UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, May 2022

Course: Programming for Analytics
Semester: IV
Program: BBA (ABD)   **Time   : 03 hrs.**
Course Code: DSBA3002   **Max. Marks: 100**

Instructions: Attempt all sections

	SECTION A 10Qx2M=20Marks		
S. No.		**Marks**	**CO**
Q 1	Write the outputs for the following snippets of Python code:		
a.	marks= input('Enter your marks:') type(marks)	**2**	**CO1**
b.	print(25%3)	**2**	**CO1**
c.	type(True)	**2**	**CO1**
d.	ar=1.5 ar=int(ar) type(ar)	**2**	**CO1**
e.	ax=1500 ay=2500 print(x==y)	**2**	**CO2**
f.	str1='data visualization' print(str1[2:8])	**2**	**CO2**
g.	a='Dehradun' print(a[-4:]*3)	**2**	**CO2**
h.	list1=['Chennai', 'Goa', 'Mumbai', 'Banglore'] print('NewDelhi' not in list1)	**2**	**CO2**
i.	str1='data mining' print(str1[1:-3])	**2**	**CO2**
j.	print(15//2)	**2**	**CO1**
	SECTION B 4Qx5M= 20 Marks		
Q2.	What is Python? What is type casting and type conversion in Python?	**5**	**CO1**
Q3.	What are dictionaries and sets? What is the key difference between the two?	**5**	**CO3**
Q4.	What are the common built-in data types in Python?	**5**	**CO2**
Q5.	What is break, continue and pass in Python?	**5**	**CO3**

	SECTION-C 3Qx10M=30 Marks		

Q6.	In reference to the lists in Python, explain the difference between:
	   a) append and extend
	   b) pop, remove and del
		10	**CO3**

Q7.	Explain how do the following functions work:
	   a) any() and all()
	   b) format() and next()
		10	**CO3**

Q8.	Write a Python program to check if a number given by the user is prime. OR What are lambda functions? Explain with examples the difference between lambda and normal functions.	**10**	**CO4**
	SECTION-D 2Qx15M= 30 Marks		

Q9.	A. Attempt both the parts:
	
	  i. Write a Python program, where user is asked to input a number and then the program checks if the number is positive, negative or zero and displays an appropriate message [use nested if statement].
	
	  ii. What will be the output for the following Python program:
	
	`inc = 0`
	`a = 'Language'`
	`while inc < len(a):`
	   `if a[inc] == 'a' or a[inc] == 'g':`
	     `inc += 1`
	     `continue`
	
	   `print('Current Letter :', a[inc])`
	   `inc += 1`
	
	OR
	
	   B. Write a Python Program to print the Fibonacci number series up to a limit given by the user.
	
	[Hint: Fibonancci number series is constructed as follows: 1st and 2nd terms of the series are 0 and 1 respectively. 3rd term is the sum of the 1st and the 2nd terms. 4th term is the sum of 2nd and 3rd terms. 5th term is the sum of the 3rd and 4th terms and so on….]
		15	**CO4**

Q10.	A. Write a Python program to print a list of numbers between 155 and 200 that are divisible by 6 B. Write the output for the following Python program: fnames = {1:'Megha', 2:'Amrita', 3:'Priya', 4:'Shivani'} print("1st name is "+fnames[1]) print("2nd name is "+ fnames[4]) print (d.keys()) print (d.values())	15	CO4