 Mark.
- Section B, consists of 7 questions (19 to 25). Each question carries 2 Marks.
- Section C, consists of 5 questions (26 to 30). Each question carries 3 Marks.
- Section D, consists of 2 questions (31 to 32). Each question carries 4 Marks.
- Section E, consists of 3 questions (33 to 35). Each question carries 5 Marks.
- All programming questions are to be answered using Python Language only.

| Q. No.    | Question                                                                                                                                                                                                                                                                                                  | Marks |
|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
| SECTION A |                                                                                                                                                                                                                                                                                                           |       |
| 1         | State True or False:<br><br>"Identifiers are pre-defined or reserved words that convey a special meaning in programming language."                                                                                                                                                                        | 1     |
| 2         | In a table in MYSQL database, an attribute A of datatype varchar (20) has the value "Harish". The attribute B of datatype char (20) has value "Siddhartha ". How many characters are occupied by attribute A and attribute B?<br><br>a. 20,6              b. 6,20              c. 9,6              d. 6,9 | 1     |
| 3         | What will be the output of the following code:<br>t=(4,5,6)<br>t1=t*2<br>print(t1)<br>a) (4,5,6,4,5,6)<br>b) (4,4,5,5,6,6)<br>c) (8,10,12)<br>d) None of the above                                                                                                                                        | 1     |
| 4         | Select the correct output of the code :<br>S= "Amrit Mahotsav @ 75"<br>a=S.partition (" ")<br>print (a)                                                                                                                                                                                                   | 1     |

|    |                                                                                                                                                                                                                                                                                                                                                                                                        |   |
|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|    | (a) ('Amrit Mahotsav', '@', '75')      (b) ['Amrit', 'Mahotsav', '@', '75']<br>(c) ('Amrit', 'Mahotsav @ 75')      (d) ('Amrit', '', 'Mahotsav @ 75')                                                                                                                                                                                                                                                  |   |
| 5  | In a relational model, _____ is the number of columns.<br>(a) Attribute<br>(b) Degree<br>(c) Relation<br>(d) Tuple                                                                                                                                                                                                                                                                                     | 1 |
| 6  | Two doctors seating in a room and sharing some data between their mobile phone. Identify the type of network formed by their devices.<br>a) LAN   b) MAN      c) PAN      d) WAN                                                                                                                                                                                                                       | 1 |
| 7  | Given the following dictionary<br>Day={1:"Monday", 2: "Tuesday", 3: "Wednesday"}<br>Which statement will return "Tuesday".<br>(a) Day.pop()<br>(b) Day.pop(2)<br>(c) Day.pop(1)<br>(d) Day.pop("Tuesday")                                                                                                                                                                                              | 1 |
| 8  | What will the following expression be evaluated to in Python ?<br><b>2+3/3**1**2*5+10</b><br>(a) 6.5<br>(b) 17.0<br>(c) 16.0<br>(d) 17                                                                                                                                                                                                                                                                 | 1 |
| 9  | Which of the following statement(s) would give an error after executing the following code?<br><br>Stud = {"Murugan":100,"Mithu":95 }      # Statement 1<br>print (Stud[95])      # Statement 2<br>Stud ["Murugan"]=99      # Statement 3<br>print (Stud.pop())      # Statement 4<br>print (Stud)      # Statement 5<br>a) Statement 2<br>(b) Statement 3<br>c) Statement 4<br>(d) Statements 2 and 4 | 1 |
| 10 | What possible output(s) are expected to be displayed on screen at the time of execution of the following code ?<br>import random<br><b>import random</b><br><b>S=["Pen", "Pencil", "Eraser", "Bag", "Book"]</b><br><b>for i in range (1,2):</b><br><b>f=random.randint(i,3)</b><br><b>s=random.randint(i+1,4)</b><br><b>print(S[f],S[s],sep=" : ")</b><br><br>Options :<br>a) Pencil:Book              | 1 |

|    |                                                                                                                                                                                                                                                                                                                                                                                       |   |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|    | b) Pencil:Book<br>Eraser:Bag<br>c) Pen:Book<br>Bag:Book<br>d) Bag:Eraser                                                                                                                                                                                                                                                                                                              |   |
| 11 | Fill in the blank:<br>_____ is a communication methodology designed to deliver both voice and multimedia communications over Internet protocol.<br>(a) VoIP (b) SMTP (c) PPP (d)HTTP                                                                                                                                                                                                  | 1 |
| 12 | Consider the code given below:<br>c = 1<br>def add():<br>_____ # missing statement<br>c = c + 4<br>print(c)<br>add()<br><br>Which of the following statements should be given in the blank for #Missing Statement, if the output produced is 5 ?<br>Options:<br>a. global c<br>b. global c= 5<br>c. global 5<br>d. c= 5                                                               | 1 |
| 13 | _____ function returns a list containing each line in the file as a list item.<br>a. tell()<br>b. read()<br>c. readline()<br>d. readlines()                                                                                                                                                                                                                                           | 1 |
| 14 | Which of the following statements is FALSE about keys in a relational database?<br>a. Any candidate key is eligible to become a primary key.<br>b. A primary key uniquely identifies the tuples in a relation.<br>c. A candidate key that is not a primary key is a foreign key.<br>d. A foreign key is an attribute whose value is derived from the primary key of another relation. | 1 |
| 15 | Fill in the blank :<br>_____ is used for point-to-point communication or unicast communication such as radar and satellite.<br>a. Micro waves<br>b. Infrared waves<br>c. Radio waves<br>d. Bluetooth                                                                                                                                                                                  | 1 |
| 16 | State whether the following statement is True or False:<br>An exception may be raised even if the program is syntactically correct.                                                                                                                                                                                                                                                   | 1 |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                          |   |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|           | <p>Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as</p> <p>(a) Both A and R are true and R is the correct explanation for A<br/> (b) Both A and R are true and R is not the correct explanation for A<br/> (c) A is True but R is False<br/> (d) A is false but R is True</p>                                                                                                          |   |
| 17        | <p>Assertion (A): CSV (Comma Separated Values) is a file format for data storage which looks like a text file.<br/> Reason (R): The information is organized with one record on each line and each field is separated by comma.</p>                                                                                                                                                                                      | 1 |
| 18        | <p>Assertion (A) : readlines() reads all the lines from a text file and returns the lines along with newline as a list of strings.<br/> Reason (R) : readline() can read the entire text file line by line without using any looping statements.</p>                                                                                                                                                                     | 1 |
| SECTION B |                                                                                                                                                                                                                                                                                                                                                                                                                          |   |
| 19        | <p>Differentiate between Bus Topology and Star Topology. Also, write one advantage of each of them.<br/> OR</p> <p>(i) Expand the following terms:<br/> POP3 , URL<br/> (ii) Give one difference between XML and HTML.</p>                                                                                                                                                                                               | 2 |
| 20        | <p>Hari has written a code to input a number and check whether it is prime or not. His code is having errors. Rewrite the correct code and underline the corrections made.</p> <pre>def prime():     n=int(input("Enter number to check :: "))     for i in range (2, n//2):         if n%i=0:             print("Number is not prime \n")             break         else:             print("Number is prime \n')</pre> | 2 |
| 21        | <p>Write a function countNow(PLACES) which takes a list of names and displays the names (in uppercase) of the places whose names are longer than 5 characters.</p> <p>For example, Consider the following List<br/> PLACES= ["Delhi","London","Paris","New York","Doha"]<br/> The output should be:<br/> LONDON<br/> NEW YORK</p> <p>OR</p>                                                                              | 2 |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---|
|           | Write a function, lenWords(String), that takes a string as an argument and returns a tuple containing length of each word of a string.<br>For example, if the string is "Come let us have some fun", the tuple will have (4, 3, 2, 4, 4, 3)                                                                                                                                                                                                      |   |
| 22        | Predict the output of the Python code given below:<br><pre> tuple1 = (11, 22, 33, 44, 55 ,66) list1 =list(tuple1) new_list = [] for i in list1:     if i%2==0:         new_list.append(i) new_tuple = tuple(new_list) print(new_tuple) </pre>                                                                                                                                                                                                    | 2 |
| 23        | Write the Python statement for each of the following tasks using BUILT-IN functions/methods only:<br><br>(i) To delete second element of the list L1.<br>(ii) Insert the value "orange" as the second element of the list L1.<br>OR<br>A list named studentAge stores age of students of a class. Write the Python command to import the required module and (using built-in function) to display the most common age value from the given list. | 2 |
| 24        | Name any two DDL and any two DML commands.<br>OR<br>Differentiate between count(attribute) and count(*) functions in SQL.                                                                                                                                                                                                                                                                                                                        | 2 |
| 25        | Write the output of the Python code given below :<br><pre> a=15 def update(x):     global a     a+=2     if x%2==0:         a*=x     else:         a//=x a=a+5 print(a,end="\$") update(5) print(a) </pre>                                                                                                                                                                                                                                       | 2 |
| SECTION C |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |   |
| 26        | Write the output of the code given below:                                                                                                                                                                                                                                                                                                                                                                                                        | 3 |

|      | <pre> a=30 def call(x):     global a     if a%2==0:         x+=a     else:         x -=a     return x x=20 print(call(35),end="#") print(call(40),end="@") </pre>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |           |            |      |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |
|------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|------|--------|------|-----|-------|---------|------------|------|-----|-------|-----------|------------|------|-----|--------|---------|------------|------|-----|-------|--------|------------|------|-----|--------|-----------|------------|------|---|
| 27   | <p>Write the output of the SQL queries (a) to (d) based on the table TRAVEL given below :</p> <p><b>Table : TRAVEL</b></p> <table border="1"> <thead> <tr> <th>T_ID</th> <th>START</th> <th>END</th> <th>T_DATE</th> <th>FARE</th> </tr> </thead> <tbody> <tr> <td>101</td> <td>DELHI</td> <td>CHENNAI</td> <td>2021-12-25</td> <td>4500</td> </tr> <tr> <td>102</td> <td>DELHI</td> <td>BENGALURU</td> <td>2021-11-20</td> <td>4000</td> </tr> <tr> <td>103</td> <td>MUMBAI</td> <td>CHENNAI</td> <td>2020-12-10</td> <td>5500</td> </tr> <tr> <td>104</td> <td>DELHI</td> <td>MUMBAI</td> <td>2019-12-20</td> <td>4500</td> </tr> <tr> <td>105</td> <td>MUMBAI</td> <td>BENGALURU</td> <td>2022-01-15</td> <td>5000</td> </tr> </tbody> </table> <p>(i) SELECT COUNT(DISTINCT START) FROM TRAVEL;<br/> (ii) SELECT T_ID, FARE FROM TRAVEL<br/> WHERE T_DATE LIKE '2021%';<br/> (iii) SELECT T_ID, T_DATE FROM TRAVEL WHERE END = 'CHENNAI'<br/> ORDER BY FARE ;</p> | T_ID      | START      | END  | T_DATE | FARE | 101 | DELHI | CHENNAI | 2021-12-25 | 4500 | 102 | DELHI | BENGALURU | 2021-11-20 | 4000 | 103 | MUMBAI | CHENNAI | 2020-12-10 | 5500 | 104 | DELHI | MUMBAI | 2019-12-20 | 4500 | 105 | MUMBAI | BENGALURU | 2022-01-15 | 5000 | 3 |
| T_ID | START                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | END       | T_DATE     | FARE |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |
| 101  | DELHI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CHENNAI   | 2021-12-25 | 4500 |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |
| 102  | DELHI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | BENGALURU | 2021-11-20 | 4000 |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |
| 103  | MUMBAI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | CHENNAI   | 2020-12-10 | 5500 |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |
| 104  | DELHI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | MUMBAI    | 2019-12-20 | 4500 |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |
| 105  | MUMBAI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | BENGALURU | 2022-01-15 | 5000 |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |
| 28   | <p>Write a function count_Dwords () in Python to count the words ending with a digit in a text file "details.txt".</p> <p>Example:<br/> If the file content is as follows:<br/> On seat2 VIP1 will sit and<br/> On seat1 VVIP2 will be sitting<br/> Output will be:<br/> Number of words ending with a digit are 4</p> <p>OR</p> <p>Write the definition of a Python function named LongLines ( ) which reads the contents of a text file named 'lines.txt' and displays those lines from the file which have at least 10 words in it. For example, if the content of 'lines.txt' is as follows:<br/> Once upon a time, there was a woodcutter<br/> He lived in a little house in a beautiful, green wood.<br/> One day, he was merrily chopping some wood.<br/> He saw a little girl skipping through the woods, whistling happily.</p>                                                                                                                              | 3         |            |      |        |      |     |       |         |            |      |     |       |           |            |      |     |        |         |            |      |     |       |        |            |      |     |        |           |            |      |   |

|                  | <p>The girl was followed by a big gray wolf.</p> <p>Then the function should display output as:<br/> He lived in a little house in a beautiful, green wood.<br/> He saw a little girl skipping through the woods, whistling happily.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |         |        |        |       |       |      |       |        |      |   |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------|--------|-------|-------|------|-------|--------|------|---|
| 29               | <p>Consider the following table :</p> <table border="1"> <caption>Table : LOAN</caption> <thead> <tr> <th>LOAN_NO</th><th>B_NAME</th><th>AMOUNT</th></tr> </thead> <tbody> <tr> <td>L-170</td><td>DELHI</td><td>3000</td></tr> <tr> <td>L-230</td><td>KANPUR</td><td>4000</td></tr> </tbody> </table> <p>Based on the given table, write SQL queries for the following:<br/> (i) Increase the amount by 10% of all loan_no.<br/> (ii) Display loan_no and interest (12 % of amount) of all records. The column heading 'Monthly interest' should also be displayed.<br/> (iii) Delete the records of loan_no who have amount less than 4000.</p>                                                                                                   | LOAN_NO | B_NAME | AMOUNT | L-170 | DELHI | 3000 | L-230 | KANPUR | 4000 | 3 |
| LOAN_NO          | B_NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | AMOUNT  |        |        |       |       |      |       |        |      |   |
| L-170            | DELHI                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 3000    |        |        |       |       |      |       |        |      |   |
| L-230            | KANPUR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 4000    |        |        |       |       |      |       |        |      |   |
| 30               | <p>A list contains following record of course details for a University:<br/> [Course_name, Fees, Duration]<br/> Write the following user defined functions to perform given operations on the stack named 'Univ' :</p> <p>(i) Push_element() - To push an object containing the Course_name, Fees and Duration of a course, which has fees greater than 100000 to the stack.<br/> (ii) Pop_element() - To pop the object from the stack and display it.<br/> Also, display "Underflow" when there is no element in the stack.<br/> For example :<br/> If the lists of courses details are :<br/> ['MCA', 200000,3]<br/> ['MBA', 500000,2]<br/> ['BA', 100000, 3]<br/> The stack should contain :<br/> ['MBA', 500000,2]<br/> ['MCA', 200000,3]</p> | 3       |        |        |       |       |      |       |        |      |   |
| <b>SECTION D</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         |        |        |       |       |      |       |        |      |   |
| 31               | <p>Consider the tables COMPUTER and SALES given below:</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 1X4=4   |        |        |       |       |      |       |        |      |   |

Table : COMPUTER

| PROD_ID | PROD_NAME       | PRICE | COMPANY  | TYPE   |
|---------|-----------------|-------|----------|--------|
| P001    | MOUSE           | 200   | LOGITECH | INPUT  |
| P002    | LASER PRINTER   | 4000  | CANON    | OUTPUT |
| P003    | KEYBOARD        | 500   | LOGITECH | INPUT  |
| P004    | JOYSTICK        | 1000  | IBALL    | INPUT  |
| P005    | SPEAKER         | 1200  | CREATIVE | OUTPUT |
| P006    | DESKJET PRINTER | 4300  | CANON    | OUTPUT |

Table : SALES

| PROD_ID | QTY_SOLD | QUARTER |
|---------|----------|---------|
| P002    | 4        | 1       |
| P003    | 2        | 2       |
| P001    | 3        | 2       |
| P004    | 2        | 1       |

Write SQL queries for the following:

- (i) Display PROD\_NAME and QTY\_SOLD from the tables COMPUTER and SALES.
- (ii) Display the structure of the table COMPUTER .
- (iii) Delete table SALES.
- (iv) Display the total QTY\_SOLD in each QUARTER.

32

4

- i. What is the advantage of using a csv file for permanent storage?
- ii. Write a Program in Python that defines and calls the following user defined functions:
  - (i) ADD() – To accept and add data of an employee to a CSV file ‘record.csv’. Each record consists of a list with field elements as empid, name and mobile to store employee id, employee name and employee salary respectively.
  - (ii) COUNTR() – To count the number of records present in the CSV file named ‘record.csv’.

OR

- i. Give any one point of difference between a binary file and a csv file.
- ii. Write a Program in Python that defines and calls the following user defined functions:
  - (i) add() – To accept and add data of an employee to a CSV file ‘furdata.csv’. Each record consists of a list with field elements as fid, fname and fprice to store furniture id, furniture name and furniture price respectively.
  - (ii) search()- To display the records of the furniture whose price is more than 10000.

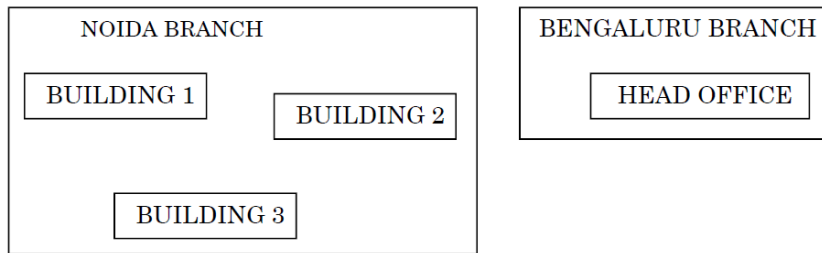
### SECTION E

33

ABC Consultants are setting up a secure network for their office campus at Noida for their day-to-day office and web-based activities. They are planning to have connectivity between three buildings and the head office situated in Bengaluru. As a

1x5=5

network consultant, give solutions to the questions (i) to (v), after going through the building locations and other details which are given below :



Distance between various blocks/locations :

| Building                    | Distance |
|-----------------------------|----------|
| Building 1 to Building 3    | 120 m    |
| Building 1 to Building 2    | 50 m     |
| Building 2 to Building 3    | 65 m     |
| Noida Branch to Head Office | 1500 km  |

Number of computers

| Building    | Number of Computers |
|-------------|---------------------|
| Building 1  | 25                  |
| Building 2  | 51                  |
| Building 3  | 150                 |
| Head Office | 10                  |

- (i) Suggest the most suitable place to install the server for this organization. Also, give reason to justify your suggested location.
- (ii) Suggest the cable layout of connections between the buildings inside the campus.
- (iii) Suggest the placement of the following devices with justification :
  - i. Switch
  - ii. Repeater
- (iv) The organization is planning to provide a high-speed link with the head office situated in Bengaluru, using a wired connection. Suggest a suitable wired medium for the same.
- (v) The System Administrator does remote login to any PC, if any requirement arises. Name the protocol, which is used for the same.

34

- (i) Differentiate between r+ and w+ file modes in Python.
- (ii) Consider a file, SPORT.DAT, containing records of the following structure:

[SportName, TeamName, No\_Players]

Write a function, copyData(), that reads contents from the file SPORT.DAT and copies the records with Sport name as “**Basket Ball**” to the file named BASKET.DAT. The function should return the total number of records copied to the file BASKET.DAT.

**OR**

- (i) How are text files different from binary files?
- (ii) A Binary file, CINEMA.DAT has the following structure:

[MNO,MNAME, MTYPE]

Where

MNO – Movie Number

MNAME – Movie Name

1+4=5

|    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |       |
|----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|
|    | <p>MTYPE is Movie Type</p> <p>Write a user defined function, findType(mtype), that accepts mtype as parameter and displays all the records from the binary file CINEMA.DAT, that have the value of Movie Type as mtype.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |       |
| 35 | <p>(i) Give one difference between alternate key and candidate key.</p> <p>(ii) Kabir wants to write a program in Python to insert the following record in the table named Student in MYSQL database, SAMPLE2023:</p> <ul style="list-style-type: none"> <li>● rno(Roll number )- integer</li> <li>● name(Name) - string</li> <li>● DOB (Date of birth) – Date</li> <li>● Fee – float</li> </ul> <p>Note the following to establish connectivity between Python and MySQL:</p> <ul style="list-style-type: none"> <li>● Username - root</li> <li>● Password - tiger</li> <li>● Host - localhost</li> </ul> <p>The values of fields rno, name, DOB and fee has to be accepted from the user. Help Kabir to write the program in Python.</p> <p style="text-align: center;"><b>OR</b></p> <p>i. Give one difference between primary key and foreign key.</p> <p>ii. The code given below inserts the following record in the table Student:</p> <p>RollNo – integer<br/>Name – string<br/>Clas – integer<br/>Marks – integer</p> <p>Note the following to establish connectivity between Python and MYSQL:</p> <ul style="list-style-type: none"> <li>● Username is root</li> <li>● Password is tiger</li> <li>● The table exists in a MYSQL database named school.</li> <li>● The details (RollNo, Name, Clas and Marks) are to be accepted from the user.</li> </ul> <p>Write the following missing statements to complete the code:</p> <p>Statement 1 – to access MySQL database<br/>Statement 2 – to form the cursor object<br/>Statement 3 – to execute the command that inserts the record in the table Student.<br/>Statement 4- to add the record permanently in the database</p> <pre> import _____ as mysql                                #statement 1 import mysql.connector as mysql def sql_data():     con1=mysql.connect(host="localhost", user="root", password="tiger",     database="school")     mycursor=_____                                     #Statement 2     rno=int(input("Enter Roll Number :: "))     name=input("Enter name :: ")     clas=int(input("Enter class :: "))     marks=int(input("Enter Marks :: "))     query="insert into student values ({}, '{}',{},{})" .format     (rno,name,clas,marks)     _____                                           #Statement 3     _____                                           #Statement 4     print("Data Added successfully") </pre> | 1+4=5 |

|  |  |  |
|--|--|--|
|  |  |  |
|--|--|--|