KENDRIYA VIDYALAYA SANGATHAN, RANCHI REGION
SAMPLE QUESTION PAPER
TERM-2(SESSION ENDING EXAM 2021-22)
COMPUTER SCIENCE(CODE:083)
CLASS XI

Maximum Marks: 35   Time: 2 Hours.

General Instructions:

- The question paper is divided into 3 sections – A, B and C
- Section A, consists of 7 questions (1-7). Each question carries 2 marks.
- Section B, consists of 3 questions (8-10). Each question carries 3 marks.
- Section C, consists of 3 questions (11-13). Each question carries 4 marks.
- Internal choices have been given for question numbers 7, 8 and 12.

SECTION – A
Each question carries 2 marks

1.	Given the lists L=[2 ,7,8, 6,9,17,91,56,33] Write output of	
	i. print(L[5 : 7]) ii. print(L[-7:-2])	1 1
Ans:	i. [17, 91] ii. [8, 6, 9, 17, 91] *(1 mark each for correct output)*	

2.	Write the output of the following:
	
	L=[ ]
	
	L1 = [ ]
	
	for i in range (16,10):
	
	L.append(i)
	
	    for i in range (20,4,-2):
	
	L1.append(i)
	
	    print("L = ", L)
	
	    print("L1 = ",L1)
		2

Ans:	L = [ ] L1 = [20, 18, 16, 14, 12, 10, 8, 6] (*1 mark each for correct output*)	
3.	What possible output(s) are expected to be displayed on the screen at the time of execution of the following program code: import random COLORS=['VOILET', 'INDIGO', 'BLUE', 'GREEN', 'YELLOW', 'ORANGE', 'RED'] end = random.randrange(2)+5 begin=random.randint(1,end)+1 for i in range (begin, end): print (COLORS[i], end="#") (a) BLUE # GREEN # (b) GREEN # YELLOW # ORANGE # (c) INDIGO # BLUE # GREEN # (d) YELLOW # ORANGE # RED #	2

Ans:	End=0+5=5
	     1+5=6
	Begin=1+1=2
	     2
	     3
	     4
	     5
	     6+1=7
	Correct Ans is (b) GREEN # YELLOW # ORANGE #
	(*1 mark for calculating end and begin and 1 mark for correct output*)	

4.	(i) Name any 2 social networking apps (ii) A computer program encrypts (lock by password) all your important documents on the computer and asks you to deposit money in a certain bank account to decrypt (unlock) those files. What that malicious program is known as?	2
Ans:	(i) Ans: Facebook, WhatsApp, Twitter, Instagram, Snapchat, LinkedIn, etc (Any 2 from these) (ii) Ransomware	

5.	Write the differences between Copyrights and Patents?	2

Ans:	The differences between Copyrights and Patents are
	
	    (i) Copyright is granted for any original literary and creative work whereas patent is granted for new research.
	
	    (ii) Copyright is automatically granted to original creator whereas researcher have to apply for patent.
	
	    (iii) Copy right is granted for lifetime whereas patent is granted for 10 year. Any other valid difference
	
	(1 mark each for valid difference)	

6.	What do you understand by Phishing? Write the example of Phishing.	2
Ans:	Phishing is an unlawful activity where fake websites or emails that look original or authentic are presented to the user to fraudulently collect sensitive and personal details, particularly usernames, passwords, banking and credit card details. Examples: Email Account Upgrade Scam. Advance-fee Scam. Google Docs Scam. PayPal Scam. Fraudulent Phone calls *(1 mark for correct definition)* *(1 mark for correct example)*	
7.	Match the following:	2

Column A	Column B
Plagiarism	Fakers, by offering special rewards or money prize asked for personal information, such as bank account information
Hacking	Copy and paste information from the Internet into your report and then organise it
Credit card fraud	The trail that is created when a person uses the Internet.
Digital Foot Print	Breaking into computers to read private emails and other files

	OR	

Expand the terms: IPR, GPL, OSS, GNU

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(½ marks each for each correct match)

OR

IPR – Intellectual Property Right

GPL – General Public License

OSS- Open Source Software

GNU – GNU's Not Unix

(½ marks each for each correct full form)

SECTION – B

Each question carries 4 marks

8. Write a program to accept elements of a list from the user. Multiply elements of the list with 7, if an element is a multiple of 7 otherwise multiply each element with 4. After processing, display the elements.

Example:

List=   [4 ,7,6,8,14,22,21,17]

Output: [16,49,24,32,98,88,147,68]

OR

Consider the following list, s=['W','e','a','r', ' ' ,'a', ' ' , 'M','a','s','k']

Write a program to display each character along with its positive index and negative index.

Ans:
```
h=eval(input("Enetr values"))
length=len(h)
```

```
for x in range(0,length):
        if h[x]%7==0:
                h[x]=h[x]*7
        else:
                h[x]=h[x]*4
print ("Elements are ", h)
```
(1mark for applying correct loop, 1 mark for checking divisibility and 1 mark for multiplying value or marks may be awarded for correct logic)

OR

```
s=['W','e','a','r', ' ' ,'a', ' ' , 'M','a','s','k']
length=len(s)
for i in range(length):
                print("The element ",s[i], "is at indexes ",i, "and" ,(i-length))
```

9.	i.	What will be the output of following code:
		
		>>> tuple1 = ("Rama","Heena","Raj", "Mohsin","Aditya")
		 >>> sorted(tuple1)
			1

	ii.	Amit is getting an error with the following code. Can you spot the error.
		
		    T=(10,20,30)
		    T.append(40)
		
		Also help Amit to write correct code to, how he can add/concatenate an element at the last of the tuple.
			2

Ans:	i.	['Aditya', 'Heena', 'Mohsin', 'Raj', 'Rama'] *(1mark for correct answer output should be in list form because of sorted() return list only)*	
		Append method/function is not available in Tuple. T=T+(40,) *(1mark for identification of error and 1 mark for writing code)*	
10.		Write Short Note about following: 1. E-waste Management 2. IPR 3. Digital Footprint	3
Ans:		Write Short Note about:	

1. E-waste Management

E-waste management can be defined as the practical and holistic approach and the founding pillar of cutting down waste from our mother earth. It is reusing and recycling of e-waste which is no longer in use and can be salved for some of its components.

2. IPR

Intellectual Property Right (IPR) is the statutory right granted by the Government, to the owner(s) of the intellectual property or applicant(s) of an intellectual property (IP) to exclude others from exploiting the IP commercially for a given period of time, in lieu of the discloser of his/her IP in an IPR application.

3. Digital Footprint

A digital footprint – sometimes called a digital shadow or an electronic footprint – refers to the trail of data you leave when using the internet. It includes websites you visit emails you send, and information you submit online.

(1mark for each correct answer)

	SECTION – C **Each question carries 4 marks**	
11.	Consider the following list L=[13,18,20,10,18,23] Write python statements to perform the following task (a) count number of times the value 18 is repeating (b)arrange values in descending order (c) remove the last element (d) Insert 15 at index position 3	4
Ans:	(a) L.count(18) (b) L.sort(reverse=True) (c) L.pop() (d) L.insert(3,15) *(1 mark for each correct answer)*	
12.	Write a program to enter names of employees and their salaries as input and store them in a dictionary. Here employees name taken as key and salaries	4

	consider as value in dictionary.	
	OR	
	Write a program to enter the element in list and divide the elements of a list into two halves and interchange the elements of the list such that the first half and second half are exchanged. Example: If list is lst = [10,20,30,40,50,60,70,80] Then new list is [50,60,70,80, 10,20,30,40]	

Ans:	num = int(input("Enter the number of employees whose data to be stored: "))
	
	count = 1 employee = dict() #create an empty dictionary
	
	while count <= num:
	
	   name = input("Enter the name of the Employee: ")
	
	   salary = int(input("Enter the salary: "))
	
	   employee[name] = salary count += 1
	
	print("\n\nEMPLOYEE_NAME\tSALARY")
	
	for k in employee:
	
	   print(k,'\t\t',employee[k])
	
	     OR
	
	lst=eval(input("Enetr values"))
	
	lst1=[:len(lst)//2]
	
	lst2=[len(lst)//2:]
	
	new_lst=lst2+lst1
	
	print (new_lst)
	
	(or any other suitable logic)	

13.	Explain following term in respect of Cyber Safety and Ethics (a) Cyber Crime (b) Indian IT Act (c) Trademark (a) Netizen	4
Ans:	(a) Cyber Crime Criminal activities or offences carried out in a digital environment can be considered as cyber crime. In such crimes, either the computer itself is the target or the computer is used as a tool to commit a crime. Cyber crimes are carried out against either an individual, or a group, or an organisation or even against a country, with the intent to directly or indirectly cause physical	

harm, financial loss or mental harassment.

(b) The Information Technology Act, **2000** was enacted by the Indian Parliament in 2000. It is the primary law in India for matters related to cybercrime and e-commerce. The act was enacted to give legal sanction to electronic commerce and electronic transactions, to enable e-governance, and also to prevent cybercrime.

(c) Trademark includes any visual symbol, word, name, design, slogan, label, etc., that distinguishes the brand or commercial enterprise, from other brands or commercial enterprises

(d) The word netizen seems to have two similar meanings. A citizen who uses the Internet as a way of participating in society (for example, exchanging views, providing information, and voting). An Internet user who is trying to contribute to the Internet's use and growth.