M. SC. (Computer Science) SEM – I (Choice Based Credit & Grade System): SUMMER - 2019 SUBJECT: PARADIGM OF PROGRAMMING LANGUAGES

Time: 03.00 PM TO 06.00 PM Day: Wednesday Date: 10/04/2019 Max. Marks: 60 S-2019-1243 N.B: All questions are **COMPULSORY**. 1) Figures to the right indicate FULL marks. 2) Draw neat and labeled diagram WHEREVER necessary. 3) **Q.1** Describe object oriented characteristics and explain object oriented concepts (15) in C++ language. **OR** Elaborate building blocks of a programming language. Q.2 a) Attempt ANY ONE of the following: (08)Explain event driven programming with proper example. i) ii) Describe procedure language with features and advantages. b) Attempt ANY ONE of the following: (07)Explain referencing environment with example. i) ii) Illustrate logic programming paradigm. Attempt ANY THREE of the following: Q.3 (15)a) Write characteristics of functional programming. b) Explain loop structure with proper example. Explain structure of a computer. c) d) Illustrate various features of a good language. Describe context free grammar with example. e) **Q.4** Write short notes on **ANY THREE** of the following: (15)a) Effects of environments on languages b) Parsing Fourth generation language c) d) Subroutines Recursive sub program