1) List four or more benefits of flash memory compared to a hard drive.

1. because of its small size, low power consumption, and light weight, flash memory is frequently the secondary storage of choice for tablets, smartphones, and other mobile devices, as well as for the memory cards that plug into portable and mobile devices such as portable music players, and digital cameras.

2. data on a flash RAM can be accessed about 100 times as fast as data on a magnetic disk drive, while the read/write speed of both devices is roughly comparable.

3. An SSD has no moving parts, so it is more likely to keep your data safe in the event your drop your laptop bag or your system is shaken about by an earthquake while it’s operating.

4. faster hard drives will make more noise than those that are slower. SSDs make virtually no noise at all, since they’re non-mechanical.

5. An SSD doesn’t have to expend electricity spinning up a platter from a stand still. Consequently, none of the energy consumed by the SSD is wasted as friction or noise, rendering them more efficient.

Reference:

1. The - Irv Englander *The Architecture of Computer Hardware and System Software A , 5th Edition,* Page 298.
2. https://www.pcmag.com/article2/0,2817,2404258,00.asp