Paper / Subject Code: 51425 / Paradigms & Computer Programming Foundation

1T01233 - S.E.(Information Technology Engineering)(SEM-III)(Choice Base Credit Grading System) (R- 19) (C

Scheme) / 51425 - Paradigms & Computer Programming Foundation

DATE: 05/06/2023

QP CODE: 10032684

(3 Hours) (Total Marks: 80 N.B.: 1. Question No.1 is compulsory. 2. Answer any three out of remaining questions. 3. Assume suitable data if necessary. 4. Figures to the right indicate full marks. **Q6.** Solve any four a) Compare Static Scoping vs. Dynamic Scoping b) Explain Inheritance in OOP c) How to choose a programming language? d) Explain Types of binding in Programming Languages **Q2.** a) Explain database manipulation commands in Prolog with an example. (10)(10)b) Explain different storage allocation mechanisms. Q3. a) What do you mean by Programming Paradigm? Explain with example the difference between declarative and imperative programming paradigm. (10)b) What are Scripting Languages? Explain characteristics of scripting languages. (10) a) What is logic programming? Explain Facts and Rules along with an example. **(10)** b) Discuss Call by value vs. Call by reference. (10)a) Explain Type and Type classes in Haskell. Q5, (10)b) Explain encapsulation. How does it differ from abstraction? (10)a) What is the role of an Exception Handler in a programming language? Briefly explain important tasks it performs. (10)b) Explain the life cycle of a thread with neat labeled diagram. (10)