Code No: 155CX

R18

JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD
B. Tech III Year I Semester Examinations, February - 2022
PRINCIPLES OF PROGRAMMING LANGUAGES
(Common to CSE, IT)

Time: 3 Hours

Max. Marks: 75

Answer any five questions
All questions carry equal marks
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1. Explain the characteristics of Reliability of a programming language. [15]

2. Compare operational semantics and denotational semantics. [15]

3. How is the order of evaluation of attributes determined for the trees of a given attribute grammar? Explain. [15]

4. Define static, stack-dynamic, explicit heap-dynamic and implicit heap-dynamic variables. What are their advantages and disadvantages? [15]

5. Define shallow and deep binding for referencing environments of subprograms that have been passed as parameters. [15]

6. Describe the actions of the three Java methods that are used to support cooperation synchronization. [15]

7. Write a Scheme function that takes a simple list of numbers as its parameter and returns the largest and smallest numbers in the list. [15]

8. Write a function in LISP to read 'n' positive integers from user and find min, max and average of them. [15]

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