

Code No: 124DJ**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B.Tech II Year II Semester Examinations, March - 2022****PRINCIPLES OF PROGRAMMING LANGUAGES****(Information Technology)****Time: 3 Hours****Max. Marks: 75**

Answer any five questions
All questions carry equal marks

- 1.a) List the potential benefits of studying programming language concept.
- b) What are the three fundamental features of an object oriented programming language? [8+7]
- 2.a) What does it mean for a program to be reliable? Discuss.
- b) Describe some design trade-offs between efficiency and safety in some languages you know. [7+8]
- 3.a) Discuss the merits and demerits of short circuit evaluation.
- b) State whether static binding is more reliable or dynamic binding. Explain why. [8+7]
- 4.a) What is the importance of Named constants? Discuss with suitable examples.
- b) List the advantages of using control structures in any of the compiled programming languages. [8+7]
- 5.a) State the importance of Local Referencing Environments with suitable examples.
- b) What are the three general characteristics of subprogram? [8+7]
- 6.a) In what way co-routines are different from conventional subprograms? Explain.
- b) Describe the way that aliases can occur with pass-by-reference. [7+8]
- 7.a) List and explain the merits and demerits of subprogram level concurrency.
- b) Give an example for exception handlers in Ada language. [8+7]
- 8.a) Write features of Haskell that makes very different from schema.
- b) What are the advantages of Python scripting language over other scripting languages? Explain. [8+7]

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