

II B. Tech II Semester Supplementary Examinations, April - 2021
PRINCIPLES OF PROGRAMMING LANGUAGES
(Com to CSE, IT)

Time: 3 hours

Max. Marks: 70

- Note: 1. Question Paper consists of two parts (**Part-A** and **Part-B**)
2. Answer **ALL** the question in **Part-A**
3. Answer any **FOUR** Questions from **Part-B**

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**PART -A**

1. a) Write BNF notation for 'do-while' loop. (3M)
- b) Write a brief note on aliases. (2M)
- c) Give an example for constructor overloading in Java. (2M)
- d) Explain about cooperation synchronization with monitors. (2M)
- e) Define domain set and range set w.r.to functional languages. (3M)
- f) Define logic programming. (2M)

**PART -B**

2. a) Give a comparison between Fortran, COBOL and Lisp. (7M)
- b) Discuss about language recognizers and language generators. (7M)
3. a) Write about static variables, stack dynamic variables and heap dynamic variables. (7M)
- b) What are the four times bindings can take place in a program? Explain with examples. (7M)
4. a) Explain the design considerations for choosing parameter passing methods. (7M)
- b) Write about generic subprograms in Ada and C++. (7M)
5. a) Differentiate between procedural and object oriented languages. (7M)
- b) What are the merits and demerits of subprogram level concurrency? (7M)
6. a) Discuss about function declarations and control statements in ML. (7M)
- b) What is Common LISP? Compare it with LISP. (7M)
7. a) What is the purpose of predicate calculus? How it helps in theorem proving? (7M)
- b) Write about list structures in Prolog. (7M)