केन्द्रीय विद्यालय संगठन , बेंगलुरू संभाग

KENDRIYA VIDYALAYA SANGATHAN, BENGALURU REGION

प्रथम प्री बोर्ड परीक्षा – 2023-24

FIRST PRE BOARD EXAMINATION – 2023-24

MARKING SCHEME

Time: 3:00 Hrs | Subject: Computer Science (083) | Maximum Marks: 70

Q	Answer	Distribution of marks	Total Marks
	SECTION - A		
1	True	1 mark for correct answer	1
2	d) None of these	1 mark for correct answer	1
3	c) 15 25 -5	1 mark for correct answer	1
4	b) mEompu	1 mark for correct answer	1
5	ALTER TABLE	1 mark for correct answer	1
6	c) Packet	1 mark for correct answer	1
7	b) L += 3	1 mark for correct answer	1
8	c) Values must be immutable	1 mark for correct answer	1
9	d) Statements 1 and 3	1 mark for correct answer	1
10	a) 30-40-50-	1 mark for correct answer	1
11	a) fp.seek(2, 1)	1 mark for correct answer	1
12	b) 100 # 10	1 mark for correct answer	1
13	a) readline()	1 mark for correct answer	1
14	False	1 mark for correct answer	1
15	a) Rows	1 mark for correct answer	1
16	b) fetchrows()	1 mark for correct answer	1
	Q17 and 18 are ASSERTION AND REASONING based questions. Mark the correct choice as (a) Both A and R are true and R is the correct explanation for A (b) Both A and R are true and R is not the correct explanation for A (c) A is True but R is False (d) A is false but R is True		
17	(c)		1
18	(b)		1
	SECTION – B		
19	<table><tr><th>Circuit Switching</th><th>Packet Switching</th></tr><tr><td>Physical link must be established first.</td><td>Works on store and forward</td></tr><tr><td>A uniform path is followed throughout the session.</td><td>There is no uniform path that is followed end to end through the session.</td></tr><tr><td>It is ideal for voice</td><td>It is used mainly for data</td></tr></table>	1 mark each for any two correct differences	2

	communication Without a connection, it cannot exist	transmission A connection is not necessary	
	Similarities OR Both are used to develop web pages Pre defined tags can be used in both Differences HTML is used to develop static web pages, XML for dynamic web pages New tags can be defined in XML	1 mark for one correct similarity. 1 mark for any one correct difference	2

20	D = **dict()**
	c = 1
	while c < 5:
	k = input("Name: ")
	v = int(input("Age: ")
	D[k] = v
	print(D.**popitem()**)
	for a,b in D.**items()**:
	print(a, b)
		½ mark for each correction made	

21	Write the output of the following code: 1 : 900 2 : 2200 3 : 3600 4600	½ mark for each correct line of output	2
22	(a) 1 (b) ['AJAY', 'A']	1 mark for correct output 1 mark for correct output	1 1
23	(i) PPP - Point to Point Protocol (ii) SMTP – Simple Mail Transfer Protocol (iii) VoIP – Voice over Internet Protocol (iv) TCP/IP – Transmission Control Protocol / Internet Protocol	½ mark for each correct full form	2
24	(i) Primary Key – Attribute or combination of attributes that uniquely identifies the rows. (ii) Foreign Key – Non key attributes that derive its values from the Primary Key/Unique key of another table	1 mark each for correct explanation	2
25	A rule or a check that is applicable one or more columns. NOT NULL, PRIMARY KEY, UNIQUE, DEFAULT (Explanation of any two constraints)	1 mark for the definition. ½ mark each for any two constraints.	2
	SECTION – C		
26	W @ 50 e # 20	1 mark each for correct line of output	3

	10 $ We		

27	i) SELECT COUNT(TDATE) FROM PRODUCTS;
	COUNT(TDATE)
	3
	ii) SELECT MAX(TDATE) FROM PRODUCTS WHERE PRICE BETWEEN 1000 AND 1400;
	MAX(TDATE)
	2015-03-12
	iii) SELECT ITEM, QTY*PRICE AS TOTAL FROM PRODUCTS WHERE QTY > 200 AND ITEM LIKE '%tap%' ;
	ITEM TOTAL
	Stapler Mini 300000
		1 mark for each correct output	3

28	fil = open('ARTICLE.TXT' , 'r')
	data = fil.read()
	words = data.split()
	count = 0
	for w in words:
	if w[-1] in 'aeiouAEIOU':
	count += 1
	fil.close()
	print('Total words which ends with vowel =',count)
	
	Note: Any other correct logic may be marked
		1 mark for correctly opening and closing the file
		½ mark for correctly reading data
		1 mark for correct loop and if statement
		½ mark for displaying the output.
			3

29	(i) SELECT TNAME, CITY, HIREDATE FROM TRAINER WHERE HIREDATE LIKE '2000%'; (ii) UPDATE TRAINER SET CITY = 'MUMBAI' WHERE CITY = 'BOMBAY'; (iii) ALTER TABLE TRAINER ADD PRIMARY KEY (TID)	1 mark for each correct query	3

30	(i)
	N = ['ANKITA', 'NITISH', 'ANWAR', 'DIMPLE', 'HARKIRAT']
	OnlyA = []
	def PUSH(N):
	for name in N:
	if 'A' in name:
	OnlyA.append(name)
	(ii)
	def POPA(OnlyA):
	if OnlyA == []:
	print('EMPTY')
	else:
	while OnlyA != []:
	print(OnlyA.pop(), end=" ")
		1 ½ marks for each function	3

PUSH(N)
POPA(OnlyA)

SECTION – D

31 (i) SELECT PNAME, TRAVELDATE, TNAME FROM PASSENGERS P, TRAINS T WHERE P.TNO = T.TNO;
(ii) SELECT GENDER, AVG(AGE) FROM PASSENGERS GROUP BY GENDER;
(iii) SELECT * FROM TRAINS ORDER BY TNO;
(iv) SELECT DISTINCT START FROM TRAINS;

1 mark for each correct query — 4

32 (i)

```
import csv
def AddBook():
    fil = open('Books.csv','a',newline='')
    bid = int(input('Enter book ID :'))
    title = input('Enter book title :')
    author = input('Enter author name :')
    price = float(input('Enter price :'))
    headings = ['BookID','Title','Author','Price']
    data = [bid, title, author, price]
    cw = csv.writer(fil)
    cw.writerow(data)
    fil.close()
```

½ mark for accepting data correctly
1 mark for opening and closing file
½ mark for writing row

(ii)

```
def TotalCost():
    fil = open('Books.csv','r')
    cr = csv.reader(fil)
    data = list(cr)
    print(data[0])
    total = 0
    for x in data:
        total = total + int(x[3])
    fil.close()
    print('Total cost =',total)
```

½ mark for opening and closing file
½ mark for reader object
½ mark for calculating total
½ mark for printing data

OR

(i)

```
import pickle
def appendData():
    bfil = open('PRODUCTS.DAT','ab')
    pid = int(input('Enter product ID :'))
    pname = input('Enter produt name :')
    price = float(input('Enter product price :'))
    D = {}
```

½ mark for opening and closing the file
½ mark for reading the data into dictionary
1 mark for writing the data

```
D['PID'] = pid
D['PNAME'] = pname
D['PRICE'] = price
pickle.dump(D, bfil)
bfil.close()
```

(ii)

```
def findProduct(product_id):
    bfil = open('PRODUCTS.DAT','rb')
    try:
        while True:
            D = pickle.load(bfil)
            if D['PID']==product_id:
                print(D)
    except:
        bfil.close()
```

½ mark for opening and closing the file
½ mark for reading the record
½ mark for comparing product ID
½ mark for printing the dictionary

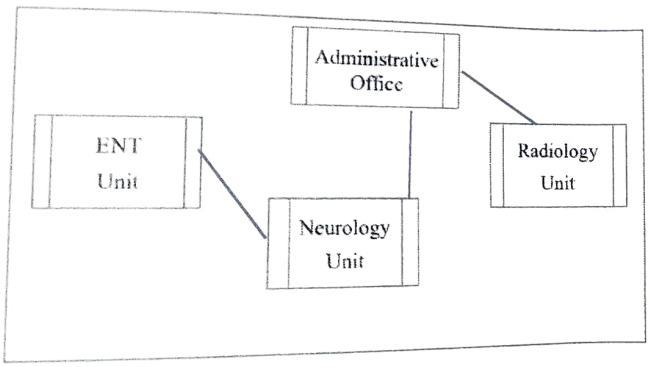
5

33 **SECTION - E**

1 mark for each correct answer

(i) Server must be placed in Administrative Office, as it requires maximum number of computers, placing server here will increase the network efficiency and reduce the network traffic.

(ii)



(iii)

(a) Repeater – Between Administrative office and Radiology unit

(b) Hub/Switch – In all units/office

(iv) Topologies: Star Topology

Network Cable: Ethernet Cable

(v) WAN

34 (i)

'w' mode	'a' mode
Used for writing data	Used for appending data
Places file pointer at the beginning by default	Places file pointer at the end by default.

1 mark each for any two correct differences

2

```
(ii)
import pickle
def searchFashion(cost):
    bfile = open('FASHION.DAT','rb')
    try:
        while True:
            L = pickle.load(bfil)
            if L[3] > 1500:
                print(L)
    except:
        bfil.close()
```

½ mark for opening the file
½ mark for try and except
½ mark for reading the record
½ mark for comparing price
½ mark for printing the list
½ mark for closing the file

35 (i) Total number of columns/Attributes is known as Degree of a table.

1 mark for correct definition

(i)

```
import mysql.connector as ms
con = ms.connect(host='localhost', user='root', passwd='tiger', database='COMPANY')
mcur = con.cursor()
sid = int(input('Enter Staff ID : '))
sn = input('Enter staff member name : ')
dt = input('Enter date of joining YYYY-MM-DD : ')
sal = 'INSERT INTO STUDENT VALUES(%s, %s, %s, %s);'
val = (sid, sn, dt, sal)
mcur.execute(qry, val)
con.commit()
con.close()
```

½ mark for importing correct module
1 mark for correct connect()
½ mark for correctly accepting the input
1 ½ mark for correctly executing the query
½ mark for correctly using commit()