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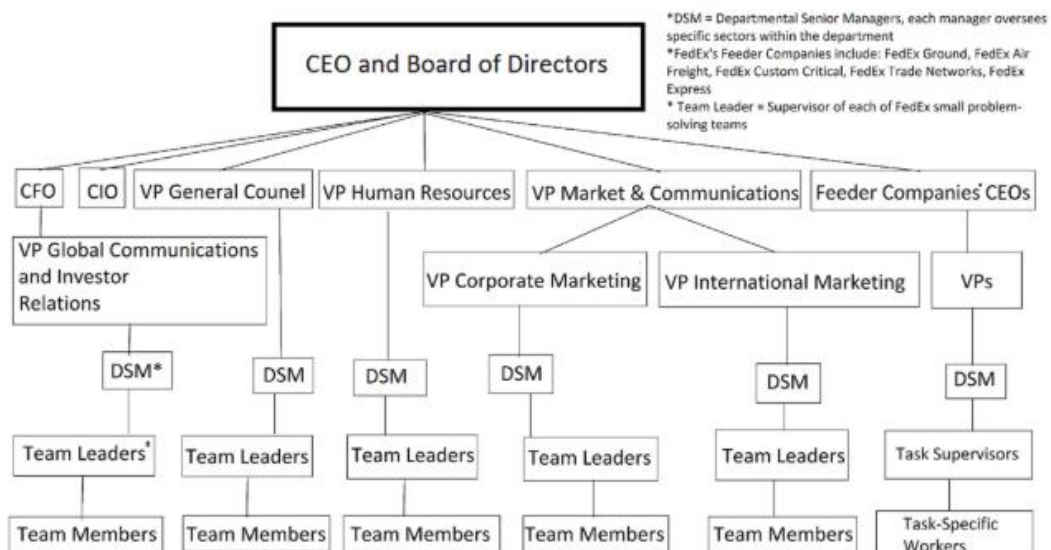
Professional practices

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QUESTION 1:

a) Explain the functional units of an organization in detail.

ANSWER (a): An organization can be arranged according to a variety of structures, which determine how the organization will operate and perform. In a functional structure, a common configuration, an organization is divided into smaller groups by areas of specialty (such as IT, finance, operations, and marketing). Some refer to these functional areas as "silos"—entities that are vertical and disconnected from each other. Correspondingly, the company's top management team typically consists of several functional heads (such as the chief financial officer and the chief operating officer). Communication generally occurs within each functional department and is transmitted across departments through the department heads.



Functional structure at FedEx: This organizational chart shows a broad functional structure at FedEx. Each different functions (e.g., HR, finance, marketing) is managed from the top down via functional heads (the CFO, the CIO, various VPs, etc.).

b) Explain that the following organizations (Microsoft, IBM, Ebay, Amazon) are centralized or decentralized. Also justify your answer.

ANSWER (b):

Microsoft: There are two kinds of organizational substructures centralized and decentralized.

Microsoft is a clear example of a centralized company. A centralized company is a company which relies on one individual, central person to make all the decisions of the company and direct the company. This is more commonly used in small companies as there is a small amount of people therefore control is very easy with only one person.

IBM: IBM is upgrading its enterprise blockchain solution to provide clients with a new decentralized governance option that will allow transaction parties to purpose and amend smart contract parameters. The blue-chip IT company said last week the IBM blockchain platform would carry over the changes in hyperlydger fabric 2.0.

Ebay: eBay is an example of an organization that has landed on the sweet spot. It has centralized, eBay requires people to log on, and buyers and sellers must identify themselves. It has decentralized, users can auction items to each other directly, buyer and sellers rate each other. This combination creates both trust and security. eBay would lose market if it moved further toward centralized or decentralized.

Amazon: Amazon is a centralized company. In a centralized world, Amazon grows its current 9% e-commerce market share to a much larger percentage, taking advantage of its scale, efficiency, advanced technology and the convenience of shopping in one place.

ANSWER NO 2 (a): Limited Liability Company:

Limited liability means the business owners' liability for debts is restricted to the amount they put into the business. A limited liability company is a primary business structure used by multiple owners who are looking for personal protection. It gives you the best of both worlds.

To form an LLC, you file registration paperwork in your state of operation. All member owners of the company are financially insulated from business debts. You only risk losing your investment if the business sours. All partners remain responsible for their own negligent or illegal behavior that causes harm to others.

Unlimited Liability Company:

Whereas with unlimited liability, the business owner is personally responsible for any loss the business makes. Partners in a traditional general partnership structure aren't so lucky. The business isn't legally treated as a separate entity from the partners, so you do face unlimited liability risks in this structure.

According to Accounting Tools. If the company loses a lawsuit and is assessed damages well in excess of its finances, the partners would typically be ordered to cover the additional obligation.

List of Pakistani companies based on LLC:

1. Bawany Air Products Ltd.
2. Linde Pak Ltd.
3. Ittehad Chemicals Ltd.

List of Pakistani companies based on ULLC:

1. Textiles Unlimited Inc.
2. Ahmad Ali Dewan & Co.
3. Foods Unlimited.

Ans No 2(b):

As a fresh graduate, we students have two main sources of funds:

- From Guardian
- Or from micro finance bank loan.

From Guardian:

Fresh graduates, if they are financially backed by their parents and financially stable, they can lend some funds from their parents. If they are wish to return funds back once they are stable themselves.

From micro finance bank loans:

Fresh graduates can apply for 1 lac to 1 million rupees. Some of them even offer interest-free loan like Faysal bank or Pak-Turk bank or Mezan Bank to ease students repaying debts.

Answer 3 (a): Intellectual Property:

Definition: The ownership of ideas. Unlike tangible assets to your business such as computers or your office, intellectual property is a collection of ideas and concepts.

There are only three ways to protect intellectual property in the United States: through the use [patents](#), [trademarks](#) or [copyrights](#). A patent applies to a specific product design; a [trademark](#) to a name, phrase or symbol; and a copyright to a written document. All three methods have limitations--there's no one perfect way to protect an idea.

Copyright Protection

A copyright will protect the following categories of works:

- literary works
- musical works, including any accompanying words
- dramatic works, including any accompanying music
- pantomimes and choreographic works
- pictorial, graphic and sculptural works
- motion pictures and other audiovisual works
- sound recordings
- architectural works
- computer programs (sometimes the graphical user interface) and websites

Copyright protection gives the copyright holder the exclusive right to copy the work, modify it (that is, create "derivative works"), and distribute, perform and display the work publicly.

Ideas or concepts do not have copyright protection. Copyright protects the expression of the idea, but not the ideas themselves. For example, if I ask you what a chair is, you get a picture in your head; the picture I get in my head is different from the picture you get in your head and probably also different from the picture Buffy gets in her head. These are the "ideas" of what a chair is. However, if you were to draw the chair you envisioned in your head or use words to describe that chair, it's an "expression" of the idea--and that's what's protected by copyright.

Generally, the only protection for ideas and concepts is through trade secret law and/or confidentiality agreements, which provide a contractual remedy for misuse or disclosure of the idea.

Patents

Patents protect processes, methods and inventions that are "novel," "non-obvious" and "useful." If granted, a patent gives you a 20-year monopoly on selling, using, making or importing an invention into the United States. The requirements for a patent are complex, but here they are in a nutshell:

- **Your work must be novel.** This means it must not be known or used by others in this country, or patented or described in a printed publication here or abroad, or in public use or for sale in this country more than one year prior to the application for patent.
- **Your work must be non-obvious.** This means it must not be obvious to a person having ordinary skill in the pertinent art as it existed when the invention was made.
- **Your work must be useful.** This means that it must have current, significant, beneficial use as process, machine, manufacture, composition of matter or improvements to one of these. According to the Patent Office: "The word 'process' is defined by law as a process, act or method, and primarily includes industrial or technical processes. The term 'machine' used in the statute needs no explanation. The term 'manufacture' refers to articles that are made, and includes all manufactured articles. The term 'composition of matter' relates to chemical compositions and may include mixtures of ingredients as well as new chemical compounds. These classes

of subject matter taken together include practically everything which is made by man and the processes for making the products."

Patent protection requires full public disclosure of the work in detail and therefore precludes maintaining any trade secret protection in the same work.

Trademarks

A trademark is like a brand name. It is any word(s) or symbol(s) that represent a product to identify and distinguish it from other products in the marketplace. A trademark word example would be "Rollerblades." A trademark symbol would be the peacock used by [NBC](#).

A trademark can be registered in three ways:

1. By filing a "use" application after the mark has been used.
2. By filing an "intent to use" application if the mark has not yet been used.
3. In certain circumstances in which a foreign application exists, you can rely on that.

The (TM) mark may be used immediately next to your mark. The ® registration symbol may only be used when the mark is registered with the PTO. It is unlawful to use this symbol with your mark before receiving an issued registration from the PTO.

What qualities make for a strong trademark? The cardinal rule is that a mark must be distinctive. The more distinctive it is, the easier your trademark will be to enforce. This is why so many trademarked products have unique spellings.

Trademark rights last indefinitely if the company continues to use the mark to identify its goods or services. When the mark is no longer being used, the registration is terminated. The initial term of federal trademark registration is 10 years, with 10-year renewal terms.

Trade Secrets

There is a great deal of confusion regarding trade secrets. Many people think that a trade secret is some type of protection provided by the [government](#) that allows them to seek recourse in court should someone infringe upon their idea. However, unlike copyrights, trademarks and patents, a trade secret is not registered with any

government office to provide a verifiable public record of any claims to the secret. You can, however, declare one to a patent lawyer in a notarized and signed disclosure. In this manner the trade secret belongs to you forever--or until someone leaks it.

Trade secrets refer to items such as recipes that are unique and provide a business with a competitive advantage, but which cannot be safeguarded under current forms of idea protection such as copyright, trademark or patent. The best form of protection for these items is to keep them a secret. One of the most famous and best-kept trade secrets is the formula for Coca-Cola.

The best way to secure the information for a trade secret is to restrict access to the secret and have individuals and companies sign nondisclosure agreements with you should you enter into a relationship with them which will require them to know some aspects of the secret. If someone independently develops or reverse-engineers your trade secret, there's nothing you can do. If someone does leak it, you can sue for theft. Suing, however, cannot stop the person from using the leaked information. So although you may get money from the suit, you lose the larger potential profits you could have made from the idea. Still, if your luck holds and your trade secret remains secret, royalty income from it can last significantly longer than the patent period.

Answer no 3 (b):

In Europe, privacy and data protection appear as fundamental freedoms under the European Union Charter so it is therefore no wonder that the EU's GDPR was shaped into a single piece of ground-breaking legislation in defense of these rights.

Answer no 4 (a): Contract

Contracts operate in the context of a dispute resolution mechanism. The **purpose** of the **contract** is to establish the **agreement** that the parties have made and to fix their rights and duties in accordance with that **agreement**.

Contracts serve the following purpose:

- 1: Set out the agreement between the parties
- 2: Set out the aims of the parties
- 3: Provide for matters arising while the contract is running
- 4: Ways of terminating the contract and the consequences

If the contracts are too harsh or unfair causing any issue between parties to be unresolved, it is the responsibility of contract laws to contemplate according to the rules

There are almost never disputes over contracts which run perfectly. Example marriage.

Example of a ship carrying a cargo.

In order to avoid disputes and future difficulties it is better to draft a document which sets out:

- The term on which both parties work
- Methods of payment
- Appropriate ways to terminate the contract-notice required

Contract should be clear, concise and consistent. There should be no ambiguity and the parties to the agreement should be left in no doubt as to their rights and duties. Ambiguity and doubts can lead to performance which is viewed as unsatisfactory. This can lead to disagreement and the expenditure of time, effort and therefore money, in resolving the matter.

Answer no 4 (b) Penetrating testing:

Penetration test means Legal attempt to break into a company's network to find its weakest link Tester only reports findings

3 methodologies of penetration testing:

White box model:

Tester is told everything about the network topology and technology and is authorized to interview IT personnel as well. Makes the job easier for him.

Black box model:

Company staff does not know about the test. Tester is not given detail about the network so the burden is on the tester to find out the details. The test determines if the security personnel are able to detect an attack.

Gray box model:

This mode of test is combination of both white and black box models. The company provides the tester with partial information about the network.