

Assignment 3

Ques. What do you mean by time value of money?

Ans. Time Value of Money (TVM) is a fundamental financial concept, stating that the current value of money is higher than its future value, given its potential to earn in the years to come. Thus, it suggests that a sum of money in hand is greater in value than the same sum of money received in the next couple of years. Time Value of Money comprises one of the most significant concepts in finance. The idea focuses on identifying the real value of cash flows

expected in the future due to the business or individual investment decisions made from time to time.

For example, A wins a lottery of \$1,000 and has two options to either take a lump sum right at the moment or receive the same after a year or two. It is obvious for the winner to choose the first option as the winner can invest that money and receive \$1,200 or more in the next two years. But on the other hand, if A chooses to go otherwise, it will be the same \$1,000 even after two years. TVM is an important factor in determining the purchasing power and hence it is considered an important concept in inflation.

TVM is hugely affected during inflation as the latter hampers the purchasing power of money, leading to the loss of its value.

$$FV = PV * (1+i/n)^{n*t}$$

Here,

PV = Present value of money

FV = Future value of money

i = Rate of interest or current yield on similar investment

t = No. of years

n = No. of compounding periods of

Ques2. Write meaning and phases of business cycle?

Ans2. Business cycles are a type of fluctuation found in the aggregate economic activity of a nation

-- a cycle that consists of expansions

occurring at about the same time in many economic activities followed by similarly

general contractions (recessions). This sequence of changes is recurrent but not periodic.

The business cycle is an example of an economic cycle.

Business cycles are comprised of concerted

cyclical upswings and downswings in the

broad measures of economic activity—output, employment, income, and sales.

The alternating phases of the business cycle are expansions and contractions (also called recessions) often start at the peak of the business cycle—when an expansion ends—and end at the trough of the business cycle, when the next expansion begins.

The severity of a recession is measured by the three D's: depth, diffusion, and duration, and the strength of an expansion by how pronounced, pervasive, and persistent it is.

In essence, business cycles are marked by the alternation of the phases of expansion and contraction in aggregate economic activity, and the comovement among economic variables in each phase of the cycle. Aggregate economic activity is represented by not only real (i.e., inflation-adjusted) GDP—a measure of aggregate output—but also the aggregate measures of industrial production, employment, income, and sales, which are the key coincident economic indicators used for the official determination of U.S. business cycle peak and trough dates.

A popular misconception is that a recession is defined simply as two consecutive quarters of decline in real GDP. Notably, the 1960–61 and 2001 recessions did not include two successive quarterly declines in real GDP. A recession is

actually a specific sort of vicious cycle, with cascading declines in output, employment, income, and sales that feed back into a further drop in output, spreading rapidly from industry to industry and region to region. This domino effect is key to the diffusion of recessionary weakness across the economy, driving the comovement among these coincident economic indicators and the persistence of the recession.

Ques.3. What do you mean by break even analysis? Write its meaning and applications?

- Ans.3. A break-even analysis is a financial calculation that weighs the costs of a new business, service or product against the unit sell price to determine the point at which you will break even. In other words, it reveals the point at which you will have sold enough units to cover all of your costs. At that point, you will have neither lost money nor made a profit.

a) A break-even analysis reveals when your investment is returned dollar for dollar, no more and no less, so that you have neither gained nor lost money on the venture.

b) A break-even analysis is a financial

calculation used to determine a company's break-even point (BEP). In general lower fixed costs lead to a lower break-even point.

c) A business will want to use a break-even analysis anytime it considers adding costs—remember that a break-even analysis does not consider market demand.

There are two basic ways to lower your break-even point: lower costs and raise prices.

In other words, you should use a break-even analysis to determine the risk and value of any business investment, especially when one of these three events occurs:

1. Expanding a business

Break-even Points (BEP) will help business owners/CFOs get a reality check on how long it will take an investment to become profitable. For example, calculating or modeling the minimum sales required to cover the costs of a new location or entering a new market.

2. Lowering Pricing

Sometime businesses need to lower their pricing strategy to beat competitors in a specific market segment or product. So, when lowering pricing, businesses need to figure out how many

more units they need to sell to offset or makeup a price decrease.

3. Narrowing down business scenarios

When making changes to the business, there are various scenarios and what-ifs on the table that complicate decisions about which scenario to go with. BEP will help business leaders reduce decision-making to a series of yes or no questions.

Ques4. 4) What are the methods and techniques of costing with examples?

- Ans4. Costing is the technique and process of ascertaining costs. Keeping this definition in view, various methods have been developed to ascertain costs. A few of the important methods are listed below:

Methods:

1. Job Costing

In job costing, the costing of each job undertaken and executed is calculated. This method is adapted in production units that do not involve highly repetitive work.

Production units in which job costing is performed should be able to separate each job

or lot based on the number of orders executed. In commercial foundries, drop forging shops, and specialized industrial equipment manufacturers, job costing is commonly used.

2. Contract Costing

Job costing and contract costing are the same in terms of their underlying principles. A contract is a big job, whereas a job is typically small. Job costing and contract costing are also frequently referred to as terminal costing.

3. Cost-plus Costing

This is an aspect of contract costing. Cost-plus costing occurs when, for a contract, both the contract price and an extra agreed sum are paid to the contractor.

4. Batch Costing

When orders or jobs are arranged into different batches after taking into account the convenience of producing items, it is known as batch costing. Under batch costing, the cost of a group of products is ascertained.

Batch costing is suitable for companies producing general engineering goods, in which

the components can be easily arranged in convenient economic batches. In pharmaceutical companies, batch costing is also used advantageously and effectively.

5. Process Costing

When a product passes through different stages, each of which is distinct, well-defined, and easily separable, process costing can be applied. Process costing helps to calculate the cost of production at each stage.

Extractive industries, including companies dealing in chemicals, paints, foods, or soaps, can effectively and advantageously use the process costing method.

6. Single Costing

Single costing is also known as unit costing or output costing. Under single costing, the cost per unit of output or production is ascertained. Each element constituting such a cost is determined separately.

This costing method is suitable in industries such as brick-making, paper mills, and flour

7. Operating Costing

When expenses are incurred to provide services such as those rendered by bus companies, transport agencies, and electricity companies the operating costing method is used to good

8. Multiple Costing

In this costing method, the costs of different sections of production are combined after ascertaining the cost of each and every part

In the automotive industry, as well as other industries in which products are comprised of many assembled parts, multiple costing is frequently applied.

9. Departmental Costing

In this method, the main objective is to ascertain separately the cost of outputs for each department. Whenever an organization consists of several departments, departmental costing is a reasonable option to adopt.

10. Operation Costing

Operation costing is a refinement of process costing. When mass production or repetitive production are carried out or where components must be stocked in a semi-finished stage, operation costing is suitable and used

with advantage.

Types:

1. Historical Costing: Ascertaining and recording costs after they have been incurred is known as historical costing. It provides the management with a record of what has happened and, therefore, is a postmortem of the actual costs.

2. Standard Costing: The preparation and use of standard costs, their comparison with actual costs, and the analysis of variances to their causes and points of incidence.

3. Marginal Costing: The ascertainment of marginal costs and of the effect on profit of changes in volume or type of output by differentiating between fixed costs and variable

4. Direct Costing: The practice of charging of all direct costs to operations, processes, or products, leaving all indirect costs to be written off against profits in the period in which they arise.

5. Absorption Costing: The Institute of Cost and Management Accountants defined

absorption costing as follows: "The practice of charging all costs, both variable and fixed, to operations, processes or products."

6. Uniform Costing: Uniform costing was defined by the Institute of Cost and Management Accountants as "the use by several undertakings of the same costing principles and/or practices."

Ques5. Difference between journal & ledger in

Ans5. The journal and the ledger are the most important books of the double entry mechanism of accounting and are indispensable for an accounting system. The differences between journal and ledger are

Journal: The journal is the book of first entry. The journal is the book for chronological record. A journal has five column - Date, Particulars, Ledger Folio, Debit Amount, credit Amount. Transaction is the basis of classification

Of data within the journal. Process of recording in the journal is called

Ledger: The ledger is a book of secondary or

final entry. The ledger is the book for analytical record. Ledger has four identical columns on debit and credit side - Date, Particulars, Journal Folio and Amount.

Account is the basis of classification of data within the ledger. The process of recording in the ledger is known as posting.

Ques6. What do you mean by law of variable proportion in economics?

Ans6. Law of Variable Proportion is regarded as an important theory in Economics. It is referred to as the law which states that when the quantity of one factor of production is increased, while keeping all other factors constant, it will result in the decline of the marginal product of that factor.

Law of variable proportion is also known as the Law of Proportionality. When the variable factor becomes more, it can lead to negative value of the marginal product.

The law of variable proportion can be understood in the following way.

When variable factor is increased while keeping all other factors constant, the total

Product will increase initially at an increasing rate, next it will be increasing at a diminishing rate and eventually there will be decline in the rate of production.

Assumptions of Law of Variable Proportion
Law of variable proportion holds good under certain circumstances which will be discussed in the following lines.

Constant state of Technology: It is assumed that the state of technology will be constant and with improvements in the technology, the production will improve.

Variable Factor Proportions: This assumes that factors of production are variable. The law is not valid if factors of production are

Homogeneous factor units: This assumes that all the units produced are identical in quality, quantity and price. In other words, the units are homogeneous in nature.

Short Run: This assumes that this law is applicable for those systems that are operating for a short term, where it is not possible to alter all factor inputs.

Stages of Law of Variable Proportion

The Law of Variable Proportions has three stages, which are discussed below.

First Stage or Stage of Increasing Returns: In this stage, the total product increases at an increasing rate. This happens because the efficiency of the fixed factors increases with addition of variable inputs to the product.

Second Stage or Stage of Diminishing Returns: In this stage, the total product increases at a diminishing rate until it reaches the maximum point. The marginal and average product are positive but diminishing gradually.

Third Stage or Stage of Negative Returns: In this stage, the total product declines and the marginal product becomes negative.