## KENDRIYA VIDYALAYA SANGATHAN, JABALPUR REGION FIRST PREBOARD EXAMINATION(2022-23)

## **CLASS - XII**

## Computer Science (083) MARKING SCHEME

Max Marks: 70 Time: 3 Hrs **SECTION A** a) Marks@12 1 1 2 b) Tuple 1 3 b) Tup[2]=90 1 4 (b) True 1 5 (d) 2 1 (c) wb 6 1 7 (c) like 1 8 (d) ALTER TABLE 1 9 (d) Statement 1 & 2 1 10 1 (c) domain 11 (b) tells the current position of the file pointer within the file. 1 12 (c) ORDER BY 1 13 (c) PPP 1 (b) 24 14 1 15 1 (d) avg() 16 (b) mysql-connector 1 17 (c) A is True but R is False 1 18 (a) Both A and R are true and R is the correct explanation for A 1 **SECTION B** Rewrite the following Python program after removing all the 19 2 syntactical errors (if any), underlining each correction: checkval def(): # def checkval(): x = input("Enter a number") # x=int(input("Enter a number")) if x % 2 == 0# if x % 2 ==0: print (x, "is even") # else: else: print (x, "is odd") (1/2 mark for each correction) 20 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). 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. (1 mark for each part) OR 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. 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 hundred kilometres. For example: Network of schools, bank, and government offices within a city. Best example of WAN is the Internet. (1 mark for each part)	
21	(a) Vidyalay (b) 3 (1 mark for each correct answer)	2
22	SQL constraints are used to specify rules for the data in a table. Constraints are used to limit the type of data that can go into a table. This ensures the accuracy and reliability of the data in the table. If there is any violation between the constraint and the data action, the action is aborted. Examples NOT NULL, UNIQUE, PRIMARY KEY, CHECK etc. (1 mark for correct definition, 1 mark for examples)	2
23	<ul> <li>(a) Transmission Control Protocol, Virtual Private Network (1/2 mark for each answer)</li> <li>(b) FTP is used to transfer files between computers on a network. (1 Mark for correct answer)</li> </ul>	2
24	50#5 (2 marks for correct answer) OR 20 40 (2 marks for correct answer)	2
25	Aggregate functions are also known as group functions. Various aggregate functions in MySql are- sum(), min(), max(),avg() and count()  OR  DDL commands- CREATE, ALTER, DROP  DML commands- INSERT, UPDATE, DELETE, SELECT  SECTION C	2
26	(a) 1 Mark for correct answer (b) i) Personal Computer 37000 3 Laptop 57000 2 ii) N Roy PQR R Singh XYZ R Pandey COMP C Sharma PQR K Agarwal ABC iii) Personal Computer 3500000 Laptop 5500000 iv) Delhi Mumbai Bangalore (1/2 mark for each correct result)	3
27	def count_W_H():     f = open ("Country.txt", "r")     W,H = 0,0     r = f.read()     for x in r:         if x[0] == "W" or x[0] == "w":	3

```
f.close()
           print ("W or w:", W)
           print ("H or h:", H)
                                         OR
       def countwords():
           s = open("Quotes.txt","r")
           f = s.read()
           z = f.split()
           count = 0
           for I in z:
              count = count + 1
            print ("Total number of words:", count)
       Note: Using of any correct code giving the same result is also
       accepted.
28
                                                                                 3
       (a)
           ENGLISH 51
       i)
           PHYSICS 76
           MATHS 24
           CHEMISTRY 27
       ii) PRIYA RAI FEMALE
           LISA ANAND FEMALE
       iii) 4
       iv) 28
       (1/2 Marks for each correct answer)
       (b) DESCRIBE SCHOOL;
       (1 Mark for correct answer)
29
       def SwapHalfList(Array):
                                                                                 3
          s1=s2=0
          L=len(Array)
          for i in range(0,L//2):
              s1+=Array[i]
          for i in range(L//2, L):
               s2+=Array[i]
          if s1>s2:
               for i in range(0,L//2):
                    Array[i], Array[i+L//2]=Array[i+L//2], Array[i]
       L=[6,5,4,1,2,3]
       SwapHalfList(L)
       print(L)
       [1/2 mark for writing correct function header. 2 marks for correct logic
       and 1/2 mark for calling the function. Any other logic producing the
       same result is accepted]
       def PushBook(Book):
30
                                                                                 3
           bno = input("enter book no : ")
           btitle = input("enter book title:")
           rec = bno + "" + btitle
           Book.append(rec)
           print(Book)
                                         OR
       def PopBook(Book):
            if len(Book)==0:
                                       # If stack is empty
               print("Underflow")
```

	else:	
	print("Deleted entry :", Book.pop())	
	1/2 marks for correct function header	
	1½ marks for correct logic	
	1/2 mark for proper use of append or pop function	
	1/2 mark for correct output statement	
	SECTION D	
31	(i) 1 Mark for correct Layout.	5
0 1	(ii) Research Lab ( 1 Mark)	
	(iii) 1 Mark for correct Justification.	
	(iv) Antivirus/ Firewall (1 Mark for Correct Answer)	
	(v) 1 Mark for correct Justification.	
32	(a) x is 50 (2 Marks for correct answer)	5
	Changed global+local x to 20	
	(b) Statement 1	
	mycursor= <u>conn.cursor()</u>	
	Statement 2	
	mycursor.execute(sql)	
	Statement 3	
	conn.commit()	
	(3 Marks for all correct answer)	
	OR	
	(a) iNdiA%**** (2 Marks for correct answer)	
	(b) Statement 1	
	mycursor=conn.cursor()	
	Statement 2	
	mycursor.execute("select * from EMP where salary>25000")	
	Statement 3	
	resultset=mycursor.fetchall()	
	(3 Marks for all correct answer)	
33	import pickle	5
	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(rec,fobj)	
	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	
<u> </u>	· · · · · · · · · · · · · · · · · · ·	

```
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
                                  SECTION E
34
       (i) Rollno (1 mark)
       (ii) 5
                (1 mark)
       (iii) a. INSERT INTO FEES VALUES(1201,"AKSHAY","12TH",350,2);
       b. UPDATE FEES SET FEE=FEE+50 WHERE CLASS="12TH" AND
       QTR=2;
       OR (Option for part iii only)
       a. DELETE FROM FEES WHERE ROLLNO=1212;
       b. b) ALTER
       (1 marks for correctly answering each sub-part of iii )
       (i) CSV (1 mark)
35
                                                                           4
       (ii) "w" (1 mark)
       (iii) reader, close() (2 marks for both correct answers)
```