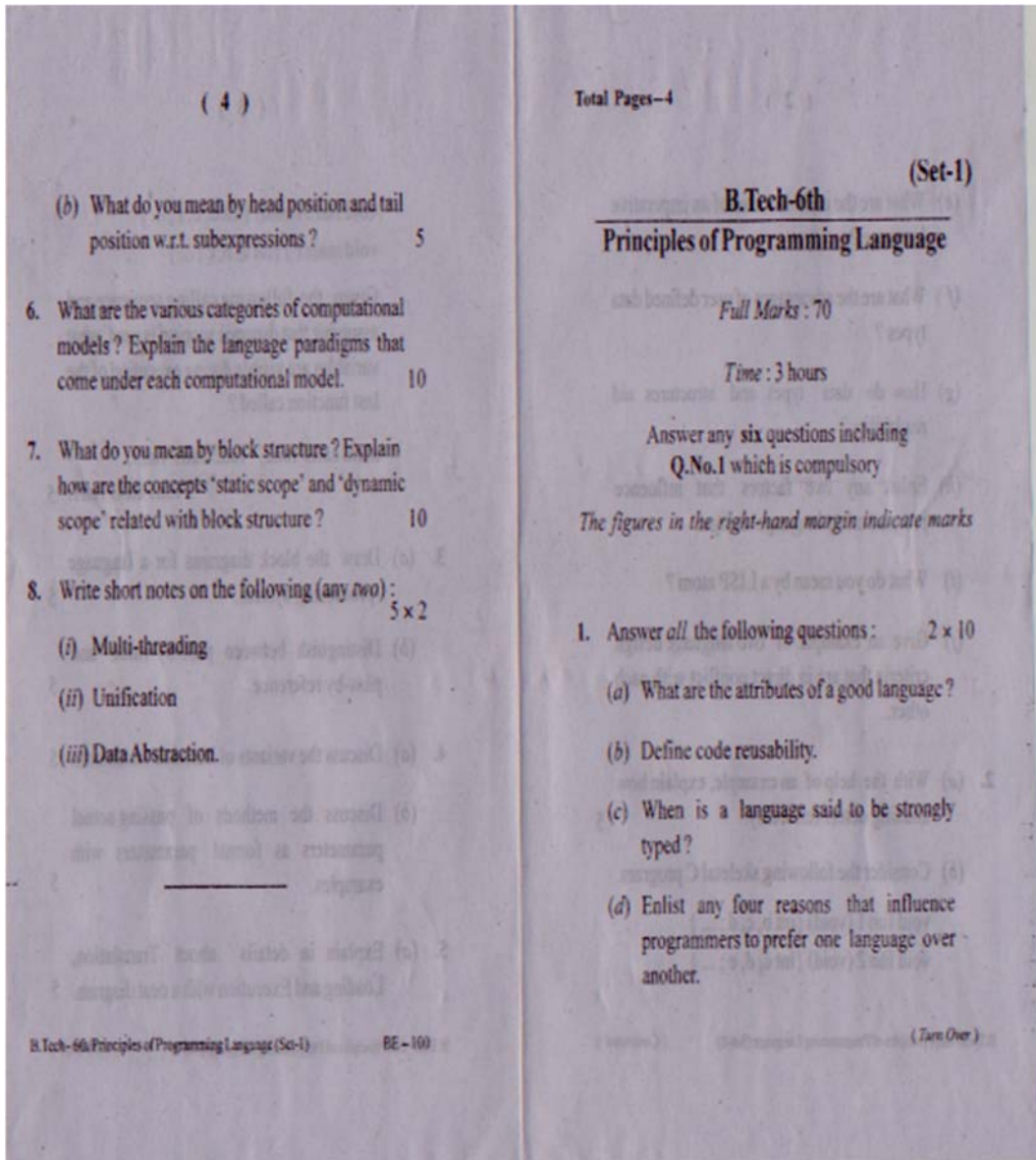


VEER SURENDRA SAI UNIVERSITY OF TECHNOLOGY, BURLA
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING
& INFORMATION TECHNOLOGY
SESSION 2014-2015 (EVEN SEMESTER)



- (e) What are the main features of an imperative language?
- (f) What are the advantages of user defined data types?
- (g) How do data types and structures aid readability?
- (h) Enlist any two factors that influence programming language design.
- (i) What do you mean by a LISP atom?
- (j) Give an example of two language design criteria that are in direct conflict with each other.
2. (a) With the help of an example, explain how aliasing deters reliability. 5
- (b) Consider the following skeletal C program.
- ```
void fun 1 (void) {int b, c, d; ... }
void fun 2 (void) {int c, d, e; ... }
```

```
void fun 3 (void) {int d, e, f; ... }
void main () {int a, b, c; ... }
```

Given the following calling sequence and assuming that dynamic scoping is used, what variables are visible during execution of the last function called?

main calls fun2, fun2 calls fun3,  
fun3 calls fun1. 5

3. (a) Draw the block diagrams for a language processing system. 5
- (b) Distinguish between pass-by-value and pass-by reference. 5
4. (a) Discuss the variants of iteration statements. 5
- (b) Discuss the methods of passing actual parameters as formal parameters with examples. 5
5. (a) Explain in details about Translation, Loading and Execution with a neat diagram. 5