CAMBRIDGE INSTITUTE OF TECHNOLOGY

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Department of Computer Science and Engineering

Subject Name: Introduction to Python Programming **Semester** : I

Subject Code: BPLCK105B (Programming Language Course) **Section** : C4 – C6

Question Bank for Internal Assessment 1

1. What is an Expression? How an Expression can be entered into the Interactive shell. **(RBT-Level 1)**
2. What is a data type? Also, explain the commonly used data types. **(RBT-Level 1)**
3. Explain string concatenation and string replication with suitable examples wherever needed. **(RBT-Level 1)**
4. What is a variable? How a variable can be stored and used in python. **(RBT-Level 1)**
5. Here is list of possible names for variables in Python language. Which are valid names and invalid names? If name is invalid, explain why? **(RBT-Level 2)**
   i) 1999_space ii) _apple iii) iNtEL iv) one_2v) for vi) #12 vii) i.b.m viii) help+me
6. Write a python Program for the following. Dissect the program and explain it in detail. **(RBT-Level 2)**
   - Sum of 2 float numbers
   - Area and perimeter of a circle
   - Area and perimeter [2*(l+b)] of a rectangle
   - Calculation of simple interest : ptr/100
   - Swap 2 numbers
   - Swap 2 numbers without using temporary variable
   - Convert temperature in degree to Fahrenheit
7. Explain typecasting with all necessary functions to determine typecasting. Give suitable example programs wherever needed. **(RBT-Level 1)**
8. What is called “commenting out” code? **(RBT-Level 1)**
9. Explain print() function in detail. **(RBT-Level 1)**
10. What is the usage of len() function. **(RBT-Level 1)**
11. Why does this expression cause an error? How can you fix it? **(RBT-Level 2)**

' I scored ' + 100 + ' marks.'

12. What should the following two expressions evaluate to? **(RBT-Level 2)**

'spam' + 'spamspam'

'spam' * 3

13. Which of the following is a variable, and which is a string? **(RBT-Level 2)**

spam

'spam'

14. Develop a program to read the student details like Name, USN, and Marks in three subjects. Display the student details, total marks and percentage with suitable messages. **(RBT-Level 2)**

15. Explain all the Comparison and Boolean operators.

16. Develop a program to read the name and year of birth of a person. Display whether the person is a senior citizen or not.

17. What is Boolean data type?

18. Explain the following flow control statements with syntax and example. **(RBT – Level 1)**

i) If ii) else iii) elif

19. Explain while loop & for loop with syntax and example in detail. **(RBT – Level 2)**

20. Explain the usage of continue and break in python with an example. **(RBT – Level 2)**

21. Write a program to calculate the sum and product of two numbers and display it. **(RBT – Level 2)**

22. Illustrate the use of * and + operators in string with example. **(RBT – Level 1)**

23. Write a Python program to print Fibonacci series upto n terms. **(RBT – Level 2)**

24. Draw a flow chart and write a program to find the sum of the series 1+2+3+……+100. **(RBT – Level 2)**

25. What is len() function and explain how it is used on strings with an example. **(RBT – Level 1)**

26. Write a python program to find the given number is odd or even. **(RBT – Level 2)**

27. How to early exit from a program? **(RBT – Level 2)**

28. Explain importing modules in python. **(RBT – Level 1)**

29. What is truthy and falsey values? **(RBT – Level 1)**

30. Explain None data type. **(RBT – Level 1)**

31. Explain Boolean data type. **(RBT – Level 1)**

32. What is the usage of keyword arguments. Explain with example programs. **(RBT – Level 1)**

33. How scopes are created in python? **(RBT – Level 1)**

34. Explain the usage of the global statement in python. **(RBT – Level 1)**

35. Explain global statement. **(RBT – Level 1)**

36. Develop a program for guessing a number between 1 and 20. **(RBT – Level 2)**

37. Explain how exceptions are handled in detail. **(RBT – Level 1)**

38. Write a function to calculate factorial of a number. Develop a program to compute binomial coefficient (Given N and R). **(RBT – Level 2)**

39. What is list data type? Give suitable examples. **(RBT – Level 1)**

40. Explain the working with lists – for loops in lists, in and not in operators, multiple assignment trick. **(RBT – Level 2)**

41. Explain the usage of augmented assignment operators. **(RBT – Level 1)**

42. Explain list methods with examples.

43. Write a python program for magic 8 ball with a list. Dissect the program and explain it indetail.