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***Class : B.B.A (4 SEMETER)***

**Given Data**

Pv = 2000

Fv = 4765

K = 8% = 4% (semiannually)

N = ?

**Solution**

As we know that

Pv = fvxpvIfkn ……(1)

Now put the values in equation 1

Pv/fv = PVIFkn

2000/4765=PVIF4%n

0.4197 = PVIF4%n

Checking in present value table under 4%

So

N = 22 years.

**PART(B)**

**Given Data**

PMT = 100

I = 10%

I = O.1

PVP = ?

**SOLUTION**

As we know that

PVP = PMTx1/I

PVP = 100x1/0.1

PVP = 1000

**Question (2) Part (A)**

**Nominal Interest Rate**

Nominal interests rate refer to the interest rate before taking inflation into account. Nominal can also refer to stated interest rate on loan, without taking into account any fees or compounding of interest.

**Example**

If I deposit 800000 in saving account and bank allow me to refer 12% interest return rate on 800000 that extra return is nominal interest rate.

**Real Rate Of Interest**

Real rate of interest is the rate of interest an investor, saver or lender receives after allowing for inflation, and taxes.

**Example**

Suppose if a person deposit 700000 in bank and bank paid 20% on amount including inflation of 10%, this 10% will deduct from 20% of interest rate is called real rate of interest.

**Part(B)**

**Security Exchange**

Security exchange is also known as stock exchange in which we have a trader or a broker who can buy and sell bonds and currency between two parties.

I will prefer security exchange market because this market has some physical existence and in case of any mishap the broker will be responsible for the loss.

All the companies are register on security exchange so it make easier for us to chose it. Security exchange helps the buyer to choose on your own choice.

**Question (3) Part (A)**

**Given Data**

FV = 40000

N = 15

K = 10%

K = 0.1

PV = ?

**SOLUTION**

As we know that

Pv = FV/(1+k)n

Now putting the value in above equation

Pv = 40000/(1+0.1)15

= 40000/(4.177248169)

Pv = 9575.6819

**Part (B)**

**Ordinary Annuity**

Series of equal payment made at the end of the consecutive period over fixed length of time period.

**Example**

The inventor receives the payment at the end of time period. Home loan payment at end of month, loan from the bank in the end of month etc

**Annuity Due**

Require payment to be made at the beginning of each period. They are categorized as in annuity.

Due payment is made at today but in ordinary annuity payment is made at the end of month/year.

**Example**

University fee/ school fee at beginning of month, rent in beginning of month. Cellphone payment in beginning of month.

**Reason of Difference**

Annuity due is payment done the start of month or time period. Ordinary annuity is payment done in the end of month or time period.

Therefore they are categorized different.