

**Question Bank**  
**BCA-3001 Python Programming****Section-A**

1. Briefly explain about Python IDLE.
2. Explain about Logical operator and Boolean expression.
3. Write a program to check a given number is prime or, not. Number is given by user.
4. Write a program to print Armstrong numbers from 100 to 200.
5. Write the difference between List and Tuple.
6. What is module and package in python ?
7. What is generator in Python ? Explain with example.
8. Why do we need a date class in python ?
9. How can you raise an exception in python ? Explain with example.
10. Explain features of python language.
11. Explain the difference between implicit and explicit type conversions in python programming.
12. Explain about datatype used in python language.
13. Write a program to check a user-given number is odd or even.
14. Write a program to print all prime numbers from 1 to 100.
15. Write the difference between tuple and dictionary.
16. Define the remove() and discard() functions of python sets.
17. Illustrate the use of break, continue and pass keywords in python.
18. Relate pop() and del() methods of the dictionary.
19. Explain, can a mutable element be a member of a set. Use any example in support.

**Section-B**

1. What is Python programming cycle? Mention what are the rules for local and global variable in python. How can you share global variables across modules ?
2. Explain the need for continue, break and pass statements. Write a program in python where these three statements are implemented.
3. What is dictionary in python ? Write a Python program to convert a given dictionary into a list of lists.
4. Explain about string data type in python. What is slicing and indexing ? Explain about negative indexing. Give four examples of slicing and indexing with negative indexing.
5. Explain about functions in python? Write a python function to multiply all the numbers in a list.
6. Explain the type of arguments used in python function. Write the difference between a normal function and Lambda functions.
7. Write a program using lambda and filter method.
8. Write a python program to sort list of tuple using lambda module?
9. What is datetime module? Explain four different functions of datetime module.
10. Write a Python program to create a function for Fibonacci series from 1 to 30 and store this series to a list which will be further printed.
11. What is exception? Write the difference between Error and Exception.
12. Write a custom exception with multiple except blocks.
13. What are assertions in Python? Explain it with the help of suitable example.
14. Define the role of raise keyword in Python? Write a simple example to give custom exception including else and finally clauses.
15. Build a recursive python function to find a factorial of a given number.
16. Build a recursive python function to find a Fibonacci of a given number.

17. Inspect an user given string to remove all the punctuation in it, next split them into individual words and finally print a list of words in ascending order. Say input string is as: "Hello!!!, Yes this is the right time to: learn!!!! -----> python."

### Section- C

1. Explain about functions in python. Write a Python program using functions to find the roots of a quadratic equation.
2. What is lambda function? Explain the features of lambda function. Write a Python program to calculate the average value of the numbers in a given tuple of tuples using lambda.
3. What is time module ? Explain five functions of time module with example. Write a Python program to subtract five days from current date.
4. What is exception ? Explain about try, except, else and finally blocks used in exception handling. Write a user defined exception using exception class.
5. Define the concept of assertion in exception handling in python and write a program simple code as an example of assert keyword.
6. Illustrate the Python IDLE in detail.
7. What is looping? Explain with example.
8. Discuss the concept of try, except, else and finally blocks in Python. Explain how to handle multiple exceptions by giving a suitable example.
9. Write a python program to print Armstrong numbers between 1 to 1000.
10. Write a program in python to convert a list into tuple.
11. Write the features of dictionary with examples.
12. What is set in python? Write difference between set and dictionary?
13. Define the concept of Raising Exception with and without trace-back in python. Explain with example.
14. Differentiate between list indexing and list slicing. Explain with the help of examples.
15. What is calendar module? Explain any five calendar functions.
16. How to define multi line comments in Python? Explain the use of docstring in python using suitable example.
17. Write Python program to drop empty items from the dictionary.