

**Problem C13. (Unified Computers and programming)**

1. Solve the following recurrence equation using the iteration method. Show all the steps in your derivation.

$$T(n) = \begin{cases} c & n = 1 \\ aT\left(\frac{n}{b}\right) + cn & n > 1 \end{cases}$$

Where  $a, b, c \geq 1$ .