Physical Security

Please review the following Fencing options.
Explain each one briefly and explain where, in your opinion is the appropriate place for each type.

1. Rotating Spikes
-Description: installed at the top of walls, gates or fences; the trip-wing spike collars rotate around a central spindle;
-Comments (appropriate for): designed for high-security areas; can be painted to blend into fencing;

2. Anti-Climb Paint
-Description: a nontoxic petroleum gel-based paint that is thickly applied and does not harden, making any coated surface very difficult to climb;
-Comment (appropriate for): typically used on poles, downpipes, wall tops, and railings above head height (8 feet or 2.4 meters);

3. Roller Barrier
-Description: independently rotating large cups (diameter of 5 inches or 115 millimeters) affixed to the top of a fence; prevents the hands of intruders from gripping the top of a fence to climb over it;
-Comment (appropriate for): often found around public grounds and schools where a nonaggressive barrier is important;

4. Anti-Climb Collar
-Description: spiked collar that extends horizontally for up to 3 feet (1 meter) from the pole to prevent anyone from climbing it; serves as both a practical and visual deterrent;
-Comment (appropriate for): used for protecting equipment mounted on poles like cameras or in areas where climbing a pole can be an easy point of access over a security fence;

-CompTIA Security+ Guide to Network Security Fundamentals

Backup Solutions

You are the IT consultant to a petrochemical company.
The company has ten servers and 250 workstations located in San Francisco and New Orleans. They are currently using tape cartridge backup on a nightly basis. What is the obvious flaw in this solution?

Using tape cartridge as backup has been used for over 40 years as data backups mainstay. It can store hundreds of gigabytes of data and are relatively inexpensive. The disadvantages include slow backup speed, high failure rates, and data not encrypted on tape.

Alternatives are becoming popular, such as disk to disk.
A common strategy for performing backups using tape include:
-Daily incremental backup performed each Monday through Thursday;
-Weekly backup done every Friday (instead of the daily backup);
-Monthly backup performed the last day of the month;

If the company in the description are backing data using tapes, this process might be time consuming and difficult to retrieve recorded data amongst other types of backups.

-Security+ Guide to Network Security Fundamentals, 5th ed

You are asked to search the Internet and other resources to come up with a viable online backup solution. There are many online backup solution providers, all the way from free ones such as 'One Drive', 'Carbonite', and 'Crash Plan'.

Identify the flaws in the current situation and then find the best online option by comparing the features and the cost. Also, the reason for selecting the best option.

Online backup solution	Flaws	Features	Cost	Reason for selection
Microsofts One Drive (Syncing Service)	Syncing service vs Back-up service (when something is deleted it is deleted everywhere vs copies being kept of deleted files that have to be manually removed)	1. One Drive Basic 5 GB (Storage only) 2. One Drive100 GB (Storage Only) 3. Office 365 Personal (Premium One Drive Features) 4. Office 365 Home (Premium One Drive Features)	1. Free 2. Buy for $1.99/ mo 3. $69.99/year (Or buy for $6.99/mo) 4. $99.99/year (Or buy for $9.99/mo)	1. Total Storage: 5 GB 2. Total Storage: 100 GB 3. Total Storage: 1 TB (1000 GB) 4. Total Storage: 6 TB total (1000 GB each for 6 users)
Carbonite (Back-up service)		1. Basic Computer Backup 2. Basic Server Backup 3. Advanced Endpoint Protection	1. $24/Month (billed annually) 2. $50/Month (billed annually) 3. $52/Month (billed annually)	1. Key features: (Protects endpoints) PCs, Mac; (Encryption) 128-bit; (Supported systems) Windows, Mac; 2. Key features: (Encryption) 128-bit or 256- bit; (Supported systems) Windows; (Supported applications) System State, SQL, Exchange, SharePoint, MySQL; 3. Key features: (Protects endpoints) PCs, Macs, phones and tablets; (Encryption) 256-bit; (Supported systems) Windows, Mac, iOS, Android; (Supported applications) Teams, OneDrive, Exchange, Public folders, SharePoint, Groups, Planner, Skype for Business;