GEHV/02E/9.1.3

Graphic Era
Hill. University

MID TERM ODD SEMESTER EXAMINATION-2025

EVALUATION

Roll no.....

Name of the Program & Semester: B.Tech I SEM.
Name of the Course: Introduction to Python Programming
Course Code: TCS 102
Time: 1.5 hours **Maximum Marks:** 50

Note:
(i) Answer **all the questions** by choosing ***any one of the sub questions.***
(ii) Each question carries 10 marks

Q.1	**(10 marks)**	
a)	Describe and differentiate between LAN, WAN, PAN, MAN in terms of range, cost, usage and example.	CO1
	OR	
b)	Draw and explain the block diagram of a computer system and mention the examples of each.	CO1
Q.2	**(10 marks)**	
a)	Define the term internet and discuss its importance in today's world. Mention 5 services of the internet.	CO1
	OR	
b)	Draw a flowchart and develop a python program that takes total voltage and 2 currents as input from the user to calculate equivalent resistances in series and parallel. Rs = R1+ R2, Rp = ((1/R1)+(1/R2)).	CO2
Q.3	**(10 marks)**	
a)	Describe the following operators present in python along with a code: a. Bitwise operator b. Identity operator c. Membership operator d. Logical operators e. Relational operators	CO2
	OR	
b)	Develop a Python program that asks the user to enter a shape. If the user enters **"circle"**, then accept the radius and calculate the area of the circle. If the user enters **"rectangle"**, then accept the length and breadth and calculate the area of the rectangle. Display the computed area based on the selected shape.	CO2
Q.4	**(10 marks)**	

a)	Predict the output of the following Python code and justify your answer. Assume below code snippets are free from syntax errors.
	i)
	`def func(*args):`
	`  return sum(args)`
	`print(func(2))`
		CO2, CO3

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	print(func(3, 4))
	
	ii)
	s = "I like python programming"
	print(s[-1::-2])
	
	iii)
	x = 8
	y = 2
	print(x>>y, x<<y)
	
	iv)
	sol= lambda x: 2*x**2+2*x+1
	print(sol (3))
	
	v)
	for i in range(1, 10):
	  if i % 2 == 0:
	  print(i)
	  elif i%2!=0:
	  continue
	  elif i==5:
	  break	

	OR	
b)	Explain exception handling in python. Implement a python program to demonstrate try, except, finally and else statement in exception handling.	CO2
Q.5	**(10 marks)**	
a)	Build a menu driven program to perform the following tasks: a. Find the sum of odd digits in a number using recursion. b. Find the exponent (a**b) using recursion. c. Find the product of digits in a number using recursion	CO2, CO3
	OR	
b)	A delivery company records the distances (in kilometers) covered by each delivery truck for 30 days. Develop a Python program that using a for loop to accept the distance covered each day, and compute the total distance, average daily distance, and count of days the truck traveled more than 100 km. The program should display the computed values along with the proper message.	CO2