



Reg. No. : .....

Name : .....

**Sixth Semester B.Tech. Degree Examination, June 2018**  
**(2008 Scheme)**  
**08.602 : PRINCIPLES OF PROGRAMMING LANGUAGES (R)**

Time : 3 Hours

Max. Marks : 100

**PART – A**

Answer **all** questions.

**(10×4=40 Marks)**

1. What is structured programming ? Give the constructs for structured control flow.
2. Differentiate between objects and class.
3. What are the characteristics of functional programming languages ?
4. What is dynamic scoping ? Explain.
5. Write short note on type checking.
6. What is a relation in logic programming ? How rules and facts are defined ?
7. Explain the interleaving of threads.
8. Explain scoping rules in scripting languages.
9. Write short notes on data abstraction.
10. What is meant by unification ? Explain.

**PART – B**

Answer **any one full** question from **each** Module.

**Module – I**

**(20 Marks)**

11. a) Explain the approaches to expression evaluation in detail. 10
- b) Explain a polymorphic function for swap  $(x, y) = (y, x)$ . 10

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12. a) How do arrays differ from records ? What are variant records ? 8  
b) With an example explain dynamic allocation. 12

**Module – II**

**(20 Marks)**

13. a) What are the different methods of parameter passing ? Explain them with an example. 12  
b) Explain the data structures used in PROLOG. 8
14. a) What are the various features of object oriented programming ? Explain in detail. 12  
b) With an example explain single inheritance and multiple inheritance. 8

**Module – III**

**(20 Marks)**

15. a) Write short notes on virtual machines management. 10  
b) Explain string and pattern matching in scripting languages with an example. 10
16. a) Briefly explain various synchronization strategies in programming languages. 10  
b) Explain dynamic scoping in scripting languages. 10