

(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 (20)
- a) What are different Programming Paradigms?
 - b) List different problem domains for Prolog.
 - c) Explain list comprehension in Haskell with suitable examples.
 - d) Explain Storage management with suitable examples.
- Q2.** a) Explain various data types in Haskell. (10)
b) Explain unification and resolution in logic programming with suitable examples. (10)
- Q3.** a) Differentiate between static and dynamic binding with example. (10)
b) Write a Haskell code to find factorial of input number (05)
c) Explain how to use lists in prolog (05)
- Q4.** a) What are parameter passing methods? Explain each with suitable examples. (10)
b) Explain what are predicates, facts, rules and query in logic programming. (10)
- Q5.** a) What is exception handling? Explain what are checked and unchecked exceptions. (10)
b) Haskell belongs to which programming paradigms. Explain lambda calculus? (10)
- Q6.** Write short note on (Any 04) (20)
- a) Lambda Functions
 - b) Types of inheritance
 - c) List operations in Prolog.
 - d) Static v/s dynamic scoping.
 - e) Backtracking in Logic programming
