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Roll No.

F-184

B. Tech. EXAMINATION, May 2017

(Sixth Semester)

(B. Scheme) (Main & Re-appear)

(IT)

IT-308-B

PRINCIPLES OF PROGRAMMING
LANGUAGES

Time : 3 Hours]

[Maximum Marks : 75

Before answering the question-paper candidates should ensure that they have been supplied to correct and complete question-paper. No complaint, in this regard, will be entertained after the examination.

Note : Attempt *Five* questions in all, selecting at least *one* question from each Unit. Each question carries equal marks.

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P.T.O.

Unit I

1. (a) List *five* benefits of studying different programming languages. 7½
(b) Briefly explain the process of compilation of a program written in high level language. 7½
2. Write and elaborate at least *eight* essential characteristics of object oriented programming languages. 15

Unit II

3. Describe any *two* mechanisms using which the programmers can create new data types of their choice in addition to the data supported by a programming language. 15
4. (a) Explain any *four* operations which are performed on the data stored in a structured data type. 8
(b) Describe the packed and unpacked representation of elements of an array. 7

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Unit III

5. (a) List the different kind of associations which take place during the execution of a program. Explain with the help of suitable example. 10
(b) Define a referencing environment. List the main components of the referencing environment of a program. 5
6. Explain the different parameters transmission schemes used for establishing the connection between actual and formal parameters of a subprogram. 15

Unit IV

7. What are the storage management phases ? Discuss the “heap storage management with variable size elements”. 15
8. Write major runtime elements which require storage during lifetime of a program. 15

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