	KENDRIYA VIDYALAYA SANGATHAN LUCKNOW REGION **Class: XII Session: 2022-23** **Computer Science (083)** **PRE-BOARD -1 (Theory)** **MARKING SCHEME**	
1.	T1=(10,)	1
2.	c) _Percentage	1
3.	a) (2+(3==4)+5)==7 b) 0 ==(1 == 2)	½+½
4.	a) 2**3**2= 512 b) (2**3)**2=64	½+½
5.	888	1
6.	a) f1.read(n)	1
7.	a) drop	1
8.	c)’ yyyy-mm-dd’	1
9.	a)Statement3	1
10.	a)Primary Key	1
11.	d)moves the current file position to a given specified position.	1
12.	The break statement enables a program to skip over a part of the code. The break statement can terminate the loop immediately and the contro passes over to the statement following the statement containing the break. In nested loops, a break statement terminates the very loop it lies within.	1
13.	“ SIMPLE MAIL TRANSFER PROTOCOL”	1
14.	[8,11,20,8,11,20,8,11,20]	1
15.	DESC <TABLENAME>	1

<table>
<tr><td>16.</td><td>MySQL, Oracle</td><td>1</td></tr>
<tr><td>17.</td><td>a</td><td>1</td></tr>
<tr><td>18.</td><td>a</td><td>1</td></tr>
<tr><td>19.</td><td><u>n=30</u>

for i in range(0,n)<u>:</u>

<u>if</u> i%4==0:

print(i*4)

<u>else:</u>

print(i+4)</td><td>½ + ½ + ½ + ½</td></tr>
<tr><td>20.</td><td><table>
<tr><td>Hub</td><td>Switch</td></tr>
<tr><td>Ports of hub do not have individual addresses assigned to them.</td><td>Switch is aware of the addresses assigned to each of its ports.</td></tr>
<tr><td>Hub sends all data it receives to all the connected ports.</td><td>Switch sends the incoming data it receives only to the correct port.</td></tr>
<tr><td>Performance of Hub is relatively lower than Switch.</td><td>Performance of Switch is relatively greater than Hub.</td></tr>
</table>
Or
<table>
<tr><td>Star Topology</td><td>Bus Topology</td></tr>
<tr><td>Star topology is a topology in which all devices are connected to a central hub.</td><td>Bus topology is a topology where each device is connected to a single cable which is known as the backbone.</td></tr>
<tr><td>In star topology, if the central hub fails then the whole network fails.</td><td>In a Bus topology, the failure of the network cable will cause the whole network to fail.</td></tr>
</table></td><td>1 mark for each valid difference</td></tr>
<tr><td>21.</td><td>a) '##3202 noitanimaxE TEEN##'

b) dict_items([('sname', 'Aman'), ('age', 27), ('address', 'Delhi')])</td><td>1+1</td></tr>
</table>

<table>
<tr><td>22.</td><td>Row in a Table is a tuple and column is an attribute.</td><td>1 mark for each correct definition and 1 mark for an example of each.</td></tr>
<tr><td>23.</td><td>Top-level domain (TLD) refers to the last segment of a domain name, or the part that follows immediately after the "dot" symbol.

.com — Commercial businesses.

.org — Organizations (generally charitable).</td><td>1 mark for stating correct application area of each TDL.</td></tr>
<tr><td>24.</td><td>Maximum values for FROM=3, TO=4

OUTPUT:ii) 30#40#50#

Or

250 300</td><td>½+½+1

Or

1+1</td></tr>
<tr><td>25.</td><td><table><tr><td>CHAR</td><td>VARCHAR</td></tr><tr><td>CHAR datatype is used to store character strings of fixed length</td><td>VARCHAR datatype is used to store character strings of variable length</td></tr><tr><td>In CHAR If the length of the string is less than set or fixed-length then it is padded with extra memory space.</td><td>In VARCHAR If the length of the string is less than the set or fixed-length then it will store as it is without padded with extra memory spaces.</td></tr></table>OR

a) Degree=5, cardinality=3

b) roll must be primary key because all values are unique and not null</td><td>1+1

Or

½+½+½+½</td></tr>
<tr><td>26.</td><td>Create database MYEARTH;

Use MYEARTH;

Create Table CITY (CITYCODE CHAR(5) PRIMARY KEY,

CITYNAME CHAR(30),</td><td>½+½+2</td></tr>
</table>

	SIZE INT(3), AVGTEMP INT, POLLUTIONRATE INT, POPULATION INT);	

27.	def RECORD():
	f1=open('Myfile.txt','r')
	str1=f1.read()
	print(len(str1))
	RECORD()
	OR
	def CLRECORD():
	f1=open('Myfile.txt','r')
	l1=f1.readlines()
	print(len(l1))
	CLRECORD()
		1 mark for function definition+1 mark for function body
		+1 mark for function calling

28.	a) SHOW TABLES; b) ALTER TABLE <TNAME> ADD COLUMN <CNAME> DATATYPE; c) ALTER TABLE <TNAME> DROP COLUMN <CNAME>	1+1+1

29.	def convert(l1):
	for i in range(0,len(l1)):
	if l1[i]%2==0:
	l1[i]=l1[i]//2
	else:
	l1[i]=l1[i]*2
		½ mark for function definition+1 mark for correct for loop +1 mark for correct logic
		+½mark for function calling

	print(l1) l1=[3,4,5,16,9] convert(l1)	

30.	def PUSH_IN(L):
	
	L1=[]
	
	for i in L:
	
	if i%3==0:
	
	L1.append(i)
	
	If len(L1)==0:
	
	print(" EmptyStack")
	
	else:
	
	print(L1)
	
	L=[4,6,9,12,5]
	
	PUSH_IN(L)
	
	Or
	
	def POP(Arr):
	
	if(len(Arr)=0):
	
	print(" Underflow, No element in stack")
	
	return
	
	else:
	
	return Arr.pop()
	
	A=[] #Implemented stack
	
	POP(A)
		½ mark for function definition+1 mark for correct for loop +1 mark for correct logic
		
		+½mark for function calling
		
		Or
		
		½mark for function definition+1 mark for mark for checking underflow condition +1 mark for returning delete value from stack
		
		+½mark for function calling

31.	(i) star (ii)Broadband (iii)Switch/Hub (iv)Radio Wave (v) Block B1	1+1+1+1+1

32.	a)5#8#5#4# b) Selection : This operation chooses the subset of tuples from the relation that satisfies the given condition mentioned in the syntax of selection. Projection : This operation selects certain required attributes, while discarding other attributes. OR a) 300@200 300@100 120@100 300@120 b) An attribute is a descriptive property which is owned by each entity of an entity set while a domain is the set of values allowed for an attribute. Thus, this is the main difference between Attribute and Domain. Attributes help to describe an entity while domains help to define the range of values that suit a specific attribute. Hence, this is another difference between Attribute and Domain. Example Name and age are two examples of attributes. Moreover, the name has to be alphabetic, and age has to be positive integer to explain the domain.	a) 2 marks for correct output. b)1 mark for correct definition of selection + 1 mark for correct definition of projection+1 mark for appropriate examples. a) 2 marks for correct output. b)1 mark for correct definition of selection + 1 mark for correct definition of projection+1 mark for appropriate examples.
33.	“ Comma Separated Values” , Text editor and spreadsheet program. Program:	1+1

	import csv
	def ADDR():
	fout=open("record.csv","a",newline="\n")
	wr=csv.writer(fout)
	rollno=int(input("Enter rollno :: "))
	name=input("Enter name :: ")
	mobile=int(input("Enter mobile number :: "))
	lst=[rollno,name,mobile]
	wr.writerow(lst)
	fout.close()
	def COUNTR():
	fin=open("record.csv","r",newline="\n")
	data=csv.reader(fin)
	d=list(data)
	print(len(d))
	fin.close()
	ADDR()
	COUNTR()
	Or
	Difference between text file and csv file: (Any one difference may be given) Text file:
	Extension is .txt
	human readable in text editor
	Stores data in the form of characters
		1½ for correct definition of ADDR+1½ for correct definition of COUNTR
		1

	CSV file
	
	Extension is .csv
	
	Human readable in text editor and spreadsheet both
	
	Stores data like a text file.
	
	Program:
	
	import csv
	
	def add():
	
	fout=open("abc.csv","a",newline='\n')
	
	wr=csv.writer(fout)
	
	fid=int(input("Enter Furniture Id :: "))
	
	fname=input("Enter Furniture name :: ")
	
	fprice=int(input("Enter price :: "))
	
	FD=[fid,fname,fprice]
	
	wr.writerow(FD)
	
	fout.close()
	
	def search():
	
	fin=open("abc.csv","r",newline='\n')
	
	data=csv.reader(fin)
	
	found=False
	
	print("The Details are")
	
	for i in data:
	
	if int(i[2])>5000:
	
	found=True
	
	print(i[0],i[1],i[2])
		2marks for correct definition of add() +2 marks for correct definition of search()

	if found==False: print("Record not found")	

34.	a) Alter table Teacher add primary key T_ID;
	
	b) Alter table Teacher add column P_ID int(1);
	
	c) Alter table Teacher add constraint (c1_01) foreign key (P_ID) references Teacher(P_ID);
	
	or
	
	Alter table Posting modify column Place varchar(10);
		1+1+2

35.	Statement1 :import pickle Statement2:fout=open(‘ temp.dat’ ,‘ wb’) Statement 3: pickle.load(fin) Statement 4: pickle.dump(rec,fout)	1+1+1+1

ALL ANSWERS IN MARKING SCHEME ARE SUGGESTIVE ANY OTHER CORRECT ANSWER MUST BE AWARDED APPROPRIATE MARKS.