KENDRIYA VIDYALAYA SANGATHAN, LUCKNOW REGION

Second Pre-Board Examination

Class XII: Computer Science (083)

Session: 2020-21

Time: 3 hrs MARKING SCHEME M.M.: 70

PART-A

Section-I

Select the most appropriate option out of the options given for each question. Attempt any 15 questions from question no. 1 to 21.

QN	Questions Description	Marks Allotted
1.	a)5Total	1
2.	['violet', 'indigo', 'green', 'red']	1
3.	F=open("ABC.TXT","r+") or F=open("ABC.TXT","w+")	1
4.	(d) //	1
5.	(a) Tp1=("a","b")	1
6.	d={1:"one",3:"three",5:"five",7:"seven",9:"nine"}	1
7.	[20, 30, 40, 50, 60, 10, 20, 30]	1
8.	(ii) each of the keys within a dictionary must be unique	1
9.	17.0	1
10	(i)random (ii) math	1
11	File Transfer Protocol(FTP)	1
12	DISTINCT	1
13	AVG()	1
14	a) MAX ()	1
15	HAVING Clause	1
16	To display the list of existing databases.	1
17	URL – Uniform Resource Locator TDMA – Time Division Multiple Access	1
18	Optical Fiber Cable	1
19	Bps is Byte per second and bps is bits per second which tells the variation in data transmission speed.	1
20	LAN	1
21	Not equal to	1

PART-A Section-II

Both the case study-based questions are compulsory. Attempt any 4 out of the 5 subparts from each question. Each question carries 1 mark.

22(a)	Book_ID 4		
(b)	Degree: 5, Cardinality: 6		
(c)	SELECT Title, Author FROM BOOKS WHERE Publiser='Penguin';		
(d)	SELECT * FROM BOOKS ORDER BY Price DESC;		
(e)	DESC BOOKS; OR DESCRIBE BOOKS; (1 mark for any suitable output)		
23.	(a) csv (b) "a"		
	(c) writerow (d) reader (e) INDIA=>NEW DELHI CHINA=> BEIJING		
	PART-B		
	Section-I		
	Short answer questions of 2 marks each in which two question have internal options.		
24.	10 # 10 10 \$ 20 2 # 2	2	
	10 \$ 2 .5 mark for each correct line.		
25.	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 Or		
	Mohan is using PAN-Personal Area Network. It is a private network which is setup by an individual to transfer data among his personal devices of home. 1 mark for Identification. 1 mark for Explanation		
26.	a. HTML-HyperText Markup Language b. MAC-Media Access Control c. SIM- Subscriber Identity Module d. GSM-Global system for mobile communication ½ mark for each.		
27.	Return value of a function is the value which is being given back to the main program after the execution of function. E.g. def Check(): return 100 OR	2	
	Positional arguments are those which are used & passed in a particular sequence always. Default arguments are those whose default value is used by the function in the absence of actual argument values at the time of functional call.	f	
	1 mark for each correct definition & example.		

```
Number=250
28.
        while Number <= 1000:
                                                                                            2
             if Number>=750:
                  print(Number)
                  Number=Number+100
                  print(Number*2)
             Number=Number+50
       .5 mark for each correct error.
29.
       (a)
       Maximum value of BEG: 2
                                                                                            2
       Maximum value of END: 4
       1+.5+.5 marks for correct answer
30.
       Constraints are the checking condition which we apply on table to ensure the
       correctness of data. example primary key, nut null, default, unique etc
                                                                                            2
       1 mark for definition. 1/2 mark for each example.
31
        { } and fetchone()
                                                                                            2
32.
       WHERE clause is used to select particular rows that satisfy a condition whereas
       HAVING clause is used in connection with the aggregate function, GROUP BY
                                                                                            2
       clause.
       For ex. – select * from student where marks > 75;
       This statement shall display the records for all the students who have scored more
       than 75 marks.
       On the contrary, the statement - select stream, count(*) from student group by
       stream having count(*) > 20; shall display streams and total students if total
       students in a stream are > 20.
33.
       Output:
                                                                                            2
       ISSCE *3132
       2 marks for correct answer. 1 mark for partial correct output.
                                          PART-B
                                         Section-II
        Short answer questions of 3 marks each in which two question have internal options.
       def common(L1,L2):
34
            L3=[]
                                                                                            3
            for i in L1:
                 if i in L2:
                      L3.append(i)
            L3.sort()
            print(L3)
       .5 mark for correct declaration of function header
       2 marks for correct logic
       .5 mark for sorting
       def COUNTLINES ET():
35
                                                                                            3
             f=open ("REPORT. TXT", "r")
             lines=f.readlines()
             LineE=0
             LineT=0
             for i in lines:
                  if i[0] == 'E':
                       LineE+=1
                  elif i[0] == 'T':
                       LineT+=1
             print("No. of Lines with E:",LineE)
print("No. of Lines with T:",LineT)
       COUNTLINES ET ()
```

```
.5 mark for correct function header.
       .5 mark for correct opening of file.
       1.5 mark for any correct logic & it's code.
       .5 mark for printing correct output.
                                        OR
       def BIGWORDS():
           f=open("code.txt", "r")
           data=f.read()
           word=data.split()
           c=0
           for w in word:
                if len(w) >= 5:
                    print(w)
                    c=c+1
           print ("no of words which are having 5 or more alphabets",c)
       BIGWORDS()
       .5 mark for correct function header.
       .5 mark for correct opening of file.
       1.5 mark for any correct logic & it's code.
       .5 mark for printing correct output.
36.
          1) 2
                                                                                       3
                                              Min(Price)
          2) Company
                           Max(Price)
                                                              Count(*)
              ABC
                             15
                                                                  2
                                                  10
              XYZ
                             7
                                                                  2
                                                   6
              CAM
                             5
                                                   5
                                                                  1
          3)
                        Good Learner
                                       Pencil
                                                      5
                        Write Well
                                       Gel Pen
                                                      15
                        Topper
                                       Dot Pen
                                                      10
                        Write & Draw
                                       Pencil
                                                      6
       1 marks for each correct answer.
37.
       #Function to push student record in stack
       stk=[]
                                                                                       3
       def stk push(stk):
            rno=int(input("enter rno."))
            name=input("enter name")
            age=int(input("enter age"))
            item={"rno":rno, "name":name, "age":age}
            stk.append(item)
       #Function to push prime no.in stack
       stack=[]
       def PUSH(Lst, stack):
           for i in Lst:
                for j in range(2,i):
                    if i%j==0:
                         break
                else:
                    stack.append(i)
           if (stack==[]):
                print("stack is empty")
           else:
                top=len(stack)-1
                for i in range(top,-1,-1):
                    print(stack[i])
       3 marks for correct logic
```

PART-B Section-III Short answer questions of 5 marks each in which ONE question have internal options. Shahjahanpur, Maximum no of Computers ½ Mark for Naming and ½ for 38. (i) 1 reason. Any suitable layout 1 Mark for correct layout. (ii) 1 (iii) Switch 1 Mark for Correct answer. 1 Kanpur to Bareli Block if direct connection is there. (iv) 1 ½ marks for naming and ½ marks for justification. WAN: spread over more than one city (v) 1 ½ marks for naming and ½ marks for justification. SELECT PERIODS FROM SCHOOL WHERE SUBJECT = 'ENGLISH'; 39.(i) 1 (ii) SELECT SCHOOL.TEACHERNAME, SCHOOL.CODE, ADMIN.DESIGNATION FROM SCHOOL, 1 ADMIN WHERE GENDER='MALE' AND SCHOOL.CODE = ADMIN.CODE; (iii) select SUBJECT, count(*) from SCHOOL group by SUBJECT; 1 select * from SCHOOL where DOJ > '01/01/1999' order by EXPERIENCE (iv) 1 desc: select * from SCHOOL where EXPERIENCE<10; 1 (v) (1 mark for each correct answer) import pickle 5 40. def createFile(): fobj=open("Account1.dat", "ab") accno=int(input("Account number : ")) acctype=input("Account type :") accholdername = input("Account holder name: ") balance=int(input("enter balance")) rec=[accno,acctype,accholdername,balance] pickle.dump(rec, fobj) fobj.close() def CountBalanceAbove(BAL): fobj=open("Account1.dat", "rb") num = 0try: while True: rec=pickle.load(fobj) if rec[3]>BAL: print(rec) num = num + 1except: fobj.close() return num (2.5 marks for each correct answer) OR import csv def DISPEMP(): with open('emp.csv') as csvfile: myreader = csv.reader(csvfile,delimiter=',') print("%10s"%"EMPNO","%20s"%"EMP NAME","%10s"%"SALARY") for row in myreader: if int(row[2]) > = 4000: print("%10s"%row[0],"%20s"%row[1],"%10s"%row[2]) (5 marks for correct answer)