

**I B. Tech II Semester Regular Examinations, September- 2021**  
**PYTHON PROGRAMMING**

**(Com. To CSE, IT, CSE-AI&ML, CSE-AI, CSE-DS, CSE-AI&DS, AI&DS)**

Time: 3 hours

Max. Marks: 70

**Answer any five Questions one Question from Each Unit**  
**All Questions Carry Equal Marks**

**UNIT-I**

- 1 a) Summarize the precedence of mathematical operators in Python. (7M)  
 b) Illustrate various conditional statements used in Python programming. (7M)

Or

- 2 a) Write a Python program to demonstrate explicit type conversion. (7M)  
 b) Demonstrate the use of break and continue keywords in looping structure using a code snippet. (7M)

**UNIT-II**

- 3 a) Write a program to compute only even numbers sum within the given natural number using a continue statement. (7M)  
 b) Is String a mutable data type? Also explain the string operations length and slicing in detail with an appropriate example (7M)

Or

- 4 a) Compare and contrast for loop and while loop. (7M)  
 b) Write a Python program to check whether a given number is Armstrong number or not. (7M)

**UNIT-III**

- 5 a) Does mutability support for list, if yes explain any two methods with example? (7M)  
 b) Write a program to read one subject mark and print pass or fail Use single return values function with argument. (7M)

Or

- 6 a) Write a brief note on PIP. Explain installing packages via PIP. (7M)  
 b) Write a Python program to read a word and print the number of letters, vowels and percentage of vowels in the word using a dictionary. (7M)

**UNIT-IV**

- 7 a) Create a class Employee with data members name, department and salary. Create suitable methods for reading and printing employee information. (7M)  
 b) How to implement method overriding in Python? Explain. (7M)

Or

- 8 a) Write a Python program that reads a text file and changes the file by capitalizing each character of file. (7M)  
 b) Illustrate the concept of pure function with Python code. (7M)

**UNIT-V**

- 9 a) What s the difference between else block and finally block in exception handling? Explain with an example program. (7M)  
 b) How to create two radio button sets (one for gender and another for Indian or not) on the same canvas? Illustrate. (7M)

Or

- 10 Illustrate the use of the four main elements of scratch- Programming palette, storage area, Sprites and Script. (14M)

