**KLS Gogte Institute of Technology, Belagavi**

**Department of Computer Science and Engineering Academic Year: 2019-20(ODD SEM)**

**Program: B.E (\_\_\_\_\_\_\_CSE\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_) Semester: Fastrack 2020**

**IA Test – I**

**Course Title:Python Programming** **Code: 16CS553**

**Max. Marks:25 marks Duration:1 HrDate: 25/9/19**

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| Instructions: | 1. | **Answer any 5 questions, each carries 5 M**. |
|  | 2. | **Programs must be documented and indented.** |
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| **Q. No.** | **Question** | **[L ]** | **[CO]** | **[PO]** | **[M]** |
| **1** | Why python is a great first language and explain 3 of its applications. Explain with a neat diagram how python compiles and runs source code. | **1, 3** | **1** | **1** | **5** |
| **2** | How would you use round function. Develop a python program to find the total and average of 3 scores which are input by the user. Round the average score to 2 decimal places | **3** | **1** | **3** | **5** |
| **3** | Develop a python program for the pseudocode given below.  Display user message  get monthly investment, yearly interest rate and years  convert yearly interest rate to monthly interest rate  convert years to months  set the future value to zero  FOR each month  add monthly investment amount to future value  calculate interest for month  add interest to future value  display future value | **2** | **1** | **1** | **5** |
| **4** | What is a list and how do you create it? How to use append, insert and remove items to/ from a list? Explain with suitable examples. | **3** | **1** | **3** | **5** |
| **5** | Explain with syntax and examples the iteration constructs provided by Python. Develop a Python program to generate n prime numbers using function prime(i) that returns true if i is prime and false otherwise. | **2** | **1** | **1** | **5** |
| **6** | Develop a python program to read a list with 5 items from the console. Search whether an item (key) which the user inputs, exists in the list. Display appropriate message. | **3** | **1** | **3** | **5** |
| **7** | Explain exception handling in python. Develop a calculator program in python which does the operation (i)Add (ii)Subtract (iii)Divide (iv)Multiply. Raise exceptions wherever necessary. | **3** | **1** | **3** | **5** |

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| **Quiz : 5 marks Duration : 15 minutes** | | | | | | |
| **Q.No** |  | **[L]** | **[CO]** | **[PO]** | **[M]** | |
| 1 | The three dictionary iterator methods are: \_\_\_\_\_\_, \_\_\_\_\_\_ and \_\_\_\_\_\_\_  \_\_\_\_\_\_\_\_\_\_\_\_. | 1 | 1 | 1 | | 0.5 |
| 2 | Which of these is mutable? a) list b) tuple c) int d) str |
| 3 | Python is a dynamically typed programming language. True/False |
| 4 | The developer of Python is \_\_\_\_\_\_\_\_\_\_\_\_\_\_. |
| 5 | The named arguments used in print function are \_\_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_. |
| 6 | input function returns a string. True/False |
| 7 | Python is platform-independent. True/False |
| 8 | \_\_\_\_\_\_\_\_ and \_\_\_\_\_\_\_\_ string methods convert the letters in a string to all lowercase and uppercase respectively. |
| 9 | When a local and global variable have same name, the local variable shadows the global variable. True / False |
| 10 | Coding one function as argument of another is called as \_\_\_\_\_\_\_\_\_\_\_\_\_. |