

SP-I/Computer Science/101/C-1A/19

B.Sc. 1st Semester (Programme) Examination, 2019-20**COMPUTER SCIENCE****Course ID : 11518****Course Code : SP-CSC-101-C-1A**

Course Title : Problem Solving Using Computers

Time: 1 Hour 15 Minutes**Full Marks: 25***The figures in the margin indicate full marks.**Candidates are required to give their answers in their own words as far as practicable.*

- 1.** Answer *any five* questions: 1×5=5
- (a) Write down two functions of CPU.
 - (b) Write differences between top-down and bottom-up approach of Programming.
 - (c) Write down important characteristics of an algorithm.
 - (d) What is PVM?
 - (e) Write differences between interpreter and compiler.
 - (f) Write two advantages of flowchart.
 - (g) Why control unit of a computer system is called “Central nervous system”?
 - (h) What are the basic operations of a computer system?
- 2.** Answer *any two* questions: 5×2=10
- (a) Write down important features of Python. Explain them briefly.
 - (b) What are the important features of a computer? Write down differences between analog and digital computer.
 - (c) Write a program in Python to find HCF of 2nos.
 - (d) Draw a flowchart to display prime factors of a number.
- 3.** Answer *any one* question: 10×1=10
- (a) Explain memory hierarchy of a computer system. Differentiate between primary and secondary memory. What is locality of reference? What is hit ratio? 5+2+2+1=10
 - (b) Write a program in Python to check a no. is palindrome or not. Define tuple, frozen set 6+4=10
-