M. SC. (Computer Science) SEM – I (CBCS 2018 Course) : SUMMER - 2019

SUBJECT: PARADIGM OF PROGRAMMING LANGUAGES

Time: 03.00 PM TO 06.00 PM Day : Wednesday **Date** : 10/04/2019Max. Marks: 60 S-2019-1230 N.B. 1) All questions are **COMPULSORY**. 2) Figures to the RIGHT indicate FULL marks. Q.1 What is programming language? Explain the various types of programming (15) languages and effects of environments on languages. Illustrate types of conditional and looping structure with suitable example. Answer **ANY ONE** of the following: Q.2 A) (08)Describe function declaration and expression evaluation in functional programming. **b)** Explain multiple inheritance with suitable example using C++ language. **B)** Answer **ANY ONE** of the following: (07)a) Explain following object oriented concept: i) class ii) object iii) polymorphism iv) encapsulation. b) Illustrate logical programming paradigm with suitable example. **Q.3** Answer **ANY THREE** of the following. **(15)** a) Explain needs for studying programming languages. Describe context free grammar with suitable example. Explain database language paradigm. d) What is a data object? Explain variable declaration rules with proper example. Explain fourth generation language. e) **Q.4** Write short notes on **ANY THREE** of the following. (15)a) Recursive subprogram b) Parsing c) User defined data type d) Abstraction e) Syntax and semantics