KENDRIYA VIDYALAYA SANGATHAN DELHI REGION

FIRST PRE-BOARD EXAMINATION 2019-20

COMPUTER SCIENCE NEW (Code: 083)

CLASS:-XII

SET-2

Time: 3 Hrs.

M.M.:70

General Instructions:

(i) All questions are compulsory,

(ii) Question paper is divided into 4 sections A, B, C & D.

SECTION A-UNIT 1

B-UNIT 2

C-UNIT 3

D-UNIT 4

(iii) Give examples where required.

Ans1	a.	Keywords are the reserved words in Python. We cannot use a keyword as variable name, function name or any other identifier. e.g. while, if	1
	b.	iii) ==	1
	c.	i) math ii) pickle	1
	d.	```def __main(): x =int(input("Enter a number:")) if (abs(x)== x): print("You entered a positive number") else: x*=-1 print("Number made positive:",x) __main()```	2
	e.	1 : 30	2

		130	
		2 : 145	
		245	
		3 : 254	
		354	
	f.	[11, 10, 10, 9, 9, 8, 8, 7, 7, 6]	3
	g.	(i) 0 : 0 (iii) 0 : 4	2
Ans2.	a.	Immutable Objects : These are of in-built types like int, float, bool, string, tuple. In simple words, an immutable object can't be changed after it is created.	1
		Mutable Objects : These are of type list, dict, set In simple words, an immutable object can be changed after it is created.	
	b.	Index Error : List index out of range	1
	c.	colors=['red','green','blue'] series-[1,2,3,4,5]	1
	d.	Key : 'KVS' Value : {'Branches':1227,'HQ':'Delhi'}	1
	e.	In the given user defined function is there any error, if it is correct it: def DEFA_ARG(n1=1,n2=2,n3=10): # any value to be given to n3 n1=n1+n2 n2+=n3 print(n1,n2,n3) Check() Check(2,1) Check(3,4,5)	1
	f.	A parameter is data that you ask to be imputed into a function. For example: def func(param):	2

		In the code above, the function "func" asks for a parameter called "param". When we call the function like so: func(sample_param) The data that we imputed, named "sample_param" is an argument.	
	g.	from matplotlib import pyplot as plt x = [5,8,10] y = [12,16,6] x1 = [7,9,14] y1= [13,17,7] plt.plot(x,y,color='red') plt.plot(x1,y1,color='green') plt.title('Epic Info') plt.ylabel('Y axis') plt.xlabel('X axis') plt.legend(['Sales','figures'],loc=7) plt.show() **OR** plt.pie(sizes, explode=explode, labels=labels, colors=colors, autopct='%1.1f%%', shadow=True, startangle=140)	2

	h.	def LinesWith():
		
		  C=0
		
		  F=open("Woods.txt","r")
		
		  X=F.read()
		
		  Word=X.split()
		
		  W=input("Enter Word")
		
		  for i in Word:
		
		    if i=="W":
		
		      C+=1
			2

```
        print(C)
        F.close()
                                OR

    def countlines():
        file=open('read.txt','r')
        lines = file.readlines()
        count=0
        for w in lines:
                if w[0]=="T":
                        count=count+1
        print ("Total lines starting from T are:", count)
        file. Close()
```

2

i.
```
def cube(n):
    if n==1:
        return 1
    return n*n*n+cube(n-1)
n=int(input("Enter the value of n"))
print(cube(n))
                        OR

def fib(n):
    if n==1:
        return 0;
    elif n==2:
        return 1
    else:
        return fib(n-1) + fib(n-2)
```

3

j.
```
list1=[]
def QINSERT(list1):
        name= input("Enter a new APPLICATION No.: ")
```

4

```
        list1.append(name)


def QDELETE(list1):
    if (list1==[]):
            print( "Queue empty")
    else:
            print ("Deleted Application is: ",list1[0])
            del(list1[0])
```

OR

```
list2=[]
def PUSHNAME():
    N=input("Enter a new name in the stack")
    List2.append(N)
    print("New named added in stack")
def POPNAME():
    if list2==[]:
        print("Stack is empty")
    else:
        print(list2[-1],"Top name deleted from stack")
        list2.pop(-1)
```

SECTION - B

Ans3	a.	The difference between a PAN and LAN is that the former tends to be centered around one person while the latter is a local area network (LAN) that is connected and serving multiple users.	1
	b.	Intellectual Property **Rights** are legal rights, which result from intellectual activity in industrial, scientific, literary & artistic fields.	1
	c.	The IP address is an address bound to the network device, i.e., computer, via software. In a Windows-powered computer, the Windows operating	1

	?		system allows the user to configure the IP address the specific workstation. The MAC address is assigned to each network interface when it is manufactured.	
	द्व	d.	Private	1
		e.	1. PPP – Point to Point Protocol 2. DNS – Domain Name System 3. VoIP - Voice over Internet Protocol 4. FTP – File Transfer Protocol	2
		f.	And IPv4 and IPv6 are two generations of Internet Protocol where IPv4 stands for Internet Protocol version 4 and IPv6 for Internet Protocol version 6. Size of an address in IPv4 is 32-bits. Where IPv6 address fields are 128-bits.	2
		g.	1. ping - To test the reachability of a host on an Internet Protocol (IP) network 2. ipconfig - This utility allows you to get the IP address information of a Windows computer. 3. whois - to find the registration status of a **domain name**	3
		h.	(i) LAN and STAR (ii)SalesDept (more computers and network traffic) (iii)i)SalesDept ii)Every Departments (iv)MAN	4
			SECTION – C	
Ans4		a.	It is used to fetch all the rows of the table.	1
	९)	b.	Degree – 4 Cardinality – 7	1
		c.	import pymysql con=pymysql.connect(host="localhost",user="scott",passwd="tiger") c=con.cursor()	2

	d.	ALTER is a DDL (Data Definition Language) statement. Whereas UPDATE is a DML (Data Manipulation Language) statement. ALTER is used to update the structure of the table (add/remove field/index etc). Whereas UPDATE is used to update data.	2
	e.	MVT is Model, View Template architecture which is slightly different from MVC. In fact the main difference between the two patterns is that Django itself takes care of the controller part (Software code) and leaving us with the template. The template is a HTML file mixed with Django Template Language (DTL). The develop provides the model, the view and the template then just maps it to a URL and Django does the magic to serve it to the user.	2

f.

i. Acc_no   Cust_name

    1002   Saniya

ii. sum(Open_Bal)

     38000

iii.

Acc_No	Cust_Name	Cust_City	Cust_Phone	Open_Bal
1003	Joe	New Delhi	9972136576	13000
1001	Dharmesh	Ambala	9710557614	10000
1004	Mrinal	New Delhi	9321305453	10000
1002	Saniya	Patna	8223545233	15000

(marks: 3)

g.

i. Select Cust_Name,Cust_City from Customer;

ii. Select Cust_Name ,Open_Bal from Customer where Open_bal between 10000 and 13000

iii. Select *from Customer where Cust_Name like 'D%';

iv. Select *from Customer order by city desc;

(marks: 4)

SECTION – D

Ans5	a.	It is stealing someone else's intellectual work such as idea, literary work or academic work etc. and representing it as your own work without	1

		giving credit to creator or without citing the source of information.	
	b.	E-waste disposal process: - • Dismantling • Segregation of ferrous metal, non-ferrous metal and plastic • Refurbishment and reuse • Recycling/recovery of valuable materials • Treatment/disposal of dangerous materials and waste	1
	c.	Trojans and Viruses	2
	d.	It refers to methods used for interpretation of computer media for digital evidence Data identification ⟹ project planing ⟹ Data capture ⟹ Data processing ⟹ Data analysis ⟸ Data display ⟸ Report generation	2
	e.	Open-source software (OSS) is a type of computer software in which source code is released under a license in which the copyright holder grants users the rights to study, change, and distribute the software to anyone and for any purpose. Ex:- Python	2
	f.	Phishing is fraudulent attempt to obtain sensitive information such as usernames, passwords, and credit card details(and money),often for malicious reasons, by disguising as a trustworthy entity in an electronic communication	2