CS 507 – Theory of Programming Languages – Assignment 1

Deadline: 15th Feb, 2018 in class or online (by 8 am) Late submissions will result in marks deduction

Q.1

Considering the language categories like imperative, functional, logic and object oriented, differentiate these with respect to their features?

Q.2

What is the importance of Reliability and Orthoganality in Languages Evaluation Criteria? Explain with examples.

0.3

Write down a program in SNOBOL that calculates the product of integers from 1 to 35 using loop.

Q.4 (to be discussed in class on Tuesday)

Consider the following pattern:

 $\mbox{MY_PATTERN} = (("\mbox{IF"} \mid "\mbox{THEN"}) \mbox{. CONDITIONAL ("\mbox{DO"} \mid "\mbox{WHILE"}) \mbox{. CONTROL ("ENUM"} | "END ENUM")) \mbox{. FINAL}$

MY_SUBJECT = "ENUM ENDIFTHENELSEWHILEIFDOEND ENUM" MY_SUBJECT MY_PATTERN

Explain the code written in the above programs in your words. Also give values of variables CONDITIONAL, CONTROL and FINAL after the execution of the last statement.