

SURNAME: _____

NAME: _____

Sheets: 1

ADMINISTRACIÓ DE SISTEMES OPERATIUS
17 de Desembre de 2007

The exam is individual.

Answer in the given space.

Write your Name in all sheets.

You can't use any book or notes.

Time: 1h 50 minutes. (You can't leave the room before the first hour)

1. (2 punts)

a) Explain what are the disk quotas and which limits they allow to define.

b) Explain what would you do if wanted to be notified when users exceed their quota (not necessarily immediately).

2. (1 punt) Explain what are the *runlevels* and what are they useful for.

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- e) The use of temperature and humidity sensors are fundamental part of the security of our systems.

 - f) To monitor correctly the virtual memory of the system will have to control the disk activity.

 - g) Using compression in our backups is the safest way to increase the amount of data that we can fit in a device.

 - h) The SUID bit allows us to control which users can execute an application which we own.
6. (2,5 punt) We want to add a new special user to our system that allows our guests to check their mail and surf the Web. We will use an application called MyKiosk that is currently not installed in our system. MyKiosk is application that allows us to configure a directory and it will only allow users to execute programs from that directory (following the regular permission rules). Take into account that the guest account must not see any file from the other users and must only be able to execute the applications configured in MyKiosk. We also want that guests cannot write to disk to avoid problems between multiple guests. Explain all the steps that you would follow in your system to achieve this. **If in any step, there's more than one choice reason the option you have chosen.**