**Economics Assignment**

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**Answer 1**

The concept involved in this scenario is the time value of money and the specific subtopic involved is the present value of an ordinary annuity. The annuity is a series of payments received or made at a regular interval of time. If the payment involved is done at the start of a time period, it is called an annuity due while if the payment is made at the end of the period, it is called an ordinary annuity. The case under observation is an ordinary annuity. The terms involved in calculating the present value of annuity are as follows:

P denotes the periodic payment, I shows the interest rate, n shows the time period. The formula for calculating the present value of the ordinary annuity is as follows:



Putting the values in the given formula, we have P = 20000, r = 4.15% and n = 3 years. Putting the values in the formula gives us an answer of $ 55239 which is more than $50000. The interest rate chosen is the highest offered in the USA on fixed annuities. One more consideration that the investor will have to keep in mind is the number of compounding periods under consideration. This relates to the differentiation between the nominal and effective rates on interest. The nominal rate is written as 9 % per annum compounded quarterly. The effective rate will come out to be 2.25% per quarter. Generally the more number of compounding will result in an increased amount of money for the investor. Another consideration that we have to take into account is the option to receive payment at the start of the time period. This would lead us to the concept of annuity due. The formula for the present value of annuity due is as follows



If we put the given values in the above formula, we get $ 57587.

The advice to the friend should be to accept the offer of $ 20000 over the next three years. Tge most profitable option is to go with annuity due.

**Answer 2**

The company chosen in American Airlines.

Today price: 31.43

Yesterday price: 32.13

Percentage Change: (31.43-32.13)/31.43\*100. This comes out to be -2.22%.

Dow Jones Index:

Today: 248.28

Yesterday: 247.94

Percentage change: (248.28-247.94)/248.28\*100. This comes out to be 0.137%.

The dow jones is regarded as the sole indicator for the US market itself. This is one of the most followed indices in the world. This is a price weighted index which means that the stocks with higher prices are given higher weights. The index is adjusted to various aspects like spinoffs etc. The dow jones index for airlines is a simple weighted averages of the share prices of all the companies included in the said sector. The drop in the index is associated with an economic downturn in the US. The overall rise in the index may be because of the rise in only one company that is able to outweigh the decrease in all other shares. Thus an increase in Dow average is not beneficial to all the investors.

**Answer 3**

1. The author concludes that the kidneys should not be allowed to be sold because in that case the poor will start trying to sell their body parts to the rich people.

2. The alternate method prescribed is that the government provides the finances for the patients of kidney diseases.

3. The alternate method is better as this would also allow the poor people to have their kidney problems solved as well.

**Answer 4**

**Price**

 s d Quantity

In the above diagram the curve named d shows the demand curve and the curve named S shows the supply curve. The price is shown on Y axis and quantity is shown on the x axis. Equilibrium price is 300.

**Price**

 S D

 Quantity

In the above diagram, the red line shows the price suggested by the person also known as ceiling price. Implementation of this price will create a shortage in the economy shown as the distance between the supply and demand curves. As the suppliers will not be willing to provide sufficient amount of the product or service at this price.

**Answer 5**

Although before the class I believed that the prices are set by the shopkeepers themselves and the rise therein is affected by the shopkeeper. I believed that it is the discretion of the sellers to fix the price of a product. After I have studied this course, I have come to know that the sellers have least impact on the price of a product especially if the market has perfect competition. It is the availability of substitutes and other similar factors that affect the price of a product. The suppliers will be happier if the prices are higher.

We should know the idea correctly because if the price of a product is higher, we can look for some of its substitutes and buy them.

The wrong concept would lead us to the conclusion that the shopkeeper is selling the product at a higher price at his own discretion. This will stop us going to certain shops for buying. However if we have corrected our concept, we will go to any shopkeeper to buy certain products, in this case our decisions will be well informed.