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Printed Pages : 3 TCS504

(Following Paper ID and Roll No. to be filled in your Answer Book)

PAPER ID : 1076 Roll No.

B.Tech

(SEM V) ODD SEMESTER THEORY EXAMINATION 2009-10
PRINCIPLES OF PROGRAMMING LANGUAGES

Time : 3 Hours] *[Total Marks : 100*

Note : *Attempt all questions.*

1 Attempt any **four** parts of the following : **5×4=20**

(i) What are part arrays and variant records ?

(ii) Explain in brief free - and fixed field formats of syntax.

(iii) Explain abstract data types with examples.

(iv) Write brief note upon abstraction.

(v) Explain variable size data structure with example.

(vi) What is binding and binding time ?

2 Attempt any **four** parts of the following : **5×4=20**

(i) List and explain major characteristics of a good programming language.

(ii) Briefly discuss the development in programming methodology.

(iii) Write note on virtual computers.

(iv) Discuss various classes of binding time.

(v) What do you understand by software simulated computers ?

(vi) What are language translators ? Discuss the need of language translators.

3 Attempt any **two** parts of the following : **10×2=20**

(i) Describe sequence control and its types. What are recursive subprograms ?

(ii) What is parameter passing what are actual and formal parameters ? Explain call by value and call by reference.

(iii) Describe implicit and explicit sequence control with example.

4 Attempt any **two** parts of the following : **10×2=20**

(i) Describe heap storage management and its advantages.

(ii) Describe various syntactic criteria.

(iii) Differentiate interpreters and compilers.

5 Attempt any **two** parts of the following : **10×2=20**

(i) Describe in detail the object oriented programming methodology and its advantages.

(ii) What do you understand by operating and programming environment. List various attributes of a good operating and programming environment.

(iii) Compare C and LISP on the basis of various attributes.

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