uc3m Universidad Carlos III de Madrid

DEPARTMENT OF COMPUTER SCIENCE CARLOS III UNIVERSITY OF MADRID

Computer Science Language Processors

Rules

- The duration of the test is **30 minutes**
- Questions will not be answered during the test
- One cannot re-enter the classroom after leaving it
- The answers must be written using a pen (not a pencil)
- 1.- Write which is the phase and module of the compiling process that would carry out the following functions:
- a) Assign a variable to the register 5.
- b) Identify loop as a label.
- c) Detect that in an assignment sentence, types are not compatible.
- d) Change ind +4*4 by ind +16.
- e) Create the syntax tree.
- f) Detect that a variable has not been declared.
- 2.- Describe in detail which are the steps for developing a lexical analyzer given a regular expression.

