KENDRIYA VIDYALAYA SANGATHAN HYDERABAD REGION PRE-BOARD - EXAMINATION - 2022-23

Class: XII (Comp.Sc -083) MARKING SCHEME

Maximum Marks: 70 TimeAllowed:3hours

	SECTION A	
1	What will be the result of the following statements?	1
	a) bool(int('0')) b) type("hello")	
ans		1
	a) False	
	b) <class str'=""></class>	
2	Which of the following is valid arithmetic operator in Python:	1
	(a) // (b) ? (c) < (d) and	
ans	(a) //	1
3	Given the following dictionary	
	Emp1={'salary':10000,'dept':'sales','age':24,'name':'john'}	
	Emp1.keys() can give the output as	
	a. ('salary', 'dept', 'age', 'name')	
	b. ['salary', 'dept', 'age', 'name']	
	c. [10000, 'sales',24, 'john']	
	d. {'salary','dept','age','name'}	
ans	b.['salary','dept','age','name']	1
4	Consider the given expression:	1
	(5<10)and(10<5)or(3<18)and not (8<18)	
	Which of the following will be correct output if the given expression is evaluated?	
	(a) True	
	(b) False	
	(c) NONE	
	(d) NULL	
ans	b) False	1
5	string= "it goes as - ringa ringa roses"	
	sub="ringa"	
	string.find(sub,15,22)	
	(a) 13 (b)-13 (c) -1 (d) 19	
ans	(c) -1	1
6	When the file content is to be retained, we can use the mode	1
	(a) r (b) w (c) a (d) w+	
ans	(c) a	
7	Which of the following is NOT a DML Command?	1
	(a) Insert (b) Update (c) Drop (d) Delete	
ans	(c) Drop	1
8	Identify the error in the following SQL query which is expected to delete all rows of a table emp	1
	without deleting its structure and write the correct one:	
	(a) DELETETABLE;	

	(b) DROPTABLE emp;	
	(c) REMOVETABLE emp;	
	(d) DELETE FROM emp;	
ans	(d) DELETE FROM emp;	1
9	What will be the Output for the following code –	
	Language=["C", "C++", "JAVA", "Python", "VB", "BASIC", "FORTRAN"]	
	del Language[4]	
	Language.remove("JAVA")	
	Language.pop(3)	
	print(Language)	
	(a) ['C', 'C++', 'VB', 'FORTRAN']	
	(a) [C, C++, VB, TORTRAN] (b) ['C', 'C++', 'Python', 'FORTRAN']	
	(c) ['C', 'C++', 'BASIC', 'FORTRAN']	
	(d) ['C', 'C++', 'Python', 'BASIC']	
ans	(b) ['C', 'C++', 'Python', 'FORTRAN']	1
10	All attribute combinations inside a relation that can serve as primary key are	1
	(a) Primary Key	
	(b) ForeignKey	
	(c) CandidateKey	
	(d) AlternateKey	
ans	(c) Candidate Key	1
11	Which of the following statements correctly explain the function of tell() method?	
	(a) tells the current position within the file.	
	(b) tell the name of file.	
	(c) move the current file position to a different location.	
	(d) it changes the file position only if allowed to do so else returns an error	1
ans	(a) tells the current position within the file.	1
12	Which is known as range operator in MySQL?	1
	(a) IN (b) BETWEEN (c) IS (d) DISTINCT	
ans	(b) BETWEEN	1
13	Network in which every computer is capable of playing the role of a client, or a server or both at same time	1
	is called	
	a)local area network	
	b)peer-to-peer network c)dedicated server network	
	d)wide area network	
ans	b)peer-to-peer network	1
14	What will be the value of y when following expression be evaluated in Python?	1
	x=10.0	
	y=(x<100.0) and $x>=10$	
	(a)110 (b) False (c)Error (d)True	
ans	(d) True	1
15	All aggregate functions except ignore null values in their input collection.	1
	(a) Count (attribute)	
	(b) Count (*)	
	(c) Avg	
0.77	(d) Sum	1
ans	(b) Count (*)	1

1.0		4
16	A databaseis a special control structure that facilitates the row by row processing of records in the result set.	1
	(a) Fetch (b) table (c) cursor (d) query	
ans	(c) cursor	1
	Q17and18areASSERTIONANDREASONINGbasedquestions. 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):-Built in functions are predefined in the language that are used directly.	1
	Reasoning(R):-print() and input() are built in functions	
ans	(b) Both A and Rare true and R is not the correct explanation for A	1
	Explanation : The python built in functions are defined as the functions whose functionality is	
	predefined. The python interpreter has several functions that are always present for use.	
	Example: print() and input() are built in functions	
18	Assertion(A):CSV file stands for Comma Separated Values.	1
	Reason(R):CSV files are common file format for transferring and storing data	
ans	(b) Both A and R are true and R is not the correct explanation for A	1
	Explanation: The ability to read, manipulate and write data to and from CSV files using python	
	is a key skill to master for any data Scientist and Business analysis.	
	SECTIONB	
19	Ravi has written a function to print Fibonacci series for first 10 element. His code is having errors. Rewrite the correct code and underline the corrections made. some initial elements of Fibonacci series are:	2
	def fibonacci() first=0 second=1 print(("first no. is ", first) print("second no. is , second) for a in range (1,9): third=first+second	
	print(third) first,second=second,third fibonacci()	2
ans	def fibonacci(): # missing colon first=0 second=1 print("first no. is ", first) # extra parenthesis print("second no. is", second) # closing quotes is missing for a in range (1,9): third=first+second	2

	print(third)					
	first,second=second,third					
	<u>fibonacci()</u> # fuction call indentation is wrong					
20	Give difference between Video Conferencing and Ch	•	2			
	OR					
one	Write two points of difference between Message Swi Video conference	Ş	12			
ans	Audio as well Visuals are shared	Chatting Only text communicated	2			
	High Bandwidth required	Works with low bandwidth also				
	Protocols: SIP, H.323	Protocol: IRC(Internet relay chat)				
	110000015. 511 , 11.525	Trotocoi. Inc. Internet relay enacy				
		Or				
	Message Switching	Packet Switching				
	In message switching data is stored in	In this form of switching data is				
	buffer form.	transferring into packet form.				
	The message is, sent to the nearest	A fixed size of packet that can be transmitted across the network is				
	directly connected switching node. This process continues until data is	specified.				
	delivered to the destination computer.	specificu.				
	Stored in disk	All the packets are stored in the main				
		memory instead of disk.				
	Ex: sms	Ex:E mail				
21	(a) Given is a Python string declaration:		1			
	str="malavalam"		1			
	str="malayalam" Write the output of :print(str[: :-1])					
	str="malayalam" Write the output of :print(str[: :-1])					
	·					
	·					
	Write the output of :print(str[: :-1]) (b) Write the output of the code given below:	1}	1			
	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24					
	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept':					
	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2)					
	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1)		1			
ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam"	'Sales'}	1			
	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24,	'Sales'} 'dept': 'Sales'}	1 1 1			
	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational	'Sales'} 'dept': 'Sales'}	1 1 1			
22	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer.	'Sales'} 'dept': 'Sales'} Database Management System. Give example of the state o	1 1 1 1 ample to 2			
22	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes	'Sales'} 'dept': 'Sales'} Database Management System. Give example of the state o	1 1 1 1 ample to 2			
22	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation.	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within	1 1 ample to 2			
22	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other states.	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example.	1 1 2 ample to 2 the 2			
22	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other in the code given below: (1 mark for explanation and 1 mark for example in the code given below: [2	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example.	1 1 2 ample to 2 the 2			
22 ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other (1 mark for explanation and 1 mark for examp marked)	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example.	1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1			
22 ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other (1 mark for explanation and 1 mark for examp marked) (a) Write the full forms of the following:	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example.	1 1 2 ample to 2 the 2			
22 ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other (1 mark for explanation and 1 mark for examp marked) (a) Write the full forms of the following: (i)GSM (ii)XML	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example.	1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1			
ans 22 ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other (1 mark for explanation and 1 mark for examp marked) (a) Write the full forms of the following: (i)GSM (ii)XML (b) What is the use of Modem?	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example. ble) (Any relevant correct example may	1 1 2 ample to 2 the 2 2			
22 ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other (1 mark for explanation and 1 mark for examp marked) (a) Write the full forms of the following: (i)GSM (ii)XML (b) What is the use of Modem? (a) (i) GSM: Global system for mobile computing the comp	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example. ble) (Any relevant correct example may	1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1 1 2 1			
22 ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other (1 mark for explanation and 1 mark for examp marked) (a) Write the full forms of the following: (i)GSM (ii)XML (b) What is the use of Modem?	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example. ble) (Any relevant correct example may	1 1 2 ample to 2 the 2 2			
22 ans	Write the output of :print(str[: :-1]) (b) Write the output of the code given below: Employee1={'name':'John','salary':10000,'age':24 Employee2={'name':'Divya','salary':54000,'dept': Employee1.update(Employee2) print(Employee1) (a)"malayalam" (b){'name': 'Divya', 'salary': 54000, 'age': 24, Explain the use of 'Primary key' in a Relational support your answer. A Primary Key is a set of one or more attributes relation. Ex: Adminno. From student table or any other (1 mark for explanation and 1 mark for examp marked) (a) Write the full forms of the following: (i)GSM (ii)XML (b) What is the use of Modem? (a) (i) GSM: Global system for mobile computing the comp	'dept': 'Sales'} Database Management System. Give exact that can uniquely identify tuples within suitable example. ole) (Any relevant correct example may ng	1 1 2 2 the 2 2 1			

```
24
       (a) Predict the output of the Python code given below:
                                                                                                          2
     def Display(str):
         m=""
         for i in range(0,len(str)):
           if(str[i].isupper()):
              m=m+str[i].lower()
           elif str[i].islower():
             m=m+str[i].upper()
           else:
             if i\% 2 == 0:
               m=m+str[i-1]
             else:
               m=m+"#"
         print(m)
     Display('Fun@World2.0')
                                                     OR
       (b)Predict the output of the Python code given below:
       What is the output of the following Python code
      x="hello world"
      print(x[:2],x[:-2],x[-2:])
      print(x[6],x[2:4])
      print(x[2:-3],x[-4:-2])
        (a)fUN#wORLD#2#
                                                                                                          2
ans
                                                      OR
      (b)he hello wor ld
          w 11
         llo wo or
25
      Differentiate between WHERE and HAVING clause in MySql.
                                                                                                          2
                                                  OR
       What do you understand by the terms Degree, cardinality of a Relation? Explain with an example.
        WHERE Clause is used to filter the records from the table or used while joining more than one
ans
        table. Only those records will be extracted who are satisfying the specified condition in WHERE
        clause. It can be used with SELECT, UPDATE, DELETE statements.
       HAVING Clause is used to filter the records from the groups based on the given condition in the
       HAVING Clause. Those groups who will satisfy the given condition will appear in the final
       result. It can be used only with GROUP BY clause.
                                                      OR
        Degree: No. of columns(attribute) of a table
        Cardinality: No.of rows(Tuples) of a table
       Ex: EMP Table
                 EmployeeId
                                           Name
                                                              Sales
                                                                                 JobId
                         E1
                                        Sumit Sinha
                                                             110000
                                                                                  102
                         E2
                                        Vijay Singh
                                                             130000
                                                                                  101
                                          Tomar
```

		E3	Ajay Rajpal	140000	103			
		ee- 4 nality- 3 other suitable example)						
26	(a) Differentiate between Natural join and Equi join. (b) Table: Employee							
		EmployeeId	Name	Sales	JobId			
		Ell El	SumitSinha	110000				
		E2	Vijay Singh Tomar	130000				
		E3	Ajay Rajpal	140000	103			
		E4	Mohit Kumar	125000				
		E5	Sailja Singh	145000	103			
			Table	e: Job				
		JobId	Job	Γitle	Salary			
		101	Pres		200000			
		102		resident	125000			
		103		or Assistant	80000			
		104		g Manager	70000			
		105		untant	65000			
	Give th	ne output of following S		Ianager	80000			
	whe	ect Name, JobTitle, Salere Employee.JobId=Joect JobId, count(*) from	b.JobId and JobId ir	n (101,102)				
ns	_	ui Join displays the con		, where as the	e Natural join displays the			
		Name	JobTitle		Sales	\neg		
	Vijay Singh Tomar SumitSinha		President		130000			
			Vice Preside	nt	110000			
		Mohit Kumar	Vice Preside	nt	125000			
	(ii)							
		Jobld		Count(*)				
	101			1				
		102 103		2				

27	Write a me	thod/fun	ction COUNT_B	LANK_SPAC	ES() in Python to 1	read lines from a text file	3
	STORY.T	XT, and c	lisplay the count	of blank space	s in the text file.		
				OR			
	Write a method/function DISPLAYWORDS() in python to read lines from a text file POEM.TXT, a						
			which are less than		to read fines from	a text file i OEM.17x1, und	
	• •			4 Characters.			2
ans		I_BLAN ("STORY	K_SPACES():				3
	str=f.re	`	1.txt ,1)				
	x=str.s	,					
	count=	- "					
	for i in						
	cou	ınt+=1					
	print("	Γotal no.	blank spaces are	",count-1)			
	f.close(\mathcal{C}					
	Any other	r logic 3	marks				
				OR			
	def DISPL	AYWORI	OS():				
	file=oper	n('POEM.	.txt','r')				
	line = fil	`	, ,				
		ine.split()					
	for w in	• "					
		(w)<4:					
	file.clos	rint(w) e()					
		ach for rea	ading line and/or sop amd checking c				
28	(a) Consi	derthefo	llowingtablesGA	AMES.Giveou	tputsforSQLquei	ries(i)to(iv).	3
	Table:G	ī		Tax .			
		GCode	GameName	Number	PrizeMoney	ScheduleDate 22. Lang 2004	
		101	CaromBoard Badminton	2 2	5000 12000	23-Jan-2004 12-Dec-2003	
		102	TableTennis	4	8000	14-Feb-2004	
		105	Chess	2	9000	01-Jan-2004	
		108	LawnTennis	4	25000	19-Mar-2004	
	` '		OUNT(DISTING	,	OMGAMES; uleDate)FROMGA	AMES:	
	` '		UM(PrizeMoney)	, ,	,	1171L/J,	
	, ,		FROMGAMESW				
(b) Whatare the eligible candidate keys from the Table Games?							

ans	i) 2 ii) 19-Mar-2004 12-Dec-2003 iii) 59000 iv)						2+	
	GCode GameName Number PrizeMoney ScheduleDate							
	108 LawnTennis 4 25000 19-Mar-2004							
	(b) GCode GameName							
29	Write defi	nition of a	n method/function	DoubletheOdo	l() to add and dis	splay twice of odd values	3	
	from the li	ist of Num	ns.					
	For examp	ole :						
	If the Nun	ns contain	s [25,24,35,20,32	,41]				
	The functi	on should	display					
	Twice of 0	Odd Sum:	202					
ans	def DoubletheOdd(): Nums=[25,24,35,20,32,41] s=0 for i in Nums: if i%2!=0: s+=i*2 print(s)						3	
30	(3 mark	s for corre		: EMBCODE	1 CALADY 1	1 : 65 F 1		
30	Pramod has created a dictionary containing EMPCODE and SALARY as key value pairs of 5 Employees of Parthivi Constructions. Write a program, with separate user defined functions to perform the following operations: • Push the keys (Employee code) of the dictionary into a stack, where the corresponding value (Salary) is less than 25000. • Pop and display the content of the stack. For example: If the sample content of the dictionary is as follows: EMP={"EOP1":16000, "EOP2":28000, "EOP3":19000, "EOP4":15000, EOP5":30000} The output from the program should be: EOP4 EOP3 EOP1 OR Write a function POP(Arr), where Arr is a stack implemented by a list of numbers The function returns the value deleted from the stack.					ne		
ans	def PUSI S.app def POP(S if S!=	value deleted from the stack. EMP={"EOP1":16000, "EOP2":28000, "EOP3":19000, "EOP4":15000, "EOP5":30000} def PUSH(S,N): S.append(N) def POP(S): if S!=[]: return S.pop()						

```
return None
ST=[]
for k in EMP:
    if EMP[k]<25000:
       PUSH(ST,k)
while True:
    if ST!=[]:
       print(POP(ST),end="")
   else:
       break
                       OR
def POP(Arr):
    if len(Arr)==0:
         print("Underflow")
    else:
         L=len(Arr)
         val=Arr[L-1]
         print(val)
         return (Arr.pop(L-1))
(Any other correct code can also be given.)
```

SECTIOND

Quick Learn University is setting up its academic blocks at Prayag Nagar and planning to set up a network. The university has 3 academic blocks and one human resource Centre as shown in the diagram given below:

Business
Block
Technology
Block
HR Centre

Centre-to-Centre distance between various blocks is as follows:

Law block to business block	40 m
Law block to technology block	80 m
Law block to HR block	105 m
Business block to technology block	30 m
Business block to HR block	35 m
Technology block to HR block	15 m

Number of computers in each of the buildings is as follows:

Law block	15
Technology block	40
HR Centre	115
Business block	25

	(a) Suggest a cable layout of connection between the blocks.	1
	(b) Suggest the most suitable place to house the server of the organization with suitable reason.	1
	(c) Which device should be placed/installed in each of these blocks to efficiently connect all the	1
	computers within these blocks?	
	(d) The university is planning to link its sales counters situated in various parts of the CITY. Which	1
	type of network out of LAN, MAN or WAN will be formed?	1
	(e) Which network topology may be preferred between these blocks?	
ans	(a) Suggest a cable layout of connection between the blocks.	1
	Business Technology Block Law Block HR Centre	
	(b) Ans: HR centre because it consists of the maximum number of computers to house the	1
	server.	
	(c) Ans: Switch/ Hub should be placed in each of these blocks.	1 1
	(d) Ans: MAN	1
	(e) Ans: Bus	
32	(a) Find and write the output of the following python code: def Change(P,Q=10): P=P*Q Q=Q+P print(P,"#",Q) return (Q) A=5 B=10 A=Change(A) B=Change(A,B) print(A,"#",B)	2+ 3
	(b) Avni is trying to connect Python with MySQLfor her project. Help her to write the python	
	statement on the following:-	
	(i) Name the library, which should be imported to connect MySQL with Python.	
	(ii) Name the function, used to run SQL query in Python.	
	(iii) Write Python statement of connect function having the arguments values as:	
	Host name :192.168.11.111	
	User : root	
	Password: Admin	

```
Database: MYPROJECT
                                                OR
      (a) Find and write the output of the following python code:
      def encrypt(s):
       k=len(s)
       m=""
       for i in range(0,k):
         if(s[i].isupper()):
           m=m+str(i)
         elif s[i].islower():
           m=m+s[i].upper()
          else:
           m=m+'*'
        print(m)
      encrypt('Kvs@Hyderabad')
      (b)
      NotethefollowingtoestablishconnectivitybetweenPythonand MYSQL:
                 • Usernameismyusername
                 • Passwordismypassword
                 • ThetableexistsinaMYSQLdatabasenamedmydatabase
       Writethefollowingmissingstatementstocompletethecode:
       Statement 1 – to create the connection object
      Statement2-tocreate the cursor object
       Statement3-To execute the sql query
      import mysql.connector
      mydb = _____ # Statement 1
mycursor = _____ # Statement 2
      sql = "INSERT INTO customers (name, address) VALUES (%s, %s)"
      val = ("John", "Highway 21")
      mycursor._____# Statement 3
      mydb.commit()
      print(mycursor.rowcount, "record inserted.")
ans
      (a)
      50 # 60
      600 # 610
      60 # 610
      (b)
```

	(i) import mysql.connector	
	(ii) execute (<sql query="">) (iii)mysql.connector.connect(host="192.168.11.111",user="root",passwd="Admin",</sql>	
	database="MYPROJECT")	
	OR	
	(a)0VS*4YDERABAD	
	(b)	
	import mysql.connector mydb = mysql.connector.connect(host="localhost", user="myusername",	
	password="mypassword", database="mydatabase") # Statement 1	
	mycursor = mydb.cursor() # Statement 2	
	sql = "INSERT INTO customers (name, address) VALUES (%s, %s)" val = ("John", "Highway 21")	
	mycursor.execute(sql, val) # Statement 3	
	mydb.commit()	
33	print(mycursor.rowcount, "record inserted.") Manoj Kumar of class 12 is writing a program to create a CSV file "user.csv" which will contain	5
<i>33</i>		
	user name and password for some entries. He has written the following code. As a programmer,	
	help him to successfully execute the given task.	
	import #Line1	
	def addCsvFile(UserName, Password):	
	fh=open('user.csv','') #Line2	
	Newfilewriter=csv.writer(fh)	
	Newfilewriter.writerow([UserName,Password])	
	fh.close()	
	# csv file reading code	
	def readCsvFile(): #to read data from CSV file	
	with open('user.csv','r') as newFile:	
	newFileReader=csv(newFile) #Line3	
	for row in newFileReader:	
	print(row)	
	newFile #Line4	
	addCsvFile('Arjun','123@456')	
	addCsvFile('Arunima','aru@nima')	
	addCsvFile('Frieda','myname@FRD')	
	readCsvFile()	
	OUTPUT #Line 5	

- (b) In which mode file should be opened to work with user.csv file in#Line2
- (c) Fill in the blank in #Line3 to read data from csv file
- (d) Fill in the blank in #Line4 to close the file
- (e) Write the output he will obtain while executing Line5

OR

Radha Shah is a programmer, who has recently been given a task to write a python code to perform the following CSV file operations with the help of two user defined functions/modules:

- (a) . CSVOpen() : to create a CSV file called **books.csv** in append mode containing information of books Title, Author and Price.
- (b). CSVRead(): to display the records from the CSV file called **books.csv** where the field title starts with 'R'.

She has succeeded in writing partial code and has missed out certain statements, so she has left certain queries in comment lines.

import csv

def CSVOpen():

```
with open('books.csv','______',newline=") as csvf: #Statement-1

cw=_____#Statement-2

_____#Statement-3

cw.writerow(['Rapunzel','Jack',300])

cw.writerow(['Barbie','Doll',900])

cw.writerow(['Johnny','Jane',280])

def CSVRead():

try: with open('books.csv','r') as csvf:

cr=_____#Statement-4

for r in cr:

if _____: #Statement-5
```

except:

print('File Not Found')

print(r)

CSVOpen()

CSVRead()

You as an expert of Python have to provide the missing statements and other related queries based on the following code of Radha.

- (a) Write the appropriate mode in which the file is to be opened in append mode (Statement 1)
- (b) Which statement will be used to create a csv writer object in Statement 2.
- (c) Write the correct option for Statement 3 to write the names of the column headings in the CSV file, books.csv
- (d) Write statement to be used to read a csv file in Statement 4.
- (e) Fill in the appropriate statement to check the field Title starting with 'R' for Statement 5 in the above program.

ans a) csv
b) w
c) reader()
d) close()
e) ['Frieda', 'myname@FRD']
OR
(a) a
(b) csv.writer(csvf)
(c) cw.writerow(['Title','Author','Price'])
(d) csv.reader(csvf)
(e) r[0][0]=='R'

A departmental store MyStore is considering to maintain their inventory using SQL to store the data. As a database Administrator, Abhay has decided that:

Name of the database – mystore

Name of the table –STORE

The attributes of STORE are as follows

ItemNo –numeric

ItemName – character of size 20

Scode – numeric

Quantity - numeric

Table: STORE

ItemNo	ItemName	Scode	Quantity
2005	Sharpner Classic	23	60
2003	Ball Pen 0.25	22	50
2002	Gel Pen Premium	21`	150
2006	Gel Pen Classic	21	250
2001	Eraser Small	22	110
2004	Eraser Big	22	220
2009	Ball Pen 0.5	21	180

- (a) Identify the attribute best suitable to be declared as primary key
- (b) Write the query to add the row with following details

(2010,"Notebook",23,155)

(c)

(i) Abhay wants to remove the table STORE from the database MyStore, Help Abhay in writing the command for removing the table STORE from the database MyStore.

	(ii) Now Abhay wants to display the structure of the table STORE i.e. name of the attributes and their respective data types that he has used in the table. Write the query to display the same.	
	OR	
	(i) Abhay wants to ADD a new column price with data type as decimal. Write the query to add the column	
	(ii) Now Abhay wants to remove a column price from the table STORE. Write the query.	
ans	(a) ItemNo	
	(b) INSERT INTO STORE VALUES (2010,"Notebook",23,155);	
	(c) (i) DROP TABLE STORE;	
	(ii) DESCRIBE STORE;	
	OR (C) Alter the STORE	
	(i) Alter table STORE add price decimal(2,1);	
	(ii) Alter table Store	
	drop price;	
35	Manoj is learning to work with Binary files in Python using a process known as Pickling/depickling. His teacher has given him the following incomplete code, which is creating a Binary file namely Mydata.dat and then opens, reads and displays the content of this created file.	
	import#Statement-1	
	sqlist=list()	
	for k in range(5): sqlist.append(k*k)	
	fout=open("mydata.dat",) #Statement-2	
	(sqlist,fout) #Statement-3	
	fout.close()	
	fin=open("Mydata.dat", "rb")	
	mylist=(fin) #Statement-4	
	fin.close()	
	print(mylist)	1
	i) Which module should be imported in Statement-1.	1
	ii) Which file mode to be passed to write data in file in Statement-2	1
	iii) What should be written in Statement-3 to write data onto the file.	1
ans	iv) Which function to be used in Statement-4 to read the data from the file.i) pickle	1
MIII	ii) wb	1
	iii) pickle.dump()	1
	iv) pickle.load()	1