## <u>Beginner Level</u> <u>Module - 1</u>

## **Python Basics**

Course duration = 1 month (3 classes a week) Fee = 12000 pkr /month

## Course Outline:

- 1: Print
- 2: Variables for Strings
- 3: Variables for Numbers
- 4: Math expressions: Familiar operators
- 5: Variable Names Legal and Illegal
- 6: Math expressions: Unfamiliar operators
- 7: Math expressions: Eliminating ambiguity
- 8: Concatenating text strings
- 9: if statements
- 10: Comparison operators
- 11: else and elif statements
- 12: Testing sets of conditions
- 13: if statements nested
- 14: Comments
- 15: Lists
- 16: Lists: Adding and changing elements
- 17: Lists: Taking slices out of them
- 18: Lists: Deleting and removing elements
- 19: Lists: popping elements
- 20: Tuples
- 21: for loops
- 22: for loops nested
- 23: Getting information from the user
- and converting strings and numbers
- 24: Changing case
- 25: Dictionaries: What they are
- 26: Dictionaries: How to code one
- 27: Dictionaries: How to pick information out of them
- 28: Dictionaries: The versatility of keys and values
- 29: Dictionaries: Adding items
- 30: Dictionaries: Removing and changing items

- 31: Dictionaries: Looping through values
- 32: Dictionaries: Looping through keys
- 33: Dictionaries: Looping through key-value pairs
- 34: Creating a list of dictionaries
- 35: How to pick information out of a list of dictionaries
- 36: How to append a new dictionary to a list of dictionaries
- 37: Creating a dictionary that contains lists
- 38: How to get information out of a list within a dictionary
- 39: Creating a dictionary that contains a dictionary
- 40: How to get information out of a dictionary within another dictionary