Roll No						

PRESIDENCY UNIVERSITY BENGALURU

SCHOOL OFINFORMATION SCIENCE

MAKEUP EXAMINATION – JAN 2023

	Date: 23-JAN-2023
Course Code: BCA1005	Time : 09:30 AM To 12:30 PM
Course Name: Programming in Python	Max Marks :100
Program & Sem: BCA	Weightage:50%

Instructions:

(i) Read all questions carefully and answer accordingly.

(ii) Every input in the program must be taken from user.

(iii) List/Tuple/Dictionary can be read from user using eval() or loops.

Part A

Answer all the Questions. Each question carries TWO marks.	(10Qx 2M=20M)		
1. Identify which exception is raised when a sequence index is out of range?	(C.O.No 3)[Knowledge]		
 Identify which keyword is used for function in Python language? a) function b) def c) fun d) define 	(C.O.No 3)[Knowledge]		
3. Identify the function which removes an item from the list and also displays the	he item to be deleted? (C.O.No 2)[Knowledge]		
 Identify the function which is used to read a csv file using pandas? a) pandas() b)read() c) read_csv() d)read_pandas() 	(C.O.No 4)[Knowledge]		
 a) pandas() b)read() c) read_csv() d)read_pandas() 5. Identify truncate division operator in Python? a) b) // c) / d) % 	(C.O.No 1)[Knowledge] (C.O.No 3)[Knowledge]		
6. Identify which of the following functions is not a built-in function in python?			
 a) factorial()b) print() c) seed() d) sqrt() 7. Identify the output of the following Python function? len(["hello",2,4,6]) 	(C.O.No 2)[Knowledge]		
a) Error b) 6 c) 4 d) 3			
8. Identify the right option to add new element to list:	(C.O.No 2)[Knowledge]		
a) list1.addEnd(5) b) list1.addLast(5) c) list1.append(5) d) list1.add	d(5)		
9. To open a file c:\scores.txt for reading, we use	(C.O.No 3)[Knowledge]		
a) infile = open("c:\\scores.txt", "r") b) infile = open(file = "c:\scores.txt"	t", "r")		
c) infile = open("c:\\scores.txt", "w") d) infile = open("c:\\scores	.txt", "a")		

10. Identify the output of the following Python code?

(C.O.No 1)[Knowledge]

(4Qx10M=40M)

i=1 while ⁻	True: if i%2==0: break print(i) i += 2				
a) 1		b) 1 2	c) 1 2 3 4 5 6 … <u>Part B</u>	d) 1 3 5 7 9	11
Answer a	all the Ques	tions. Each q	question carries TEN marks	S.	(4Qx10M=40M)
11. a) De	fine Operato	rs and Expres	ssions? List different types of	f operators. (4M))
b) Ex	olain any two	o types of Itera	ative control structures(loops) in python with	syntax and examples.(6M) (C.O.No 1)[Knowledge]
12. a) Exj	plain List and	d its any four N	Methods. (4M)		(C.O.No 2)[Knowledge]
b) Exp examples		n, deletion and	d updation(of elements) oper	ations performe	ed on dictionary with
13. a) Imp	plement a py	thon code to i	read text file contents line by	line.(4M)	(C.O.No 3)[Application]
b) Exp	lain any thre	e types of fun	ction arguments in python w	ith examples. (6	SM)
14. a) De	scribe atleas	st four method	ls of xlrd package with exam	ple:(4M)	(C.O.No 4)[Knowledge]
b) Expl	ain index op	erator[] and e	val() function with examples	:(6M)	

Part C

Answer all the Questions. Each question carries TEN marks.

15. You are working in ICICI bank. Your manager has asked to develop an application to calculate the loan interest based on the type of loan and loan amount **(using functions)**. Salary should be greater than 25000 otherwise invalid input. [**Note:** Loan interest amount= (Loan interest rate*Loan amount* No. of years)/100] (C.O.No 3)[Application]

Type of loan	Loan interest rate
1.Personal loan	10%
2.Car loan	8%
3.Home loan	6%

Sample Input and output:

Enter your loan choice: 1

Enter your loan amount: 500000

Enter your salary: 30000

Your loan interest amount for 5 years will be 250,000

16.Airtel company has wi-fi broadband plans. Details are given below in the table. Implement a python program which reads Plan Name and print plan price and Data Limit.. (C.O.No 1)[Application]

Plans Price	Plans Name	Data Limit
799	Basic	150 GB
999	Entertainment	300 GB
1499	Premium	500 GB

Sample Input and Output:

Enter your plan name: Premium Your plan price is 1499 Your Data limit is 500 GB

- 17. Professor John Smith, faculty of XYZ University is the faculty advisor of 6 students. He has collected the Id numbers and marks of his students. (C.O.No 2)[Application]
 - a) Help him to store the data in a suitable data structure(dictionary).
 - b) He wants to find out the lds of students having marks between 60 to 70.

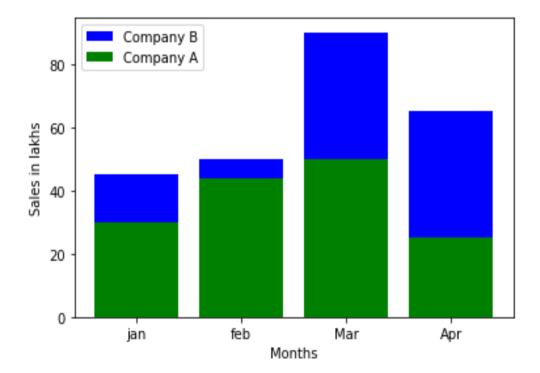
Sample Input and Output:

marklist = {'01':68, '02':75, '03':80, '04':40, '05':73, '06':90} Student lds having marks between 60 to 70 are: ['01', '05']

18. Oh! Its time to check a company's profit over bike sales between two reputed automobile companies, Company A and Company B. Company A's manager has been asked to give presentation on the same and now, he is worried how to analyze such huge amount of data to decide and prepare his presentation that depicts his company's bike sales over company B's bike sales over past 6 months. (C.O.No 4)[Application]

a) Initialize lists that contains company's sales details and month data for six months.

b) Plot either side by side bar graph or stacked bar graph.



Sample output graph: