EICO022 | TEORIA DA COMPUTAÇÃO | 2017/2018 - 1º SEMESTRE

Exercise 6 – Regular Languages

Which of the following languages are regular languages, and which are not? Provide a short justification for each language.

a)
$$A = \{0^n \mid n = p!, p \ge 1\}$$

b) B =
$$\{0^p 1^q \mid p \ge 1, q \ge p\}$$

c)
$$C = \{0^n 0^n \mid n \ge 2\}$$

d) D =
$$\{0^p 1^q \mid p, q \ge 0\} \cup \{0^n 1^n \mid n \ge 1\}$$