CBSE Class 12 Computer Science Marking Scheme 2023-24

Marking Scheme

Class XII

Computer Science (083)

Ques No	Question and Answers	Distribution of Marks	Total Marks
	SECTION A		
1	False	1 mark for correct answer	1
2	Option b 6,20	1 mark for correct answer	1
3	Option c -244.0	1 mark for correct answer	1
4	PYTHON-is-Fun	1 mark for correct answer	1
5	Option b 8,15	1 mark for correct answer	1
6	Option a PAN	1 mark for correct answer	1
7	Option b `del D1["Red"]`	1 mark for correct answer	1
8	Option b	1 mark for correct answer	1

	ceieP0		
9	Option d Statement 4	1 mark for correct answer	1
10	Option b YELLOW* WHITE* BLACK* RED*	1 mark for correct answer	1
11	Option b Modulator	1 mark for correct answer	1
12	Option c global b	1 mark for correct answer	1
13	True	1 mark for correct answer	1
14	Option c A candidate key that is not a primary key is a foreign key.	1 mark for correct answer	1
15	circuit	1 mark for correct answer	1
16	Option c `seek()`	1 mark for correct answer	1

17	Option d A is false but R is True	1 mark for correct answer	1
18	Option b Both A and R are true but R is not the correct explanation for A	1 mark for correct answer	1
	SECTION B		
19	(i) POP3 – Post Office Protocol 3 URL – Uniform Resource Locator (ii) HTML(Hyper text mark Up language) • We use pre-defined tags • Static web development language – only focuses on how data looks • It use for only displaying data, cannot transport data • Not case sensistive XML (Extensible Markup Language) • we can define our own tags and use them • Dynamic web development language – as it is used for transporting and storing data • Case sensitive	½ mark for each correct expansion 1 mark for any one correct difference No mark to be awarded if only full form is given	1+1=2
20	`def revNumber(num):` `  rev = 0` `  rem = 0` `  while num > 0:`	½ mark for each	2

	rem =num %10 rev = rev*10 + rem num = num//10 return rev print(revNumber(1234))	correction made	
21	PLACES={1:"Delhi",2:"London",3:"Paris",4:"New York",5:"Dubai"} def countNow(PLACES): for place in PLACES.values(): if len(place)>5: print(place.upper()) countNow(PLACES) OR def lenWords(STRING): T=() L=STRING.split() for word in L: length=len(word) T=T+(length,) return T **Note: Any other correct logic may be marked**	½ mark for correct function header ½ mark for correct loop ½ mark for correct if statement ½ mark for displaying the output ½ mark for correct function header ½ mark for using split() ½ mark for adding to tuple ½ mark for return statement	2

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22	4*L 33*4 21*S 10*6	½ mark for each correct line of output	2
23	(i) L1.insert(2,200) (ii) message.endswith('.')	1 mark for each correct statement	1+1=2
24	SQL Command to add primary key: `ALTER TABLE Employee ADD EmpId INTEGER PRIMARY KEY;` As the primary key is added as the last field, the command for inserting data will be: `INSERT INTO Employee VALUES("Shweta","Production",26900,999);` OR `INSERT INTO Employee(EmpId,Ename,Department,Salary) VALUES(999,"Shweta","Production",26900);`	1 mark for correct ALTER TABLE command 1 mark for correct INSERT command	2
25	10.0$20 10.0$2.0###	1 mark for each correct line of output	2
SECTION C			
26	ND-*34	½ mark for each correct character	3
27			

(i)

COUNT(DISTINCT SPORTS)
4

(ii)

CNAME	SPORTS
AMINA	CHESS

(iii)

CNAME	AGE	PAY
AMRIT	28	1000
VIRAT	35	1050

1 mark for each correct output

1*3=3

28

```
def test():
    fObj1 = open("Alpha.txt","r")
    data = fObj1.readlines()
    for line in data:
        L=line.split()
        if L[0]=="You":
            print(line)
    fObj1.close()
```

OR

1 mark for correctly opening and closing files

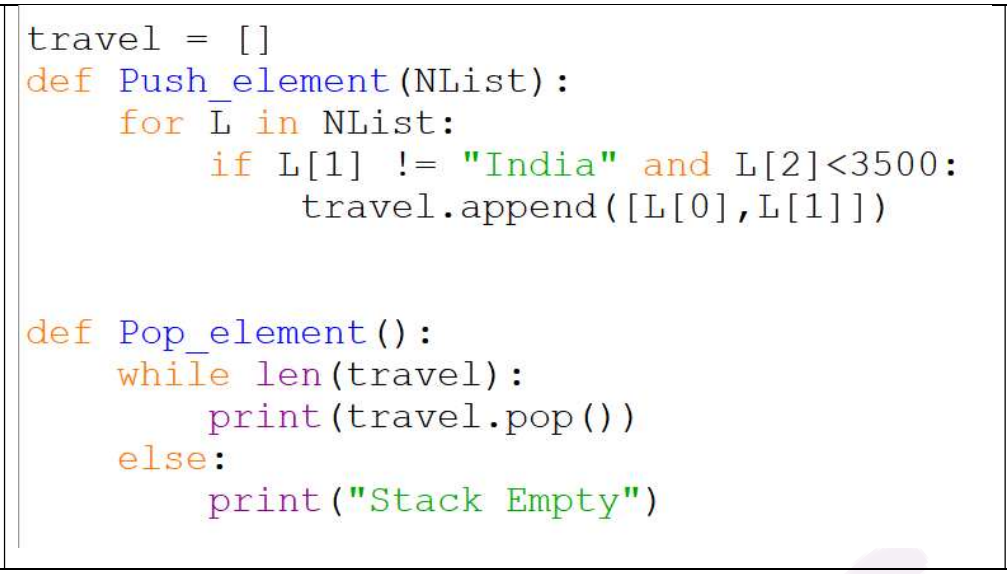
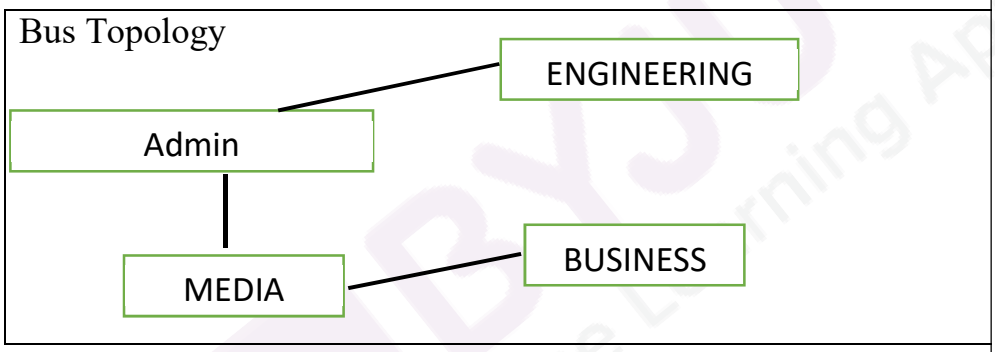
½ mark for correctly reading data

1 mark for correct loop and if statement

½ mark for displaying data

3

	`` def vowelCount(): fObj = open("Alpha.txt","r") data = str(fObj.read()) cnt=0 for ch in data: if ch in "aeiouAEIOU": cnt=cnt+1 print(cnt) fObj.close() ``` **Note: Any other correct logic may be marked**	1 mark for correctly opening and closing the files ½ mark for correctly reading data 1 mark for correct loop and if statement ½ mark for displaying the output.	
29	(i) ``` UPDATE Personal SET Salary=Salary*0.5 WHERE Allowance IS NOT NULL; ``` (ii) ``` SELECT Name, Salary+Allowance AS "Total Salary" FROM Personal; ``` (iii) ``` DELETE FROM Personal WHERE Salary>25000 ```	1 mark for each correct query	1*3=3

30	 travel = [] def Push_element(NList): for L in NList: if L[1] != "India" and L[2]<3500: travel.append([L[0],L[1]]) def Pop_element(): while len(travel): print(travel.pop()) else: print("Stack Empty")	1 ½ marks for each function	3
	SECTION D		
31	a)  b) Switch c) Admin block, as it has maximum number of computers. d) Microwave e) Firewall	1 mark for each correct answer	1*5=5
32	(i) r+ mode: • Primary function is reading • File pointer is at beginning of file • if the file does not exist, it results in an error w+ mode:	1 mark for each correct difference (minimum two differences should be given)	2+3=5

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- primary function is writing
- if the file does not exist, it creates a new file.
- If the file exists, previous data is overwritten
- File pointer is at the beginning of file

(ii)

```
def copyData():
    fObj = open("SPORT.DAT", "rb")
    fObj1 = open("BASKET.DAT","wb")
    cnt=0
    try:
        while True:
            data = pickle.load(fObj)
            print(data)
            if data[0] == "Basket Ball":
                pickle.dump(data,fObj1)
                cnt+=1
    except:
        fObj.close()
        fObj1.close()
    return cnt
```

½ mark for correctly opening and closing files

½ mark for correct try and except block

½ mark for correct loop

1 mark for correctly copying data

½ mark for correct return statement

OR

(Only for option ii)

```
def Searchtype(mtype):
    fObj = open("CINEMA.DAT", "rb")
    try:
        while True:
            data = pickle.load(fObj)
            if data[2] == mtype:
                print("Movie number:",data[0])
                print("Movie Name:",data[1])
                print("Movie Type:",data[2])
    except EOFError:
        fObj.close()
```

½ mark for correctly opening and closing files

½ mark for correct try and except block

½ mark for correct loop

	Note: Any other correct logic may be marked	½ mark for correct if statement 1 mark for correctly displaying data	
33	(i) Domain is a set of values from which an attribute can take value in each row. For example, roll no field can have only integer values and so its domain is a set of integer values	½ mark for correct definition ½ mark for correct example	1+4=5
	(ii) `import mysql.connector as mysql` `con1 = mysql.connect(host="localhost",user="root", password="tiger", database="sample2023")` `mycursor=con1.cursor()` `rno = int(input("Enter Roll Number:: "))` `name = input("Enter the name:: ")` `DOB = input("Enter date of birth:: ")` `fee= float(input("Enter Fee:: "))` `query = "INSERT into student values({},'{}','{}',{})".format(rno,name,DOB,fee)` `mycursor.execute(query)` `con1.commit()` `print("Data added successfully")` `con1.close()` **Note: Any other correct logic may be marked**	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()	

SECTION E

34	(i) SELECT PName, BName FROM PRODUCT P, BRAND B WHERE P.BID=B.BID; (ii) DESC PRODUCT; (iii) SELECT BName, AVG(Rating) FROM PRODUCT P, BRAND B WHERE P.BID=B.BID GROUP BY BName HAVING BName='Medimix' OR BName='Dove'; (iv) SELECT PName, UPrice, Rating FROM PRODUCT ORDER BY Rating DESC;	1 mark for each correct query	1*4=4
35	`def Accept():` `  sid=int(input("Enter Student ID "))` `  sname=input("Enter Student Name ")` `  game= input("Enter name of game ")` `  res=input("Enter Result")` `  headings=["Student ID","Student Name"," Game Name", "Result"]` `  data=[sid,sname,game,res]` `  f=open('Result.csv','a',newline='')` `  csvwriter=csv.writer(f)` `  csvwriter.writerow(headings)` `  csvwriter.writerow(data)` `  f.close()`	½ mark for accepting data correctly ½ mark for opening and closing file ½ mark for writing headings ½ mark for writing row	4

	def wonCount(): f=open('Result.csv','r') csvreader=csv.reader(f, delimiter=',') head=list(csvreader) print(head[0]) for x in head: if x[3]=="WON": print(x) f.close()	½ mark for opening and closing file ½ mark for reader object ½ mark for print heading ½ mark for printing data	