B.Tech. (Computer Science and Engineering)
Semester-IV
Subject: Programming with Python (BCO 081A)
Marks : 50

JECRC UNIVERSITY
BUILD YOUR WORLD

Assignment (Unit-1)

SECTION A (1*10=10 Marks)

1 [CO1] A _____ is a sequence of one or more characters used to provide a name for a given program element.
a. Identifier. b. Variable c. String d. Character

2 [CO1] What is the output of following statement?
Sum = 10 + '10'
a. 1010 b. 20 c. TypeError. d. None of the above

3 [CO1] _____ is an identifier that has predefined meaning.
a. variable b. identifier c. keyword. d. None of these

4 [CO1] What will be the output of the following statement?
print(15 + 20 / 5 + 3 * 2 - 1)
a. 19.0 b. 19 c. 12.0 d. 24.0.

5 [CO1] Operators with the same precedence are evaluated in which of the following orders?
a. Left to Right. b. Right to Left
c. Unpredictable d. None of the above

6 [CO1] Which of the following Python logical expressions can determine whether x and y are greater than z?
a. x & y > z b. (x > z) &(y > z)
c. (y > z) & (x > y) d. Both b and c e. All of the above

7 [CO1] Evaluate the following Boolean expressions. Consider the value of P, Q and R as 4, 5 and 6, respectively.
a. P > 7 b. P < 7 and Q > 2 c. P == 1 d. P > 2 || Q > 6

8 [CO1] How many operands are there in the following arithmetic expression?
6 * 35 + 8 − 25
a. 4 b. 3 c. 5 d. 8

9 [CO1] Guess the output of the following expression.
float(22//3+3/3)
a. 8 b. 8.0 c. −8.3 d. 8.333

10 [CO1] The operators is and is not are _____.
a. Identity Operators b. Comparison Operators
c. Membership Operators d. Unary Operators

SECTION B (2*4=8)

1. [CO1] What is an interpreter?
2. [CO1] Briefly explain binary left shift and binary right shift operators with examples.
3. [CO1] State the output of the following statements.
   a. print(format('Hello','>2')) b. print(format('Hello','<2'))
   c. print(format('Hello','>4')) d. print(format('Hello','>20'))

4. [CO1] Write a program that swaps the values of variables a and b. You are not allowed to use a third variable or any arithmetic operator.

SECTION C (6*2=12 Mark)

1. [CO1] Identify the error in the following piece of code. State the reason behind the error and explain how you will fix it.
   num1 = '10'
   num2 = 20.65
   sum = num1 + num2
   print(sum)
2. [CO1] Write a short note on data types in Python.

SECTION D (10*2=20 Mark)

1. [CO1] Explain different operators in Python with examples. What do you mean by precedence and associativity of operators?
2. [CO1] What will be the output of the following statements if all of them are executed in Python interactive mode?

a. abs(-2)	b. min(102,220,130)
c. max(-1,-4,-10)	d. max('A','B','Z')
e. max('a','B','Z')	f. round(1.6)
g. math.ceil(1.2)	h. math.floor(1.8)
i. math.log(16,2)	j. math.cos(math.pi)