Question No.01

Cost:

Cost is defined as

"The monetary worth of goods and services that manufacturers and consumers purchase."

In economic, cost is the measure of the diverse opportunities foreseeable in the choice of one good or activity over others.

Fixed and variable cost:

In economics, variable costs and fixed costs are the two main costs a company has when producing goods and services.

Variable cost:

Varies with the amount produced.

Variable costs, however, change over a definite period and are linked directly to the business activity. These are based on the business performance and the volume of services the business generates.

Some examples of variable costs include:

- Direct labor
- Commissions
- Taxes
- Operational expenses

Fixed cost:

Fixed cost remains the same no matter how much output a company produces.

Some examples of fixed costs include:

- Rent
- Telephone and internet costs
- Insurance
- Employee Salaries
- Loan Payments

Fixed costs ae usually the same throughout the year and easy to calculate.

Direct and Indirect cost:

Direct costs are expenses that directly go into producing goods or deliever services while indirect costs are common business expenses that keep you operating.

Direct cost:

“Direct costs are business expenses that can be directly useful to producing a precise cost object, like a good or service. Cost objects are items that costs are consigned to.

Examples of direct costs include direct labor, direct materials, and manufacturing supplies.”

Indirect cost:

Indirect costs are expenses that relate to more than one business activity. Unlike direct costs, you cannot allocate indirect expenses to specific cost objects.

Examples of indirect costs include rent, utilities, general office expenses, employee salaries, professional expenses

Explicit cost:

Explicit costs are out-of-pocket costs for a firm—for example, payments for wages and salaries, rent, or materials

Implicit cost:

Implicit costs are the opportunity cost of assets presently owned by the firm and used in business—for example, expanding a factory onto land already owned.

Actual cost:

Actual expenditure made to acquire an asset, which includes the supplier-invoiced expense, plus the costs to deliver, set up, and test the asset.

Opportunity cost:

The value of the next-highest-valued substitute use of that resource. If, for example, you spend time and money going cinema, you cannot spend that time at jogging, and you cannot use the money on somewhere else.

Question No.02

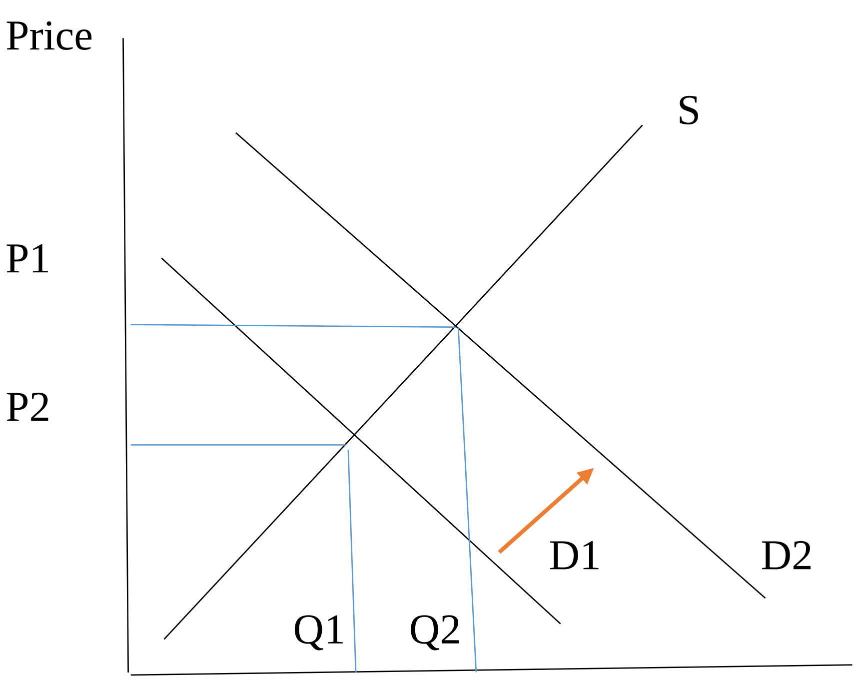
During the pandemic situation there is the shortage of facemasks in market.

As everybody is demanding facemasks and it is mandatory for everybody to wear facemasks during the pandemic situation.

If the supply decreases and the demand increases then the price of masks will increase.

As increase in demand result in market equilibrium to increase the prices.

As market equilibrium is the point where demand is equal to supply.



If there was an increase in income the demand curve would shift to the right initially, there would be a shortage of the good. Therefore the price and quantity supplied will increase leading to a new equilibrium.

Question No.02

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Variable:

A variable is a special type of amount or quantity with an unknown value.

Independent variable:

A variable whose variation does not depend on that of another.

Example:

If we take research model impact of motivation on project success.

Motivation in this model will be independent because it does not affect by other variable.

It is a variable that stands alone and isn't changed by the other variables.

How old a person is his age is independent variable. Whatever the situation is any changes happen but it would not affect the age of an individual the age of a person will increase every year.

Dependent Variable:

A variable whose value be influenced by on that of another.

Example:

In the model

“Impact of benefits on job retention”

Job retention is a dependent variable because it depends upon the benefits employees getting from an organization.

In real life example the health of a person depends upon the diet he is taking. Heath is dependent variable here because I depends upon the diet.

Question No 03.

Regression analysis:

Regression analysis is a powerful statistical method that allows you to examine the relationship between two or more variables of interest.

Importance of regression analysis in managerial economics:

Importance of Regression in managerial economics:

Regression is a statistical technique that supports in qualifying the affiliation between the correlated economic variables. The first step comprises estimating the coefficient of the independent variable and then calculating the reliability of the projected coefficient. This needs framing a hypothesis, and created on the hypothesis, we can create a function.

If a GM needs to findout the relationship among the firm's marketing costs and its revenue, he will undertake the test of hypothesis. persueing that greater markeing expenses lead to greater sale for a firm. The GM gathers data on marketing expenses and on sales revenue in a definite tie period. This hypothesis can be explained into the mathematical function as,

$Y = A + Bx$

Where Y is sales, x is the Marketing expenses, A and B are constant.

(B)

y	**25**	**55**	**68**	**90**	**122**	**200**	**280**	**450**	**900**
x	**100**	**250**	**500**	**800**	**1050**	**1030**	**1650**	**2400**	**3500**

function	value
Mean of x	1,283.333333
Mean of y	243.3333333
Correlation coefficient r	0.969881417
A	-74.26013106
B	0.247454268
Estimate of y	-58.42170374

The data shows strong correlation as the value of r is 0.9698.