

Industrial Management and Accounting

Credit: 2 Marks: 50

Solve all questions necessary

For Section A

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1. Define business.

Ans. The word 'Business' comes from the English words "Busi + Ness" which means business is concentrated on all human activities with earning Profit. Business refers to the organized and systematic activity of producing, buying, selling, and providing goods or services to generate a profit.

2. What are the basic elements of business?

Ans. The basic elements of business are:

- A. Capital**
- B. Organizational Institution**
- C. Specific Location**
- D. Labor**
- E. Goods and Services**
- F. Profit Motive**
- G. Risk and Uncertainty**
- H. Transactions of money**
- I. Validity**

3. Discuss the various types of Business.

Ans. There are different types of businesses to choose from while forming a company. Each of them has its legal structure and rules. Typically there are four types of business:

- Sole Proprietorships**
- Partnerships**

- Limited Liability Companies (LLC)
 - Corporations
1. **Sole Proprietorship:** A sole proprietorship is a business that is owned and operated by one person. The owner is responsible for all aspects of the business, including management, finances, and liability. While it is the most simple type of business, it also offers an owner the least amount of financial and legal protection. Because the owner is liable for all the debts and liabilities of the business. This means that if the business fails the owner could lose personal assets.
 2. **Partnership:** A partnership is a business owned by two or more people, known as partners. Like sole proprietorship partners can take advantage of flow-through taxation. This means the income is treated as the own income so it is taxed once. Owners in partnerships are responsible for the liabilities of the firm. There are different types of partnerships:
 - **General partnership:** This is the easiest type of partnership to form, with few upkeep costs. Every partner is considered as participating in the operations of business and there are unlimited liabilities for all partners.
 - **Limited partnership:** This type of partnership has at least one general partner who takes unlimited liabilities for the business and manages the operation of the company.
 - **Limited Liability Partnership:** LLPs are similar to general partnerships, where multiple partners are each responsible for the operation of the business.
 3. **Limited Liability Company (LLC):** A limited company is a business structure that combines the benefits of a partnership or sole proprietorship with the limited liability of a corporation. This means that the owners of an LLC are not personally liable for the debts and liabilities of the business.
 4. **Corporation:** A corporation is a legal entity that is separate from its owners. This means the owner is not personally liable for the debts and liabilities of the business. Corporations are also taxed separately from their owners. There are 3 main types of corporation:
 - C corporation
 - S Corporation
 - Non-profit corporation

4. What is partnership?

Ans. A partnership is an arrangement where parties, known as business partners, agree to cooperate to advance their mutual interests. The partners in a partnership may be individuals, businesses, interest-based organizations, schools, governments, or combinations.

5. What are the main features of a partnership business? Discuss.

Ans. A partnership business that is owned by two or more people, is known as a partner. The essential features and characteristics of a partnership are :

- **Agreement**: The partnership arises out of an agreement between two or more persons.
- **Profit Sharing**: There should be an agreement among partners to share the profits of the business.
- **Lawful Business**: The business to be carried on by a partnership must always be lawful.
- **Membership**: There must be at least two people to form a partnership. The maximum number is 20. But in the case of the banking business, the maximum is 10 members.
- **Unlimited Liability**: The liability of every partner is unlimited, joint, and several.
- **Principal - Agent - Relationship**: Every partner is an agent of the firm. He can act on behalf of the firm. He is responsible for his acts and also responsible for the acts done on behalf of the firm.
- **Collective management**: The firm and the partners are one. When a contact is made in the name of the firm all the partners are responsible for it individually and collectively.
- **Non - Non-Transferability of Shares**: A partner can't transfer his share of interest to others without the consent of the other partners.

6. Distingushe between a company and a partnership.

Ans. Here are the key differences between a company and a partnership:

<u>Characteristics</u>	<u>Company</u>	<u>Partnership</u>
Definition [Note: All copyright is preserved to Shahrear Al Sakib]	A company is a legal entity that is created by a group of people to engage in and operate a business enterprise. It is a voluntary association of people who have come together to achieve a common goal.	A partnership is a business owned by two or more people, known as a partner.
Liability	Limited Liability	Unlimited Liability
Taxation	Profits taxed at the corporate level, then at the individual level	Profits passed through to partners, taxed at the individual level
Each of Formation	More difficult	Easy to form
Cost	More Expensive	Less Expensive
Management	Controlled by the board of directors	Controlled by partners
Transferability of ownership	Easy to transfer	Difficult to transfer

7. Define business environment.

Ans. Business environment is the sum or collection of all internal and external factors such as employees, customer needs and expectations, supply and demand, management, clients, suppliers, etc.

8. What are the elements of the business environment?

Ans. There are two types of business environments:

- 1. Internal environment**
- 2. External environment**

Elements of internal environment:

- I. Plans and Policies**
- II. Human resources**
- III. Financial resources**
- IV. Corporate image**
- V. Plants and Machinery**
- VI. Labor and Management**
- VII. Relationship**

External environments are two types:

- I. Microenvironment**
- II. Macro environment**

Elements of the microenvironment:

- The customers**
- The competitors**
- The suppliers**
- Society**

Elements of macro environment:

- Demographic**
- Economic**
- Technological**
- Political**

- Cultural

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9. What do you mean by industry?

Ans. The industry is the process of extraction, production, conversion, processing, or products described. The industry is concerned with the production of goods or services and commerce is involved with the distribution of products and services. The industry is characterized by the existence of the following:

- Employer and Employee
- Works based on wages
- Products or services to be produced
- Buying and selling of labor power
- Creation of utility

10. Discuss the various types of industry.

Ans. Industries are typically categorized into several broad types based on the nature of their products or services. Here are some common types of industries:

1. ****Primary Industry:**** This sector involves the extraction and production of raw materials and natural resources. Examples include agriculture, mining, forestry, and fishing.
2. ****Secondary Industry:**** Also known as the manufacturing industry, this sector involves the conversion of raw materials into finished products. Examples include automobile manufacturing, electronics production, and textile manufacturing.
3. ****Tertiary Industry:**** Tertiary industries provide services rather than tangible goods. This sector includes businesses such as healthcare, education, finance, hospitality, and transportation.
4. ****Quaternary Industry:**** This knowledge-based sector focuses on information technology, research and development, consulting, and other intellectual services. It deals with information and knowledge-intensive activities.

5. ****Quinary Industry:**** The quinary sector encompasses high-level decision-making roles in government, education, healthcare, culture, and scientific research. It includes top-level executives, policymakers, and researchers.
6. ****Heavy Industry:**** Heavy industries are characterized by the use of heavy machinery and large-scale production processes. Examples include steel production, shipbuilding, and chemical manufacturing.
7. ****Light Industry:**** Light industries involve the production of consumer goods with less heavy machinery and often smaller-scale operations. Examples include food processing, clothing manufacturing, and consumer electronics assembly.
8. ****Service Industry:**** This broad category includes businesses that provide various services to consumers or other businesses. It encompasses everything from retail and restaurants to banking and consulting.
9. ****High-Tech Industry:**** High-tech industries focus on advanced technology and innovation. Examples include the semiconductor industry, software development, and biotechnology.
10. ****Creative Industry:**** Creative industries are centered around artistic and cultural expression. They include areas like film, music, advertising, and design.
11. ****Green Industry:**** Green or sustainable industries prioritize environmentally friendly practices. This can encompass renewable energy, eco-friendly manufacturing, and sustainable agriculture.
12. ****Tourism Industry:**** The tourism industry caters to travelers and includes hospitality, travel agencies, and entertainment venues.
13. ****Healthcare Industry:**** This sector involves medical services, pharmaceuticals, healthcare technology, and research institutions.
14. ****Financial Industry:**** The financial industry includes banks, insurance companies, investment firms, and other financial service providers.

15. **Transportation Industry:** Transportation industries cover various modes of moving goods and people, such as airlines, shipping companies, and logistics providers.

These are general categories, and industries can further subdivide into numerous specialized niches. Additionally, the classification of industries can evolve with technological advancements and changes in the global economy.

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11. Characteristic of Industry.

Ans. Industry is a component of business which is related to the production of goods. *Features or characteristics of the industry can be discussed as follows:*

1. **Economic Activity:** Industries involve economic activities related to the production, processing, or provision of goods and services. These activities can range from manufacturing and mining to healthcare and education.
2. **Production:** Production is the main characteristic of industry. Industry produces products by the use of human and mechanical power. Products satisfy human wants. Products can be consumer and industrial.
3. **Utility:** Industry creates form utility. It converts raw materials into finished products.
4. **Wide scope:** The industry has wide scope. Advances in science and technology create new industries. The information technology industry is an example.
5. **Competitive Environment:** Most industries are characterized by competition among businesses operating within the same sector. Competition can drive innovation, efficiency, and improvements in quality.
6. **Supply Chain:** Industries often involve complex supply chains that include the acquisition of raw materials, production processes, distribution networks, and the delivery of goods or services to end consumers.
7. **Regulations and Standards:** Industries are subject to various regulations and standards that govern their operations. These can include safety regulations, environmental standards, and industry-specific rules.

8. **Market Demand:** Industries are influenced by consumer demand and market trends. They must adapt to changing consumer preferences and emerging technologies.
9. **Innovation:** Industries often drive technological innovation, as businesses within the industry strive to improve products, services, and processes to gain a competitive edge.
10. **Lifecycle:** Industries can go through cycles of growth, maturity, and decline. Factors like market saturation and technological advancements influence industry lifecycles.

These basic characteristics help differentiate industries from one another and provide a framework for understanding the diverse sectors that make up the global economy. Each industry has its unique features and challenges, shaped by market dynamics, technology, and regulatory environments.

12. What is location planning?

Ans. Location planning, also known as facility location planning, is a strategic process that businesses and organizations undertake to determine the optimal geographic location for their facilities, such as manufacturing plants, distribution centers, offices, or retail outlets. The goal of location planning is to find the most advantageous location that aligns with a company's strategic objectives and operational needs. This decision can significantly impact a company's efficiency, costs, and overall success.

Here are some of the factors that are typically considered in location planning:

- **Target market**
- **Competition**
- **Cost of land**
- **Availability of labor**
- **Transportation**
- **Infrastructure**

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13. What is a sole proprietorship?

Ans. *A sole proprietorship is a business owned and operated by one person. The owner is personally liable for all debts and obligations of the business. This means that if the business fails, the owner could lose their personal assets, such as their home or car. Sole proprietorships are the simplest and most common form of business ownership. They are easy to set up and there are no ongoing legal requirements. However, they also offer the least amount of protection for the owner.*

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14. Advantages and Disadvantages of sole proprietorship?

Ans. *Advantages to a sole proprietorship:*

- *Easy of formation*
- *Direct motivation*
- *Complete degree of control*
- *Fixeblity of operation*
- *Minimum government regulation*
- *Social advantage of individual proprietorship*
- *Direct profit*

Disadvantage of a sole proprietorship:

- *Limited amount of capital*
- *Limited managerial ability*
- *Unlimited liability*
- *Uncertainty of continuity*
- *No outside equity*

15. What are the factors of locating a business?

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Ans.

There are many factors to consider when locating a business. Some of the most important factors include:

- **Target market:** The target market is the group of people that the business is trying to reach. The location of the business should be in an area where the target market is likely to be found. For example, if a business is selling baby clothes, it would want to be located in an area with a high concentration of families with young children.
- **Competition:** The competition is the other businesses that are selling the same products or services. The location of the business should be in an area where the competition is not too strong. For example, if a business is opening a new coffee shop, it would not want to be located right next to another popular coffee shop.
- **Cost of land:** The cost of land varies from place to place. The business needs to choose a location where the cost of land is affordable. However, it is also important to consider the long-term value of the location. For example, a business might be willing to pay more for a location in a growing area, even though the initial cost is higher.
- **Availability of labor:** The availability of labor is also an important factor. The business needs to choose a location where there is a pool of qualified workers available. For example, if a business is opening a manufacturing plant, it would need to be located in an area with a strong workforce.
- **Transportation:** The transportation options in the area should also be considered. The business needs to choose a location that is accessible to its customers and employees. For example, a business that relies on deliveries would want to locate near major highways.
- **Infrastructure:** The infrastructure in the area should also be considered. The business needs to choose a location that has the necessary utilities and services. For example, a business that needs a lot of water would want to locate near a water source.
- **Zoning regulations:** The business needs to make sure that the location is zoned for the type of business that it is planning to open. For example, a business that wants to sell alcohol would need to be located in an area that is zoned for commercial use. [Note: All copyright is

- **Taxes:** The business needs to factor in the taxes that will be paid on the property. For example, a business that is located in a city might have to pay higher property taxes than a business that is located in a rural area.
- **Government incentives:** Some governments offer incentives to businesses that are located in their area. These incentives can include tax breaks, grants, or loans.

These are just some of the factors to consider when locating a business. The specific factors that are most important will vary depending on the type of business and the specific needs of the business.

16. What is factory planning?

Ans. Factory planning, also known as plant layout planning or facility layout planning, is a crucial aspect of operations management and industrial engineering. It involves designing and organizing the physical layout of a manufacturing facility or factory to optimize efficiency, productivity, safety, and overall operational performance. The goal of factory planning is to create a well-structured and streamlined environment that supports the production process and minimizes waste, disruptions, and costs.

17. What are the types of factory buildings?

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Ans.

Factory buildings, also known as industrial buildings or manufacturing facilities, come in various types and designs, each suited to specific production processes, industries, and operational needs. Here are some common types of factory buildings:

1. ****Single-Storey Industrial Building:**** This is the most common type of factory building, characterized by a single level of floor space. It's suitable for a wide range of manufacturing processes and is often used for light to heavy industrial operations.
2. ****Multi-Storey Industrial Building:**** In urban areas with limited space, multi-story factory buildings are constructed to maximize land use. These buildings consist of multiple levels or floors for manufacturing, storage, and offices. They are common in densely populated industrial zones.
3. ****Warehouse or Distribution Center:**** These buildings are designed primarily for storing and distributing goods. They often have high ceilings and large open spaces, allowing for efficient storage and retrieval of products. Warehouses may also serve as distribution hubs for logistics and supply chain operations.
4. ****Cleanroom Facility:**** Cleanrooms are used in industries like semiconductor manufacturing, pharmaceuticals, and electronics, where a controlled and sterile environment is essential to prevent contamination. These facilities have strict environmental controls for air quality, temperature, humidity, and cleanliness.
5. ****Food Processing Plant:**** Food processing facilities are designed to meet the specific hygiene and safety requirements of the food industry. They include areas for food preparation, cooking, packaging, and storage.
6. ****Automotive Assembly Plant:**** These facilities are tailored for the assembly of automobiles and other vehicles. They include production lines, robotic automation, paint booths, and quality control areas.
7. ****Chemical Processing Plant:**** Chemical plants are equipped for the manufacturing and processing of chemicals and petrochemicals. They often require specialized equipment, safety measures, and environmental controls.
8. ****Textile Mill:**** Textile factories are designed for textile production, including weaving, spinning, dyeing, and finishing processes. They often have large open floor spaces with rows of machinery.

The design and layout of a factory building depend on factors such as the nature of the production process, the industry's specific requirements, regulatory compliance, safety considerations, and the available budget. Successful factory design ensures efficient operations, worker safety, and the ability to meet production goals.

18. What is plan layout?

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Ans. Plan layout is a term used to describe the physical arrangement of the elements of a structure or system. In the context of factories, plan layout refers to the arrangement of the machines, equipment, and other resources within the factory. The goal of plan layout is to optimize the flow of materials and people within the factory, and to create a safe and efficient working environment.

19. What are the types of plan layout?

Ans. There are many different types of plan layouts, each with its advantages and disadvantages. Some of the most common types of plan layouts include:

- **Product layout:** In a product layout, the machines and equipment are arranged in a line, following the sequence of the production process. This type of layout is best suited for repetitive production of a single product or family of products.
- **Process layout:** In a process layout, the machines and equipment are grouped based on the function they perform. This type of layout is best suited for the production of a variety of products or for products that require a lot of customization.
- **Combination layout:** A combination layout is a hybrid of the product layout and the process layout. This type of layout is often used for the production of products that require a combination of repetitive and customized production.

- **Cellular layout:** In a cellular layout, the machines and equipment are grouped into cells, each of which is dedicated to the production of a single product or family of products. This type of layout is best suited for the flexible production of a variety of products.

The best type of plan layout for a particular factory will depend on some factors, including the type of products that are produced, the size of the factory, and the budget.

20. What are the problems of Layout? [Note

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Ans. Many problems can arise from poor layout design. Some of the most common problems include:

- **Inefficient material handling:** Poor layout can lead to inefficient material handling, which can increase costs and reduce productivity. For example, if materials have to travel long distances, it will take longer to get them to where they need to go.
- **Increased waiting time:** Poor layout can also lead to increased waiting time for employees and customers. For example, if employees have to travel long distances to get to their workstations, it will take them longer to get started.
- **Increased congestion:** Poor layout can also lead to increased congestion, which can create safety hazards and reduce productivity. For example, if there is not enough space for people and materials to move around, it can lead to accidents and delays.
- **Reduced flexibility:** Poor layout can also reduce flexibility, which can make it difficult to adapt to changes in production requirements. For example, if machines are not located in a way that allows them to be easily moved, it will be difficult to change the production process.

- **Increased costs:** Poor layout can also lead to increased costs, such as the cost of material handling, the cost of labor, and the cost of energy.
- **Reduced quality:** Poor layout can also lead to reduced quality, as it can make it difficult to ensure that products are produced correctly. For example, if machines are not located in a way that allows for easy inspection, it can be difficult to catch defects.

To avoid these problems, it is important to carefully consider the layout of a factory or other facility. The layout should be designed to optimize the flow of materials and people and to create a safe and efficient working environment.

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21. How to avoid the problems of layouts? (Just to know)

Ans. Here are some tips for avoiding layout problems:

- **Involve all stakeholders:** When designing a layout, it is important to involve all stakeholders, such as employees, managers, and customers. This will help to ensure that the layout meets the needs of everyone involved.
- **Consider the flow of materials and people:** The layout should be designed to minimize the distance that materials and people have to travel.
- **Use space efficiently:** The layout should use space efficiently, without wasting any space.
- **Make the layout flexible:** The layout should be flexible enough to adapt to changes in production requirements.
- **Consider the safety of employees:** The layout should be designed to create a safe working environment for employees.

- **Consider the cost of the layout:** The cost of the layout should be considered, but it should not be the only factor.

By following these tips, businesses can avoid the problems that can arise from poor layout design.

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22. What is corporate society? What are the types of corporate society? What are the advantages and disadvantages of corporate society?

Ans. Corporate society is a term used to describe a society in which corporations play a dominant role in the economy and society as a whole. This can include several things, such as corporations having a large influence on government policy, controlling a significant amount of wealth and resources, and shaping the way people live and work.

There are many different types of corporate societies, but some of the most common include:

- **Capitalist societies:** In capitalist societies, the means of production are owned by private individuals or groups, and the economy is based on the free market. Corporations play a major role in capitalist societies, and they often have a great deal of influence over the government.
- **Social democratic societies:** In social democratic societies, the government plays a more active role in the economy, and there is a greater emphasis on social welfare. Corporations are still important in social democratic societies, but they are not as dominant as they are in capitalist societies.
- **Mixed economies:** Mixed economies are a combination of capitalist and socialist economies. Corporations play a role in mixed

economies, but the government also plays a significant role in regulating the economy and providing social welfare programs.

There are both advantages and disadvantages to corporate society.

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Advantages:

- Corporations can be efficient and productive. They can bring together resources and expertise to create new products and services.
- Corporations can create jobs and stimulate economic growth. They can also invest in research and development, which can lead to innovation.
- Corporations can provide goods and services that people want and need. They can also make a profit, which can be reinvested in the economy.

Disadvantages:

- Corporations can be powerful and can harm society. They can lobby the government to pass laws that benefit them, and they can pollute the environment.
- Corporations can exploit workers and pay them low wages. They can also move jobs to countries where labor is cheaper.
- Corporations can create monopolies, which can drive up prices and hurt consumers.

Ultimately, the impact of corporate society depends on the specific policies and regulations in place. In some cases, corporate society can lead to economic growth and prosperity. In other cases, it can lead to inequality, exploitation, and environmental degradation.

23. What is a joint stock company? What are the advantages and disadvantages of a joint stock company?

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Ans. A joint stock company (also known as a corporation) is a business entity that is owned by shareholders. The shareholders own shares of the company, which represent a portion of the company's ownership. The shareholders are not personally liable for the debts of the company.

There are many advantages to forming a joint stock company. Some of the most common advantages include:

- **Limited liability:** The shareholders are not personally liable for the debts of the company. This means that if the company goes bankrupt, the shareholders will not lose their assets.
- **Easy to raise capital:** Joint stock companies can raise capital by selling shares to the public. This can be a great way to finance a new business or expand an existing business.
- **Transferability of shares:** Shares in a joint stock company can be easily transferred from one person to another. This makes it easy for investors to buy and sell shares, and it can also help to increase the liquidity of the company's shares.
- **Continuous life:** A joint stock company is a legal entity that exists independently of its shareholders. This means that the company can continue to exist even if some of the shareholders sell their shares or die.
- **Centralized management:** A joint stock company has a board of directors that is responsible for managing the company. This can be a more efficient way to manage a large business than if the shareholders were responsible for managing the company themselves.

However, there are also some disadvantages to forming a joint stock company. Some of the most common disadvantages include:

- **Cost:** It can be expensive to form a joint stock company. There are legal fees, registration fees, and other costs involved.
- **Regulation:** Joint stock companies are subject to government regulation. This can be a burden on the company and can make it difficult to operate.
- **Shareholder dilution:** If the company issues new shares, the existing shareholders' ownership stake in the company will be diluted. This means that they will own a smaller percentage of the company.
- **Dividends:** The company is not obligated to pay dividends to its shareholders. This means that the shareholders may not receive any return on their investment.
- **Shareholder activism:** Shareholders can try to influence the way the company is run. This can be a distraction for the management team and can make it difficult to make decisions.

Ultimately, the decision of whether or not to form a joint stock company is a complex one. There are many factors to consider, such as the size of the business, the amount of capital needed, and the level of risk that the owners are willing to take.

Shahrear Al Sakib

Dept. of Computer Science and Engineering, RU

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