TERM1 EXAMINATION, OCT 2020
INFORMATICS PRACTICES

Name:	**Max Marks: 35**
Class: XI	**Duration: 1 hrs 30min**
Sec:	**Date: 11/10/2020**

General Instructions:
(i)   All questions are compulsory.
(ii) Programming language: Python
(iii) This paper consists of 4 pages.

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1)a)	Explain IPO cycle with the help of a block diagram of computer organization.	**[1]**
b)	Differentiate between SRAM and DRAM	**[1]**

c)	Rajesh download a Puzzle game on his laptop. He was prompted with 2 options "Run" and "Save" the file. He clicked on "Run" , some files processed and launched the game . Can you identify which of the following files helped Rajesh to launch the game.
	  i) Puzzle.txt
	  ii) Puzzle.dll
	  iii) Puzzle.exe
		[1]

d)	How ASCII-7 is different from ASCII-8?	**[1]**

e)	Name the following:
	  i) The part of system bus that carries instructions _____
	  ii) Antivirus, Disk Defragment are examples of _____
		[1]

2)a)	Evaluate the following expression: 48 % 3 ** 3//5 +2	**[1]**
b)	Write a program to convert the time entered as minutes to Hours : Minutes format. Example : Enter the time in minutes: 66 Hours : Minutes 1 : 6	**[1]**

c)	Find the output of the following statements :
	
	  i) print('Learning\nIP')
	  ii) print(100+False)
		[1]

d)	Find the ouutput.
	
	    a,b,c=20,40,60
	    b+=10
	    c+=b
	    print(b,c)
		[1]

e)	Rewrite the following code in python after removing all syntax error(s).
	Underline each correction done in the code.
	a,b=10=10
	c=a+b
	While c=<20:
	    print(c , End = "*")
	    c+=10
		[2]

3)a)	Fill in the blanks to execute loop from 10 to 100 and 10 to 1
	    i) for I in range (_____):
	           print(i)
	    ii) for I in range(_____):
	           print(i)
		[1]

b)	Write a program to generate the following pattern. 	D				
---	---	---	---	---
d	a			
d	a	n		
d	a	n	c	
d	a	n	c	e		**[2]**

c)	Convert the following code using while loop.
	
	L=[90,"Saamil",67,"Raashid",100,"Raj"]
	for i in range(len(L)):
	    if i%2==0:
	      print(L[i])
		[2]

d)	Write the output from the following code:
	s = 'Indian FESTIVALS'
	i = 0
	while i<len(s):
	   if (s[i].islower()):
	       print (s[i].upper(), end=" ")
	   if (s[i].isupper()):
	       print s[i].lower(), end=" ")
	   i + =1
		[1]

e)	Write a program to input any string with space and convert lowercase to uppercase and vice versa. And space must be replaced with '@'.	**[2]**

	Example : Enter the string : OOB gemsedu Converted string: oob@GEMSEDU	

4a)	Write a program to accept a first name, middle name and Last name of an employee and display only the first letter of first and middle name with complete last name as shown in the below example.
	    Example :
	   Enter Name : Raj Kumar Sharma
	   Output : R.K.Sharma
		[1]

b)	Differentiate string from a list with a good example.	**[2]**
c)	Write a program to count the number of vowels in a string. Example : Enter a string : COVID19 IS A Pandemic Number of vowels are : 7	**[2]**
d)	What will be the output of the following code? str="Hello Python" print(str) print(str[0]) print(str[2:8]) print(str[3:]) print(str*2) print(str+"string")	**[2]**

e)	Find the output for the following code.
	
	a="informatics4.com"
	for i in range(len(a)):
	   if (a[i].isalpha()):
	     print(a[i-1],end='')
	   if (a[i].isdigit()):
	      print(a[i],end='')
		[2]

5)a)	Write a program to input a sequence of numbers from a user and find the largest number . Example : Enter the elements : [5,20,100,34,78,99] Largest Number : 100	**[2]**
b)	Rahul has executed the following code to retrieve the position "Saahil" in the given list. Help Rahul to search the position of "Saahil". L=["Abhiram","Aadil","Basheer","Saahil","Furqan"] Output: Saahil is secured 4th position in running.	**[2]**

c)	Write a menu driven program to enter the price of each item in a list. If the customer pays 500 AED , then the bill should generate as shown below. Example: Enter the price of Item:78 Do you want to continue (y/n):y Enter the price of Item:100 Do you want to continue (y/n):y Enter the price of Item:67 Do you want to continue (y/n):n ************BILL************ Number of items: 3 Item of highest price: 100 Total: 245 Balance: 255	**[3]**
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