

KENDRIYA VIDYALAYA SANGATHAN LUCKNOW REGION

Class-XII

PreBoard-II Session: 2022-23

Computer Science (083)

MARKING SCHEME

Note : Accept all alternative correct code/answer.

Notes: I accept an alternative correct code/function.

SECTION A														
1.	False	1												
2.	(b) 1st_string	1												
3.	(a) True#False	1												
4.	(a) True	1												
5.	c) ['Indi', 'is', 'Gre', 't Country']	1												
6.	c) ab	1												
7.	ALTER TABLE	1												
8.	c) SHOW TABLES;	1												
9.	c) DAYS[0]="WED"	1												
10.	b) Degree, Cardinality	1												
11.	a) <objectvariable> = pickle.load(<fileobject>)	1												
12.	ORDER BY	1												
13.	b) FTP	1												
14.	c) 27.2	1												
15.	c) SUM(column)	1												
16.	b) connect	1												
17.	b) Both A and R are true and R is not the correct explanation for A	1												
18.	c) A is True but R is False	1												
SECTION B														
19	def main(): r = <u>int</u>(<u>input</u>('Enter radius')) A =pi * <u>math.pow</u>(r,2) <u>print</u>("Area=",A) (½ mark for each correct correction made and underlined.)	2												
20	Circuit Switching Vs Packet Switching <table> <tr> <th>Circuit Switching</th> <th>Packet Switching</th> </tr> <tr> <td>Physical path between source and destination</td> <td>No physical path</td> </tr> <tr> <td>All packets use same path</td> <td>Packets travel independently</td> </tr> <tr> <td>Reserve the entire bandwidth in advance</td> <td>Does not reserve</td> </tr> <tr> <td>Bandwidth Wastage</td> <td>No Bandwidth wastage</td> </tr> <tr> <td>No store and forward transmission</td> <td>Supports store and forward transmission</td> </tr> </table> (1 mark each for any two difference) OR WEBSERVER: A web server is a computer that runs websites. It's a computer program that distributes web pages as they are requisitioned. The basic objective of the web server is to store, process and deliver web pages to the users. This intercommunication is done using Hypertext Transfer Protocol (HTTP). WEB BROWSER: The web browser is the software application used to access resources on the internet. E.g. Chrome, Firefox, Internet Explorer etc. (1 mark each for correct difference)	Circuit Switching	Packet Switching	Physical path between source and destination	No physical path	All packets use same path	Packets travel independently	Reserve the entire bandwidth in advance	Does not reserve	Bandwidth Wastage	No Bandwidth wastage	No store and forward transmission	Supports store and forward transmission	2
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21	(a) @20 otnmx SC@ (1 mark for the correct answer)	1+1												

	(b) dict_items([('name', 'Aman'), ('age', 27), ('address', 'Delhi')]) (1 mark for the correct answer)																										
22.	A foreign key is used to set or represent a relationship between two relations (or tables) in a database. Its value is derived from the primary key attribute of another relation. (1 mark for explanation and 1 mark for example) (Any relevant correct example may be marked)	2																									
23	(a) Simple Mail Transfer Protocol Universal Resource Locator/Uniform resource locator) (½ mark for each correct abbreviation) (b) Hyper text transfer protocol (http) is used to transmit web pages over the internet. It does not provide encryption.(Insecure connection) Hyper text transfer protocol secure (https) is used to transmit web pages over the internet. It provides encryption when data is transmitted between web client and server. It has Secure Sockets Layer certificate which provides encryption. (Secure connection) (1 mark for correct differentiation)	1 1																									
24.	50#5 (1 mark for 50# and 1 mark for 5) OR [7, 5, 3, 1]	2																									
25.	Drop: DDL command used to remove a database object Syntax: Drop table tname; Delete:DML command used to remove rows from a table Syntax: Delete from tablename [where Cond'n] (1 mark for difference ,1 mark for correct example) OR CHAR is used to occupy fixed memory irrespective of the actual values but VARCHAR uses only that much memory which is used actually for the entered values. E.g. CHAR(10) will occupy always 10 bytes in memory no matter how many characters are used in values. But VARCHAR will uses only that much bytes of memory whose values are passed. (1 mark for each correct answer.)	2																									
SECTION C																											
26.	a) <table border="1"><thead><tr><th>UCode</th><th>UName</th><th>UColour</th><th>Size</th><th>Price</th></tr></thead><tbody><tr><td>1</td><td>Shirt</td><td>White</td><td>L</td><td>550</td></tr><tr><td>1</td><td>Shirt</td><td>White</td><td>M</td><td>500</td></tr><tr><td>2</td><td>Pant</td><td>Grey</td><td>L</td><td>850</td></tr><tr><td>2</td><td>Pant</td><td>Grey</td><td>M</td><td>810</td></tr></tbody></table> (1 mark for the correct output) b) i)	UCode	UName	UColour	Size	Price	1	Shirt	White	L	550	1	Shirt	White	M	500	2	Pant	Grey	L	850	2	Pant	Grey	M	810	1+2
UCode	UName	UColour	Size	Price																							
1	Shirt	White	L	550																							
1	Shirt	White	M	500																							
2	Pant	Grey	L	850																							
2	Pant	Grey	M	810																							

PARTICIPANT	POINTS
Juhi Chawla	350
John Abraham	300
Akshay Kumar	250
Ajay Devgan	200
Sunny Deol	200
Madhuri Dixit	200

(½ mark for the correct output)

ii)

HOUSE	COUNT(PARTICIPANT)
Bhagat	1
Bose	3
Gandhi	2

(½ mark for the correct output)

iii)

POINTS
200
300
250
350

(½ mark for the correct output)

iv)

PID	EVENTDATE
101	2022-02-03
103	2019-09-23

(½ mark for the correct output)

27.

```
def COUNTY( ):
    count=0
    length=0
    f=open('Text.txt','r')
    for word in f.read().split():
        length=len(word)
        if (word[length-1]=='y' or word[length-1]=='Y'):
            count=count+1
    print(count)
    f.close()
```

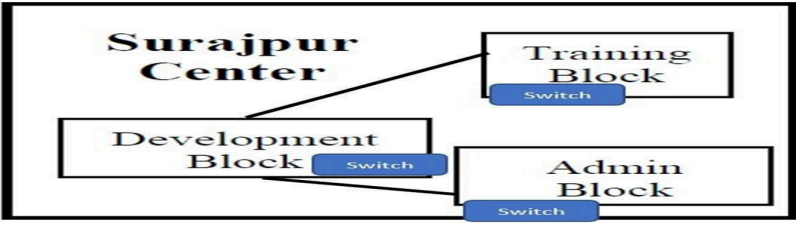
OR

```
def countvowels():
    f = open('info.txt', 'r')
    s = f.read()
    count = 0
    for x in s:
        if x in 'AEIOU':
            count+=1
    print(count)
    f.close()
```

Correct definition of function will fetch 3 marks. For each syntax error ½ mark may be deducted.

3

28.	(A) (i) select bname, auname, price from books where bid like "comp%"; (ii) update books set price = price + 50 where bid like "hist%"; (iii) select * from books order by price; (iv) select bid, bname, qty_issued from books, issued where books.bid = issued.bid; (½ mark for each correct SQL) (B) SHOW DATABASES; (1 mark for correct answer)	2+1
29.	<pre>def SQUARE_LIST(L): SList=[] for i in L: if i!= 0: SList.append(i*i) return SList</pre> (½ mark for correct function header 1 mark for correct loop 1 mark for correct if statement ½ mark for return statement) Note: Any other relevant and correct code may be marked	3
30.	<pre>status=[] def Push_element(cust): if cust[2]=="Goa": L1=[cust[0],cust[1]] status.append(L1) def Pop_element(): num=len(status) while len(status)!=0: dele=status.pop() print(dele) num=num-1 else: print("Stack Empty")</pre> (1.5 marks for correct Push_element() and 1.5 marks for correct Pop_element()) OR <pre>stk=[] d={"Ramesh":58, "Umesh":78, "Vishal":90, "Khushi":60, "Ishika":95} def push(stk,item): for i in item: if item[i]>70: stk.append(i) def Pop(stk): if stk==[]: return None else: return stk.pop()</pre> (1.5 marks for correct Push() and 1.5 marks for correct Pop())	3
SECTION D		

31.	i) Development because it contains more number of computers ii) Surajpur centre has multiple blocks and firewall ensures security. So it is required. It allows or block unwanted attacks. iii)  iv) a) Switch/Hub – In every block to interconnect the devices within every block b) Router -In development block because server is going to be placed here v) Satellite	1X5 =5
32.	(A) 1005 12 (1 marks for each line - correct output) (B) Statement 1: con1.cursor() Statement 2: mycursor.execute(query) Statement 3: con1.commit() (1 mark for each correct answer) OR (A) c&&vVpP (2 mark for correct output) (B) Statement 1:con1.cursor() Statement 2: mycursor.execute("select * from student where Marks>75") Statement 3: mycursor.fetchall() (1 mark for each correct statement)	2+3
33	Advantage of a csv file: ● It is human readable– can be opened in Excel and Notepad applications ● It is just like a text file. <pre>import csv def ADDPROD(): fout=open("product.csv","a",newline="\n") wr=csv.writer(fout) prodid=int(input("Enter Product id :: ")) name=input("Enter Product name : ") price=int(input("Enter Product Price : ")) lst=[prodid, name, price] wr.writerow(lst) fout.close() def COUNTPROD(): fin=open("product.csv","r",newline="\n") data=csv.reader(fin) d=list(data) print(len(d))</pre>	5

	<pre>fin.close()</pre> ADD() COUNTR() (1 mark for advantage, ½ mark for importing csv module, 1 ½ marks each for correct definition of ADD() and COUNTR(), ½ mark for function call statements) OR Difference between binary file and csv file: (Any one difference may be given) Binary file: ■ Extension is .dat ■ Not human readable ■ Stores data in the form of 0s and 1s CSV file ■ Extension is .csv ■ Human readable ■ Stores data like a text file Program: <pre>import csv def add(): fout=open("stud.csv","a",newline='\n') wr=csv.writer(fout) admno=int(input("Enter Admission No :: ")) sname=input("Enter Student name :: ") per=int(input("Enter percentage :: ")) st=[fid,sname,per] wr.writerow(st) fout.close() def search(): fin=open("stud.csv","r",newline='\n') data=csv.reader(fin) found=False print("The Details are") for i in data: if int(i[2])>75: found=True print(i[0],i[1],i[2]) if found==False: print("Record not found") fin.close() add() print("Now displaying") search() (1 mark for difference, ½ mark for importing csv module, 1 ½ marks each for correct definition of add() and search() , ½ mark for function call statements)</pre>	
SECTION E		
34	i) SELECT * FROM TEACHER WHERE DEPARTMENT ="COMPUTER"; II)SELECT NAME FROM TEACHER ORDER BY DATE_OF_JOIN DESC ; iii) a) Delete From Teacher Where Age>=45; b) UPDATE TEACHER SET SALARY=SALARY +(SALARY*0.15) WHERE DEPARTMENT="HISTORY";	1+1+ 2

	OR iii) a) SELECT COUNT(*) FROM TEACHER WHERE AGE <= 35; b) ALTER TABLE TEACHER ADD(QUALIFICATION VARCHAR(50)); (1 mark for each correct statement)	
35	(i) pickle(1 mark for correct module) (ii) fout=open('temp.dat', 'wb') (1 mark for correct statement) (iii) pickle.load(fin) pickle.dump(rec,fout) (1 mark for each correct statement)	1+1+ 2
