

A If you want to make sure your treasured photographs are available for future generations to enjoy, then the safest option is not to back them up on your hard drive, or store them remotely in the cloud, but to print them out. Recent history has shown that, as technology advances, data storage formats such as audio cassettes, floppy disks or video tapes quickly become **obsolete** making the data they hold **inaccessible**. With this in mind, if we want to preserve our digital lives in the same way we preserve our history in books, we need to make sure that the digital objects we create will be available in centuries to come. One way to do this would be to create a system which will not only store a digital format but hold details of the software and operating system needed to access it, so it can be recreated in the future. Until such a system is in place, printing out your photos and sticking them in the family album remains your best option.

B Storing files remotely rather than on fragile discs or **clunky** hard drives certainly proves helpful for professional as well as home users. One of the biggest advantages of using cloud storage is that it helps to add another layer* of protection for **irreplaceable** and precious files. Secure locations are chosen for the backups that are physically removed from originals. As a result, data kept within the cloud services remains absolutely safe and secure from all types of **unauthorised** use or access. However, there are **potential** pitfalls to storing your data in the cloud and, despite media scaremongering about security issues, perhaps the biggest downside is the likelihood* of technical failure or connectivity issues rendering your files unavailable at just the moment you need to access them.

C Cloud storage removes the need for portable data storage devices and therefore tackles the problem of ageing formats and hardware. However, as recent leaks* of celebrities' private photographs have proved, the cloud may not be a safe place to store personal files. With certain settings, anything you do on your phone is uploaded to the cloud then pulled down by your other devices. Convenient? Yes, but the sacrifice* required is **compromised** security because your data is actually sitting on a server in 'the cloud' on someone else's computer and is therefore **vulnerable** to hackers. There are, of course, ways of encrypting data or stopping it from being uploaded to the cloud but in my opinion, the most effective way of ensuring that sensitive information does not get into the wrong hands is not to record it on a cloud-based device in the first place.

D Research suggests that although some storage devices may last longer than a decade, others may stop working after little more than a year. For this reason, it is vital to regularly create and update copies of your most important data on different storage devices. Even then, considering the rapid evolution of data storage formats, there is no guarantee that your files and photos will be accessible even a few years from now. Cloud storage is being hailed as a solution, but science is looking to nature to find the best way to store data in a manner that will guarantee its availability far into the future. Researchers in Switzerland believe the answer may lie in the data storage system that exists in every living cell: DNA. Fossils* prove that in the right conditions, strands* of DNA can store data for close to a million years. Moreover, its strands are so compact and complex that just one gram of DNA is theoretically capable of containing all the data of Internet giants such as Google and Facebook, with room to spare.

Which writer

- 1) agrees with A about the importance of finding long-term data storage solutions?
- 2) is concerned about a different problem with data storage from the other writers?
- 3) disagrees with C about the risks involved in data storage?
- 4) agrees with B about the importance of backing up data?
- 5) refers to a specific media incident to justify a point of view?
- 6) reports a biotechnological innovation in storage?
- 7) suggests an old-fashioned solution to a modern problem?
- 8) questions the validity of an attitude taken by the media?

