



UNIVERSITA' DEGLI STUDI
ROMA TRE
CdS in *Biomedical
Engineering*

corso di
***Signal Processing for Biomedical
Engineering***

Written test of June 28th 2017.

note: This test is valid only for registered students. Test delivery implies that previous results are canceled.

Family and first name (printed): _____

signature: _____

Roma3 registration number: _____ or ID card number: _____

born on (day/month/year): _____ / _____ / _____

In the academic year 2016/2017 registered at the ____ year of the master course in

e-mail (write in clear letters): _____ @ _____

Esercizi:

- 1) Let $x(n) = s(nT)$ be the sequence obtained from sampling with the period T of the analog signal $s(t)$. Perform an **effective** digital processor to obtain at the output the sequence: $y(n) = s(0.8 n T - 0.3 T)$.
- 2) Perform a linear FIR filter made of 5 coefficients to neglect low frequency contents for $|\omega| < \pi/8$ (being ω the radian normalized frequency).