PARUL UNIVERSITY
FACULTY OF IT & COMPUTER SCIENCE
MCA, Winter 2017 – 18 Examination

Semester: 5   **Date: 26/12/2017**
Subject Code: 05201333   **Time: 10:30am to 1:00pm**
Subject Name: Open Source Tools and Frameworks   **Total Marks: 60**

Instructions:
1. All questions are compulsory.
2. Figures to the right indicate full marks.
3. Make suitable assumptions wherever necessary.
4. Start new question on new page.

Q.1   Answer the following:
  A. Write short answers.   **[05]**
   1. List out any 4 features of Python.
   2. Write different ways to import module or package with examples.
   3. Write any two differences between "List" and "Tuple".
   4. How to define function in Python? Give short example.
   5. What will be the output of str[2:5] and str[: 3] if str = "Hello MCA".
  B. Answer the following: (Each of 01 marks)   **[10]**
   1. Which of these in not a core datatype?
        a) Lists   b) Dictionary   c) Tuples   d) Class
   2. How many except statements can a try-except block have?
        a) zero   b) one   c) more than one   d) more than zero
   3. Choose the correct syntax of constructor in Python class
        a) init()   b) init(self)   c) __init__(self)   d) __init__()
   4. Which is the correct operator for power(x^y)?
        a) X^y   b) X**y   c) X^^y   d) None of the mentioned
   5. Which of the following is not a keyword?
        a) eval   b) assert   c) nonlocal   d) pass
   6. List and Tuple are used for similar concept with different type of syntax. True or False?
   7. We MUST give default argument in functions of Python. True or False?
   8. "def" keyword is used to define variable in python. True or False?
   9. Which module in Python supports regular expressions?
        a) re   b) regex   c) pyregex   d) none of the mentioned
   10. Tuple is immutable. True or False?

Q.2   Answer the followings   **[15]**
   1. Explain __ init__ method in python.   (03)
   2. Write down difference between list and tuple.   (03)
   3. What is assertion? Explain its use in python with appropriate example.   (03)
   4. Write down about membership operator and identity operator.   (02)
   5. What is Django?   (02)
   6. What is CMS? Write features of Joomla.   (02)

Q.3   Answer the following. (Any three) (Each of 05 marks)   **[15]**
   1. Explain exception handling mechanism in python with example
   2. Write a python program to create a list. Also add, update and delete items from list.
   3. Explain various types of function arguments with example.
   4. Explain string datatype with example. Also discuss in-built string functions.

Q.4   Answer the following.
  A. Explain branching and looping concepts with appropriate examples.   **[05]**
  B. Explain with example database connection in python.   **[10]**
                                            OR
  B. Explain branching and looping statements in python with examples.   **[10]**