

Università degli studi “Roma Tre”

A.Y: 2022/2023

Teaching: Sistemi Operativi

Course: Ingegneria Informatica

Exam session: 07/02/2022 – Written test

Lecturer: Romolo Marotta

Maximum score: 21 points

STUDENT ID _____ Last Name _____ First Name _____

It is recommended that you write your surname and name on this sheet and use it as a folder to contain the answer sheets. If you consider a question ambiguous, write down your interpretation and respond accordingly.

Question 1 (6 points)

Describe the First-Come-First-Serve CPU scheduling policy, highlighting its advantages and disadvantages.

Question 2 (6 points).

Describe the salient features of the UNIX file system.

Question 3 (9 points).

Given a main memory of 4 frames, determine how many and which page faults are generated by the FIFO, LRU and Optimal algorithms for page replacement in systems with virtual memory given the following trace:

0 1 2 3 1 4 5 1 2 3 5 6 7 5 3 5 6

The publication of the result via Web will take place anonymously using the serial number. To have your exam grade published on the course website, you must sign the following authorization.

The undersigned, pursuant to law 675 of 31/12/96, authorizes the lecturer to publish the results of the exam on the bulletin board and / or on the Web. In faith

Legible signature: _____