

Total No. of Questions : 12]

SEAT No. :

P1668

[5058]-156

[Total No. of Pages : 2

T.E.(Computer)

PRINCIPLES OF PROGRAMMING LANGUAGES
(2008 Pattern) (Semester-II)

Time : 3 Hours]

[Max. Marks : 100

Instructions to the candidates:

- 1) *Attempt Q.1 or Q.2, Q.3 or Q.4, Q.5 or Q.6 from Section I and Q.7 or Q.8, Q.9 or Q.10, Q.11 or Q.12 from Section II.*
- 2) *Answer to the two sections should be written in separate answer books.*
- 3) *Neat diagrams must be drawn wherever necessary.*
- 4) *Figures to the right side indicate full marks.*
- 5) *Assume Suitable data if necessary.*

SECTION-I

- Q1)** a) What are characteristics of good programming language? [8]
b) Explain parallel programming and concurrent programming paradigms. [8]

OR

- Q2)** a) Explain the control flow statements in C. [8]
b) Describe with examples implementation and storage representation of data types. [8]

- Q3)** a) Explain the basic elements of PASCAL programming language. [8]
b) Describe desirable and undesirable characteristics of procedural programming. [8]

OR

- Q4)** a) Which are the different parameter passing technique in PASCAL? [8]
b) Compare and differentiate C and PASCAL. [8]

- Q5)** a) Explain the socket programming in Java. [8]
b) Explain the multithreading with using Thread class and Runnable interface. [10]

OR

- Q6)** a) Explain the method overloading, overriding, dynamic method dispatching. [4]
b) Explain the exception handling in java.
c) Write short note on JDBC. [6]

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SECTION-II

- Q7)** a) Describe the structure of C# program. [8]
b) Explain the various components of .NET framework. [8]

OR

- Q8)** a) Explain with example delegates & event handlers. [8]
b) Explain multithreading in C#. [8]

- Q9)** a) Explain resolution and unification in Prolog. [6]
b) How goal is resolved in Prolog. [6]
c) What is cut operator in PROLOG? [4]

OR

- Q10)** a) Explain the facilities and deficiencies of Prolog. [8]
b) What are different searching techniques supported by logic programming? [8]

- Q11)** a) Explain free and bound variables, reductions in functional programming. [10]
b) What are different applications of Functional Programming? [8]

OR

- Q12)** a) Explain the expression evaluation in functional programming. [10]
b) Explain the carcdr, nthcdr, map, cons, append, reverse. [8]

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