

16/7/2016

4E4165

Roll No. _____

Total No of Pages: **3**

4E4165

B.Tech. IV-Sem (Main & Back) Exam; June-July 2016

Computer Science & Engineering

4CS6A Principles of Programming Languages

Common with CS, IT

Time: 3 Hours

Maximum Marks: 80

Min. Passing Marks (Main & Back): 26

Min. Passing Marks (Old Back): 24

Instructions to Candidates:-

*Attempt any **five questions**, selecting **one question** from **each unit**. All Questions carry **equal** marks. Schematic diagrams must be shown wherever necessary. Any data you feel missing suitably be assumed and stated clearly.*

Units of quantities used/ calculated must be stated clearly.

Use of following supporting material is permitted during examination.

(Mentioned in form No.205)

1. NIL _____

2. NIL _____

UNIT-I

Q.1 (a) What is need of Programming Language? And also explain types of programming paradigms? [8]

(b) What are main features of good programming language? [8]

OR

Q.1 (a) Define Binding and Binding time? What are the different types of binding in respect of programming? [8]

(b) What is compiler? Explain phases of compilers for given expression

$R := K + T * 30$ [8]

UNIT-II

- Q.2 (a) Explain type checking and type conversion with suitable Example? [8]
(b) What are files? Explain various types of files? [8]

OR

- Q.2 (a) Explain the Implementation of structure and union? [8]
(b) What is difference between array and vector? Explain multi-dimensional Array? [8]

UNIT-III

- Q.3 (a) What is Exception handling? Explain difference Between Exception and Compilation Error? [8]
(b) What is SUB-Program? Explain difference between simple and reursive SUB Program? [8]

OR

- Q.3 (a) What are the actual and formal parameters? Explain with suitable example? [8]
(b) What is sequence control? Example sequence control for recursive SUB Program? [8]

UNIT-IV

- Q.4 (a) What do you mean by static and dynamic scope of a data member? [8]
(b) Explain various parameters transmission:- [8]
(i) Call by value
(ii) Call by reference

OR

- Q.4 (a) What is difference between local and shared data? [8]
(b) Write short notes ON Tasks? [8]

UNIT-V

- Q.5 (a) Explain static and stack- Based storage management? [8]
(b) Explain storage management fixed and variable size heap data element? [8]

OR

Q.5 Explain with example (ANY FOUR):- [4×4=16]

- (a) Garbage Collection
 - (b) Type definition
 - (c) Abstract Data type
 - (d) Information hiding
 - (e) ENCAPSULATION
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