SP-I/Computer Sc.-101C-1A(T)/19

B.Sc. Semester I (General) Examination, 2018-19

COMPUTER SCIENCE

Course ID : 11518 **Course Code : SPCSC-101C-1A(T)**

Course Title : Problem Solving With 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 from the following: 1×5=5

(a) What is the full form of LSI?

(b) Name different types of Computers.

(c) What is the function of a register?

(d) What do you mean by flowchart?

(e) What is an algorithm?

(f) Write the full form of ALU.

(g) What do you mean by structured programming?

(h) What is the function of an interpretor?

2. Answer *any two* questions from the following: 5×2=10

(a) Describe the various generations of computers in brief.

(b) Draw the block diagram of a Von Neumann computer and state the functions of different components in brief.

(c) Distinguish between top-down and bottom up design methodology.

(d) Write a program in Python to compute the factorial of a given number.

3. Answer *any one* question from the following: 1×10=10

(a) Write an algorithm to compute the sum of the following series upto *n* terms:

$-x + \frac{x^2}{2} - \frac{x^3}{3} + \frac{x^4}{4}$ …….

Distinguish between algorithm and flowchart.

(b) Write a Python program to compute the sum of two compatible matrices.

———————