

1995 Paper 11 Question 1

Modula-3

Define the Modula-3 terms *positional parameter* and *named parameter* and write a program fragment which illustrates the difference. [5 marks]

Write a procedure `FmInD` which is designed to format an `INTEGER` to a specified (`CARDINAL`) field width, returning the result as `TEXT`. To take a simple case, `FmInD(-246,7)` would return `-246` as `TEXT` but padded with three leading spaces to make a field width of 7 characters.

If the specified field width is too small, as in `FmInD(-246,3)`, then the minimum sensible width is used (4 in this case). If no field width is specified, a default value of 8 is assumed.

The only library procedure which you may use is `Fmt.Char` which converts type `Char` to type `TEXT`. The procedure should be carefully annotated to explain how it works.

[15 marks]