
	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

Third Year

Semester I

Valuation and Storage Notes on Unit I and Unit II

Multiple-choice Questions

1. **Why is valuation important for electronics manufacturing companies when seeking investments?**
 - a) To determine the size of their workforce
 - b) To accurately assess their market position
 - c) To establish the amount of funding required
 - d) To decide on product pricing

Answer: c) To establish the amount of funding required



2. **How does valuation help in mergers and acquisitions within the electronics manufacturing industry?**
 - a) By identifying the most profitable suppliers
 - b) By determining the financial worth of the target company
 - c) By setting the company's ethical standards
 - d) By increasing production speed

Answer: b) By determining the financial worth of the target company

3. **What role does valuation play in the strategic planning of electronics manufacturing companies?**
 - a) Helps in selecting marketing channels
 - b) Assists in inventory management
 - c) Guides decisions on capital allocation and expansion
 - d) Determines employee salary structures

Answer: c) Guides decisions on capital allocation and expansion

4. **Valuation is crucial for electronics manufacturers because it helps in:**
 - a) Reducing environmental impact

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

- b) Negotiating better terms with suppliers
- c) Setting long-term growth objectives and strategies
- d) Determining the color scheme of products

Answer: c) Setting long-term growth objectives and strategies

5. How does accurate valuation benefit shareholders in the electronics manufacturing industry?

- a) By reducing the cost of raw materials
- b) By providing transparency in financial performance
- c) By ensuring product quality
- d) By enhancing customer satisfaction

Answer: b) By providing transparency in financial performance

6. In the context of market competition, why is valuation significant for electronics manufacturing companies?

- a) It helps in understanding competitor pricing strategies
- b) It assists in identifying market trends
- c) It enables a fair assessment of market share and potential growth
- d) It allows for the recruitment of skilled labor

Answer: c) It enables a fair assessment of market share and potential growth



7. Valuation is essential during IPOs (Initial Public Offerings) in the electronics manufacturing industry because:

- a) It determines the number of shares to be issued
- b) It ensures compliance with environmental regulations
- c) It helps set an appropriate share price for the market
- d) It decides the location of new manufacturing plants

Answer: c) It helps set an appropriate share price for the market

8. How does valuation impact decision-making in research and development (R&D) for electronics manufacturers?

- a) It reduces the time to market for new products
- b) It allocates resources efficiently to the most promising projects

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

- c) It ensures adherence to safety standards
- d) It identifies new consumer markets

Answer: b) It allocates resources efficiently to the most promising projects

9. **Which of the following is a direct outcome of effective valuation in electronics manufacturing?**

- a) Better product designs
- b) Improved brand recognition
- c) Enhanced financial stability and growth
- d) Faster assembly line processes

Answer: c) Enhanced financial stability and growth

10. **Valuation is critical in the electronics manufacturing industry for:**

- a) Monitoring employee productivity
- b) Establishing the company's financial health and attractiveness to investors
- c) Determining the lifespan of products
- d) Selecting materials for product development

Answer: b) Establishing the company's financial health and attractiveness to investors

11. **Why is proper storage of hazardous materials crucial in an industrial setting?**



- a) To reduce energy consumption
- b) To prevent accidents and environmental contamination
- c) To enhance the aesthetic appeal of the facility
- d) To increase production speed

Answer: b) To prevent accidents and environmental contamination

12. **What is the main purpose of using Material Safety Data Sheets (MSDS) in the storage of hazardous materials?**

- a) To provide detailed information on the suppliers
- b) To offer guidelines for safe storage, handling, and disposal
- c) To track inventory levels
- d) To record employee attendance

Answer: b) To offer guidelines for safe storage, handling, and disposal

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

13. **Which of the following is a key requirement for the storage of flammable liquids?**

- a) Storing them near electrical equipment
- b) Keeping them in well-ventilated areas away from ignition sources
- c) Placing them in open containers for easy access
- d) Storing them at room temperature only

Answer: b) Keeping them in well-ventilated areas away from ignition sources

14. **Why is Intellectual Property (IP) valuation important for businesses?**

- a) To estimate the cost of physical assets
- b) To determine the value of intangible assets like patents and trademarks
- c) To manage inventory levels
- d) To set employee salaries

Answer: b) To determine the value of intangible assets like patents and trademarks

15. **Which method is commonly used for the valuation of IP assets?**

- a) Depreciation method
- b) Market-based approach
- c) Liquidation approach
- d) Double-entry accounting method

Answer: b) Market-based approach



16. **What is the primary challenge in valuing Intellectual Property?**

- a) The fluctuation in raw material costs
- b) The intangible nature of IP assets
- c) The physical condition of the assets
- d) The ease of replicating the IP

Answer: b) The intangible nature of IP assets

17. **In the context of IP valuation, what does the income approach involve?**

- a) Estimating future cash flows generated by the IP
- b) Comparing the IP with similar assets in the market
- c) Determining the replacement cost of the IP
- d) Assessing the cost of developing the IP from scratch

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

Answer: a) Estimating future cash flows generated by the IP

18. How does IP valuation benefit companies during mergers and acquisitions?

- a) By determining the cost of the merger
- b) By ensuring the smooth integration of the workforce
- c) By identifying the strategic value of the IP involved
- d) By reducing operational costs

Answer: c) By identifying the strategic value of the IP involved

19. Which of the following IP assets is most commonly valued using the market approach?

- a) Trade secrets
- b) Patents
- c) Copyrights
- d) Brand names

Answer: d) Brand names

20. What role does IP valuation play in securing financing for a business?

- a) It helps in increasing the company's debt ratio
- b) It provides a basis for collateral when raising capital
- c) It decreases the company's credit score
- d) It limits the company's ability to expand



Answer: b) It provides a basis for collateral when raising capital

Questions for 2 Marks

Q. 1. What is Specific Item Cost?

The **Specific Item Cost** method is an inventory valuation technique where the actual cost of each individual item in inventory is tracked and recorded. This method is typically used when each item in inventory is unique, has a high value, or can be easily identified.

Q. 2. What is Weighted average cost?

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

The **Weighted Average Cost** method is another inventory valuation technique that averages out the cost of all items in inventory, giving equal weight to the cost of each item.

Q.3 what is Financial Instrument Valuation?

Financial Instrument Valuation refers to the process of determining the fair market value of a financial instrument. Financial instruments include a wide range of assets such as stocks, bonds, derivatives, and other securities.

Q.4 what is Introduction to Intellectual Property?

Intellectual Property (IP) refers to the legal rights and protections given to the creators of original works, inventions, and innovations. It encompasses a wide range of intangible assets, including inventions, literary and artistic works, symbols, names, images, and designs used in commerce.

Q.5 what is Importance of IP in competitive advantage.



Intellectual Property (IP) plays a critical role in helping businesses maintain and strengthen their competitive advantage, particularly in innovation-driven industries like electronics manufacturing. The ability to protect ideas, innovations, and branding through IP .

Questions for 4 Marks

Q.1. what are the Importance of valuation in the electronics manufacturing industry?

Valuation in the electronics manufacturing industry is essential for several reasons:

1. **Investment Decisions:** Accurate valuations help companies and investors assess the financial health of a business, guiding decisions related to mergers, acquisitions, or expansion.
2. **Pricing Strategy:** Valuation provides insights into product costs and profitability, which are crucial for pricing strategies and competitiveness in the market.
3. **Financing:** It aids in securing financing by demonstrating the company's worth to lenders or investors, making it easier to attract capital for growth or innovation.
4. **Risk Management:** Valuation allows companies to measure and manage risks associated with market volatility, technological advancements, and supply chain disruptions.
5. **Regulatory Compliance:** In some cases, valuation is required for compliance with financial reporting standards and tax regulations.

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

6. **Strategic Planning:** It enables long-term strategic planning, guiding decision-making in areas like R&D, new product launches, and market entry.

Q.2 what are types of valuation in the electronics manufacturing industry?

In the electronics manufacturing industry, there are several types of valuation methods



1. **Asset-Based Valuation-** This method calculates the total value of a company based on the value of its assets, such as machinery, equipment, inventory, patents, and real estate, minus liabilities.
2. **Business valuation** –It is the process of determining the economic value of a company within this sector. It involves assessing both tangible and intangible assets, including physical infrastructure, intellectual property (IP), market position, technology, and future earning potential. Business valuation is crucial for various strategic decisions, such as mergers, acquisitions, investment opportunities, and financial reporting.
3. **Intellectual Property (IP) Valuation-** Focuses on valuing a company’s patents, designs, trademarks, and other intellectual properties, which can be significant assets in the electronics manufacturing industry.

Q.3 what is Basic Valuation Technique?

1. Discounted Cash Flow (DCF) Analysis- This analysis estimates the present value of a company by projecting its future cash flows and discounting them back to the present using a discount rate.
2. Comparable Company Analysis (CCA)-It involves valuing a company by comparing it to similar publicly traded companies. It assumes that companies with similar characteristics should have similar valuation multiples, such as Price-to-Earnings (P/E), Enterprise Value-to-EBITDA (EV/EBITDA), or Price-to-Sales (P/S).
3. Precedent Transactions- It involves valuing a company by looking at the prices paid for similar companies in past merger or acquisition transactions.

Q.4 what are Types of IP in electronics manufacturing (patents, trademarks, designs)?

1. Patents- Patents protect new inventions and innovations that are novel, non-obvious, and useful. They grant the inventor or assignee exclusive rights to make, use, or sell the invention for a specific period.

	Akhil Bharatiya Maratha Shikshan Parishad's Anantrao Pawar College of Engineering & Research		
	Record No.: ADM/D/035B Revision: 00	DoI: 02/01/2023	
Notice for Students			

2. Trademarks- Trademarks protect distinctive symbols, logos, names, slogans, or other identifiers that distinguish a company's products or services from those of competitors. It helps in building brand recognition and preventing consumer confusion.

3. Designs- Industrial design rights protect the aesthetic appearance or visual design of a product. This includes the shape, pattern, color, or surface configuration that makes a product distinctive.

Q.5 what are Valuation Methods for IP?

1. Cost Approach

The Cost Approach estimates the value of IP based on the costs incurred to develop or replace the IP. It considers the cost of reproducing or replacing the asset at current prices, adjusted for obsolescence or depreciation.

2. Market Approach

The Market Approach values IP by comparing it to similar IP assets that have been sold or licensed in the marketplace. The value is derived from transactions of comparable IP in the same industry or sector.

3. Income Approach

The Income Approach values IP based on the future economic benefits it is expected to generate. The method projects the IP's future income, cash flows, or cost savings and then discounts them to present value using an appropriate discount rate.

UNIT III AND UNIT IV

MCQ (1 Marks Questions)

1. Which of the following is considered a fixed cost in a business?

- A) Direct labor
- B) Raw material
- C) Rent on factory building
- D) Sales commission

Answer: C) Rent on factory building

2. Which of the following best describes a variable cost?

- A) A cost that remains constant regardless of production levels
- B) A cost that increases or decreases in direct proportion to changes in production or sales volume
- C) A cost that is incurred even when no production occurs
- D) A cost that does not vary with output in the short run

Answer: B) A cost that increases or decreases in direct proportion to changes in production or sales volume

3. How would fixed costs impact the valuation of a company?

- A) They do not affect valuation as they are constant
- B) They increase the risk for investors due to their non-variable nature
- C) They reduce the company's profit margins but increase flexibility
- D) They decrease the company's valuation because they are incurred regardless of sales

Answer: B) They increase the risk for investors due to their non-variable nature

4. Which of the following is NOT a typical example of a variable cost?

- A) Cost of raw materials
- B) Direct labor costs
- C) Depreciation on machinery
- D) Utility costs that vary with production levels

Answer: C) Depreciation on machinery

5. Which of the following is true about fixed costs in relation to a company's break-even point?

- A) Fixed costs do not affect the break-even point
- B) The higher the fixed costs, the higher the break-even point
- C) Fixed costs decrease the break-even point
- D) Fixed costs are irrelevant in calculating the break-even point

Answer: B) The higher the fixed costs, the higher the break-even point

6. What is the primary challenge for companies with a high proportion of fixed costs in the context of valuation?

- A) They are less sensitive to changes in sales volume, which may stabilize cash flows
- B) They may face significant losses during periods of low sales because fixed costs still need to be covered
- C) They can easily adjust their operations to increase profitability
- D) They have lower operational risks due to steady costs

Answer: B) They may face significant losses during periods of low sales because fixed costs still need to be covered

7. In financial modeling for valuation, how are fixed costs treated compared to variable costs?

- A) Fixed costs are typically spread over a period, while variable costs are linked to output
- B) Fixed costs are completely ignored in financial models
- C) Both fixed and variable costs are treated the same in models
- D) Fixed costs increase as production increases, while variable costs decrease

Answer: A) Fixed costs are typically spread over a period, while variable costs are linked to output

8. Which of the following is a major difference between fixed and variable costs in terms of financial forecasting?

- A) Variable costs are difficult to predict, whereas fixed costs are predictable
- B) Fixed costs vary with production, while variable costs remain constant
- C) Fixed costs fluctuate monthly, while variable costs do not
- D) Variable costs are incurred regardless of the level of production, whereas fixed costs depend on sales volume

Answer: A) Variable costs are difficult to predict, whereas fixed costs are predictable

9. How does automation contribute to value creation in a business?

- A) By increasing operational costs
- B) By reducing the need for skilled labor
- C) By improving efficiency and reducing production time
- D) By eliminating the need for innovation

Answer: C) By improving efficiency and reducing production time

10. Which of the following is an example of innovation leading to value creation in a company?

- A) Reducing employee turnover
- B) Developing a new product that meets an unmet customer need
- C) Cutting down on administrative expenses
- D) Increasing production capacity without changing the product

Answer: B) Developing a new product that meets an unmet customer need

11. What is a key advantage of automation in the manufacturing process?

- A) It increases the dependency on manual labor
- B) It can lead to the elimination of all human jobs
- C) It can help scale production while maintaining or improving quality
- D) It decreases operational efficiency

Answer: C) It can help scale production while maintaining or improving quality

12. How does automation impact a company's cost structure?

- A) It typically increases both fixed and variable costs
- B) It reduces variable costs by decreasing reliance on manual labor

- C) It has no effect on a company's cost structure
- D) It leads to higher production costs without improving efficiency

Answer: B) It reduces variable costs by decreasing reliance on manual labor

13. In the context of value creation, what is the primary role of innovation in a company?

- A) To reduce the costs of existing products
- B) To improve customer experience and create new revenue streams
- C) To streamline operations without adding new products or services
- D) To minimize the use of technology in production

Answer: B) To improve customer experience and create new revenue streams

14. Which of the following is a direct result of innovation in a business?

- A) Decreased operational complexity
- B) Increased market share through unique product offerings
- C) Higher fixed costs due to technological investments
- D) Reduced need for skilled labor

Answer: B) Increased market share through unique product offerings

15. How can automation lead to long-term value creation for a company?

- A) By allowing the company to reduce investment in research and development
- B) By ensuring uniform product quality and reducing human error
- C) By decreasing customer demand for the product
- D) By lowering the company's technological capabilities

Answer: B) By ensuring uniform product quality and reducing human error

16. What role does automation play in enhancing customer value?

- A) It leads to slower delivery times but reduces costs
- B) It reduces human interactions, which may diminish customer satisfaction

- C) It increases production speed, reduces errors, and can improve product consistency
- D) It eliminates customer service functions

Answer: C) It increases production speed, reduces errors, and can improve product consistency

17. Which of the following is an example of hazardous material commonly found in electronics manufacturing?

- A) Silicon wafers
- B) Lead solder
- C) Plastic casing
- D) Copper wires

Answer: B) Lead solder

18. What is the primary risk associated with improper handling of hazardous materials in electronics manufacturing?

- A) Increased product quality
- B) Health and environmental hazards
- C) Improved manufacturing efficiency
- D) Reduced product cost

Answer: B) Health and environmental hazards

19. Which of the following safety measures should be implemented when handling hazardous materials in electronics manufacturing?

- A) Ignoring the manufacturer's safety guidelines
- B) Using proper personal protective equipment (PPE) such as gloves and masks
- C) Storing hazardous materials near food supplies
- D) Disposing of hazardous materials in regular waste bins

Answer: B) Using proper personal protective equipment (PPE) such as gloves and masks

20. Which of the following is a key regulation for handling hazardous materials in electronics manufacturing?

- A) OSHA guidelines on worker safety
- B) ISO 9001 standards for quality management
- C) LEED certification for sustainable building practices
- D) The Clean Water Act for waste disposal

Answer: A) OSHA guidelines on worker safety

21. What should be done if hazardous materials, such as solvents or chemicals, are accidentally spilled during electronics manufacturing?

- A) Leave the spill to evaporate naturally
- B) Use appropriate spill kits to contain and clean the spill immediately
- C) Wash the spill with water and leave it unattended
- D) Ignore the spill if it's in a small quantity

Answer: B) Use appropriate spill kits to contain and clean the spill immediately

22. What is the main risk associated with improper storage of printed circuit boards (PCBs)?

- A) Overheating due to static electricity
- B) Degradation from exposure to UV light
- C) Damage from electrostatic discharge (ESD)
- D) Chemical breakdown from exposure to solvents

Answer: C) Damage from electrostatic discharge (ESD)

23. Why should sensors be stored in sealed containers when not in use?

- A) To avoid chemical reactions with the environment
- B) To prevent exposure to dust and contaminants
- C) To increase their weight for better handling
- D) To ensure the sensor remains in a "rest" state

Answer: B) To prevent exposure to dust and contaminants

Short Answer Questions(2 Marks)

1. What are the key factors that influence the valuation of an electronics manufacturing company?

Answer: Key factors include revenue growth, profit margins, market position, intellectual property, supply chain efficiency, production capacity, and technological advancements.

2. Why is the assessment of production capacity important in business valuation?

Answer: Production capacity is crucial because it indicates a company's ability to meet market demand and scale operations, directly impacting future revenue generation and profitability.

3. How does the company's supply chain impact its business valuation?

Answer: A reliable and efficient supply chain lowers operational risks, reduces costs, and ensures timely production, which in turn can increase the company's value by making it more stable and profitable.

4. What are the challenges in valuing a company with significant R&D investments in electronics?

Answer: R&D investments are hard to value due to their long-term nature, uncertainty about returns, and the risk of technological obsolescence, making future revenue projections less predictable.

5. What are the main components of the cost structure in electronics manufacturing?

Answer: The main components include direct materials, direct labor, overhead costs (both fixed and variable), research and development (R&D), and marketing and distribution expenses.

6. How do direct materials impact the cost structure of an electronics manufacturer?

Answer: Direct materials, such as components, semiconductors, and raw materials, typically form a significant portion of the total cost structure. Fluctuations in material prices can directly impact production costs and profitability.

7. What role does labor cost play in the cost structure of electronics manufacturing?

Answer: Labor costs include wages, benefits, and training expenses for employees directly involved in production. These costs can be either fixed or variable and significantly affect the overall cost structure.

8. How does automation affect the cost structure in electronics manufacturing?

Answer: Automation can reduce labor costs, increase efficiency, and decrease errors, leading to lower variable costs per unit and improving overall cost efficiency in manufacturing.

9. What are fixed costs in electronics manufacturing?

Answer: Fixed costs are expenses that do not change with production volume, such as rent, equipment depreciation, and salaried management. These costs remain constant regardless of the number of units produced.

10. How do variable costs impact the cost structure in electronics manufacturing?

Answer: Variable costs fluctuate based on production volume, including raw materials, labor, and utilities. As production increases, variable costs rise, but they can be controlled through efficient processes.

11. What types of hazardous materials are commonly used in electronics manufacturing?

Answer: Common hazardous materials include chemicals like solvents, acids, heavy metals (such as lead, mercury, and cadmium), and gases used in soldering and component cleaning processes.

12. Why is it important to properly handle hazardous materials in electronics manufacturing?

Answer: Improper handling of hazardous materials can lead to health risks, environmental contamination, legal issues, and damage to equipment, which may affect production and profitability.

13. What are the key safety measures when handling hazardous chemicals in electronics manufacturing?

Answer: Key safety measures include wearing personal protective equipment (PPE) like gloves, goggles, and aprons, proper ventilation, and using safe storage practices and containment systems.

14. How can exposure to hazardous materials affect workers in electronics manufacturing?

Answer: Exposure can cause respiratory issues, skin irritation, poisoning, long-term health problems, and even death, depending on the material and level of exposure.

15. How is waste from hazardous materials typically disposed of in electronics manufacturing?

Answer: Waste is typically disposed of through licensed hazardous waste disposal services that follow environmental regulations, ensuring proper treatment or recycling of materials like chemicals and metals.

Short answer questions (4 Marks)

Q.1 Why business valuation needs in electronics manufacturing Industry.

In the Electronics Manufacturing industry, business valuation is essential for various purposes. Here are the key business needs for valuation in this sector:

Mergers and Acquisitions (M&A):

Financial Reporting

Asset Management:

Product Development and Innovation:

R&D Investments

Financing and Lending:

Collateral Valuation Tax Planning

Property Tax Assessment

Insurance Coverage

Q.2 what is cost structure in Electronic Manufacturing Industry?

The cost structure of an electronic manufacturing business is the sum of all the costs associated with producing and selling a product or service:

Bill of materials (BOM)

The cost of all the components that make up the product, including the housing, PCB, battery, electronic components, packaging, and instruction manual .

Labor

The cost of assembly workers, logistics workers, production supervisors, and packagers

Consumable production supplies

The cost of basic chemicals, gloves, Personal Protective Equipment (PPE), glue, and other supplies .

Factory overhead

The cost of all other manufacturing costs, including rent, taxes, electricity, gas, and the margin that allows the factory to operate .

PCB design

The cost of designing the PCB, which can vary depending on the size, complexity, and density of the PCB.

Q.3 Write a short notes on Storage of Hazardous and Sensitive Materials.

Electronic and electrical products contain a number of hazardous substances, including lead, mercury and other metals, flame retardants and certain phthalates. These hazardous substances can impact human health and the environment through all stages of the life-cycle: During material extraction and manufacturing, workers and their surrounding communities may come into direct contact with hazardous chemicals which can result in significant adverse effects, including high cancer rates.

During the use phase of a product, hazardous chemicals may be released from electronics and lead to exposure of consumers and the environment. Further downstream, hazardous chemicals can be released from e-waste during disposal and recycling, directly affecting workers and entering ecosystems by contaminating the air, water and soil and entering food chains.

Q.4 What is protocol for chemicals and hazardous materials.

1. Assess the risks that exist in the workplace. Know which materials in the workplace represent hazards.
2. Provide employees adequate training and information about the hazardous materials in your workplace.
3. Consider potential hazards and plan ahead. Have arrangements and procedures in place to handle emergency circumstances that may arise from hazmat spills or exposure.
4. Always use the proper personal protection equipment (PPE). Old or damaged PPE should be replaced, and the PPE should be inspected prior to each use.
5. Ensure all hazardous materials are properly marked.
6. Keep all hazardous materials stored properly. Keep chemicals in dry, cool and ventilated areas, and separate incompatible materials.
7. Only use hazardous materials for their intended purposes.

8. Never eat or drink while handling hazardous materials.
9. Employees handling hazardous materials should always read the labels to understand what they're working with and have the safety data sheet (SDS) .
10. Report any concerns about damaged containers or potential leaks or spills.