

KENDRIYA VIDYALAYA SANGATHAN, JAIPUR REGION

3rd Pre-Board Examination 2020-21

Computer Science

Class 12th

MARKING SCHEME

Part-A Section -1		
1	(i) >= , (ii) //	1
2	[6,82,5]	1
3	Comma Separated Value	1
4	c)**	1
5	b) T[2]= -29 (as tuple is immutable)	1
6	Day={2:'monday',3:'tuesday',4:'wednesday'}	1
7	26	1
8	abs()/ fabs()	1
9	SMTP	1
10	file= open("WRITEUP.TXT","w") OR file= open("WRITEUP.TXT","w+")	1
11	ORDER BY	1
12	To check if the column has null value / no value	1
13	SUM / AVG / COUNT / MAX / MIN	1
14	b) ALTER	1
15	Microwave / Radio wave	1
16	d. List	1
17	RO Jam	1
18	SHOW TABLES	1
19	Radio Frequencies Identification	1

20	(c) or (a)	1
21	Mbps	1
SECTION II		
22	<p>(a) SCode</p> <p>(b) Degree = 4 Cardinality = 6</p> <p>(c) INSERT INTO Sports (SCode, SportName, Coachname) VALUES('S007', 'Kabbadi', 15)</p> <p>(d) iii</p> <p>(e) Drop Table Sports;</p>	4
23	<p>(a) Line 1 : csv</p> <p>(b) Line 2 : a</p> <p>(c) Line 3 : reader</p> <p>(d) Line 4 : close()</p> <p>(e) Line 5 :</p> <p>'Note Book', 45, 100</p> <p>'Text Book', 60, 150</p> <p>'Ball Pen', 10, 100</p> <p>'Pencil', 2, 200</p>	4
24	<p>a) 13</p> <p>b) False</p>	2
25	<p>Hub forwards the message to every node connected and create a huge traffic in the network hence reduces efficiency whereas a Switch is also called intelligent hub since it redirects the received information/ packet to the intended node(s)</p> <p>In a large network a switch is preferred to reduce the unwanted traffic in the network which may also reduce the bandwidth and cause network congestion.</p> <p>OR</p> <p>WAN is also called as Wide Area Network. It is a network of computing devices crossing the limits of city, country or continent. It covers area of over hundreds or thousands of kilometres radius. For example: Network of ATMs, BANKS, National or International organization offices spread over a country or continent.</p>	2

	<p>MAN is also called as Metropolitan Area Network. It is a network of communicating devices within a city. It covers an area of few kilometres to few hundreds kilometres.</p> <p>For example: Network of schools, bank, and government offices within a city.</p> <p>Best example of WAN is the Internet.</p>					
26	<p>a. SMTP : Simple mail Transfer Protocol</p> <p>b. XML: Extensible Markup Language</p> <p>c. LAN: Local Area Network</p> <p>d. HTTPS: Hyper Text Transfer Protocol Secure</p>	2				
27	<p>A global variable is a variable that is accessible globally. A local variable is one that is only accessible to the current scope, such as temporary variables used in a single function definition. Any relevant example.</p> <p style="text-align: center;">OR</p> <p>A return statement is used to end the execution of the function call and “returns” the result (value of the expression following the return keyword) to the caller. The statements after the return statements are not executed. If the return statement is without any expression, then the special value None is returned. Any relevant example</p>	2				
28	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left; padding: 5px;"><u>INCORRECT</u></th> <th style="text-align: left; padding: 5px;"><u>CORRECT CODE</u></th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;"> <pre>250 = Number WHILE Number<=1000: if Number<=750: print Number Number=Number+100 else print Number*2 Number=Number+50</pre> </td> <td style="padding: 5px;"> <pre>Number=250 while Number<=1000: if Number<=750: print(Number) Number=Number+100 else: print(Number*2) Number=Number+50</pre> </td> </tr> </tbody> </table>	<u>INCORRECT</u>	<u>CORRECT CODE</u>	<pre>250 = Number WHILE Number<=1000: if Number<=750: print Number Number=Number+100 else print Number*2 Number=Number+50</pre>	<pre>Number=250 while Number<=1000: if Number<=750: print(Number) Number=Number+100 else: print(Number*2) Number=Number+50</pre>	2
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29	<p>a. Minimum Number = 1</p> <p>Maximum number = 3</p> <p>b. Option (iv)</p>					
30	<p>A table may have more than one such attribute group of attributes that identifies a tuple uniquely, all such attribute(s) are known as Candidate Keys.</p>	2				

31	<p>fetchall() fetches all the rows of a query result. An empty list is returned if there is no record to fetch the cursor.</p> <p>fetchone() method returns one row or a single record at a time. It will return None if no more rows / records are available.</p>	2
32	<p>The difference between CHAR and VARCHAR is that of fixed length and variable length.</p> <p>The CHAR datatype specifies a fixed length character string. When a column is given datatype as CHAR(n), then MySQL ensures that all values stored in that column have this length i.e., n bytes. If a value is shorter than this length n then blanks are added, but the size of value remains n bytes.</p> <p>The VARCHAR(n) on the other hand, specifies a variable length string. When a column is given datatype as VARCHAR(n), then the maximum size a value in this column can have is n bytes. Each value that is stored in this column stores exactly as we specify it i.e., no blanks are added if the length is shorter than maximum length n. However if we exceed the maximum length n, then an error message is displayed.</p> <p>Variable length VARCHAR is more memory efficient.</p>	2
33	<p>300 # 100</p> <p>300 # 200</p> <p>240 # 200</p>	2
34	<pre>def string_test(s): d={"UPPER_CASE":0, "LOWER_CASE":0} for c in s: if c.isupper(): d["UPPER_CASE"]+=1 elif c.islower(): d["LOWER_CASE"]+=1 else: pass print ("Original String : ", s) print ("No. of Upper case characters : ", d["UPPER_CASE"]) print ("No. of Lower case Characters : ", d["LOWER_CASE"])</pre>	3
35	<pre>f=open("abc.txt","r") linesList=f.readlines() count=0</pre>	3

```
for line in linesList: wordsList=line.split() print(wordsList)
```

```
count = count+ len(wordsList)
```

```
print("The number of words in this file are :",count)
```

```
f.close()
```

OR

```
count =0 f=open("abc.txt","r") data=f.readlines() print(data)
```

```
for line in data:
```

```
if line[-2] == 'a':
```

```
count=count+1
```

```
print("Number of lines having 'a' as last character is/are : "  
,count)
```

```
f.close()
```

36

OUTPUT:

i.

Department	Count(*)
History	3
Computer Sc	2
Mathematics	3

ii. Max - 31/07/2018 or 2018-07-31 Min- 05/09/2007 or 2007-09-05

iii.

Name	Department	Place
Jatin	Computer Sc	Gurgaon
Suresh	Computer Sc	Gurgaon

3

37

```
def Push(Arr, value):
```

```
s=[]
```

```
for x in range(0,len(Arr)):
```

```
if Arr[x]== "a" or Arr[x] == "g":
```

```
s.append(Arr[x])
```

```
if len(s) == 0:
```

```
print("Stack is empty!!")
```

```
else:
```

```
print(s)
```

OR

3

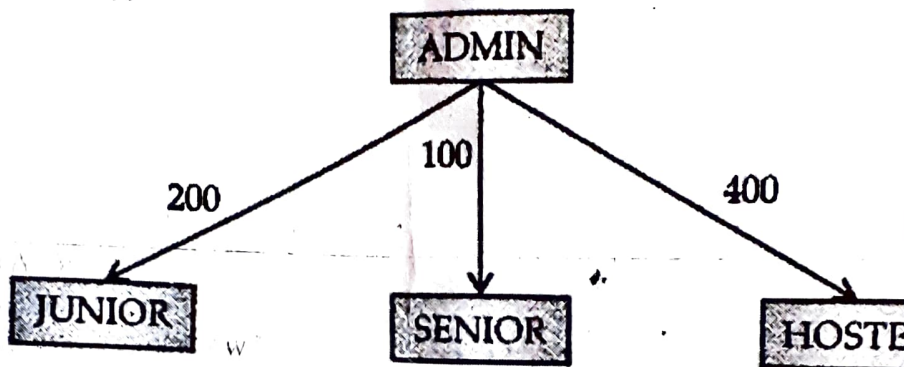
```

def Pop(Arr):
    if len(s) == 0:
        print("Stack underflow")
        return
    else:
        L = len(Arr)
        Val = Arr[-1]
        if Val%6 == 0:
            print(Val+5)
            x = Arr.pop(Val)
        return x

```

38

5



- 1.
2. Server should be in Wing S as it has the maximum number of computers. 1
3. All Wings need hub/switch as it has more than one computer.
4. Since the distance is more, wireless transmission would be better. Radiowaves are reliable and can travel through obstacles.
5. Directs the packets to the destination

39

5

- a. Select R.RecIC, S.Sendername, S.SenderAddress, R.RecName, R.RecAddress from Sender S, Receptient R where S.SenderID=R.SenderID ;
- b. SELECT * from Recipient ORDER By RecName;
- c. SELECT COUNT(*) from Recipient Group By RecCity;
- d.

A.SenderName	B.RecName
R Jain	H Singh
S Jha	P K Swamy
- e.

RecName	RecAddress
S Mahajan	arecha 16; A Vihar
S.Tripathi	accts 13, BID, Mayur Vihar

```

import pickle

def createFile():

    fobj=open("Book.dat"."ab")

    BookNo=int(input("Book Number:"))
    Book_name=input("Name:")

    Author = input("Author ")

    Price = int(input("Price :"))
    rec=[BookNo,Book_Name.Author,Price]
    pickle .dump(recfobj)
    fobj.close()

```

```

def CountRec(Author):
    fobj=open("Book.dat", "rb")
    num =0
    try:
        while True:
            rec=pickle.load(fobj)
            if Author==rec[2]:
                num = num + 1
    except:
        fobj.close()
    return num

```

OR

```

import pickle
def CountRec():
    fobj=open("STUDENT.DAT", "rb")
    num = 0
    try:
        while True:
            rec=pickle.load(fobj)
            if rec[2] > 75:
                print(rec[0],rec[1],rec[2],sep "\t")
                num = num + 1
    except:
        fobj.close()
    return num

```