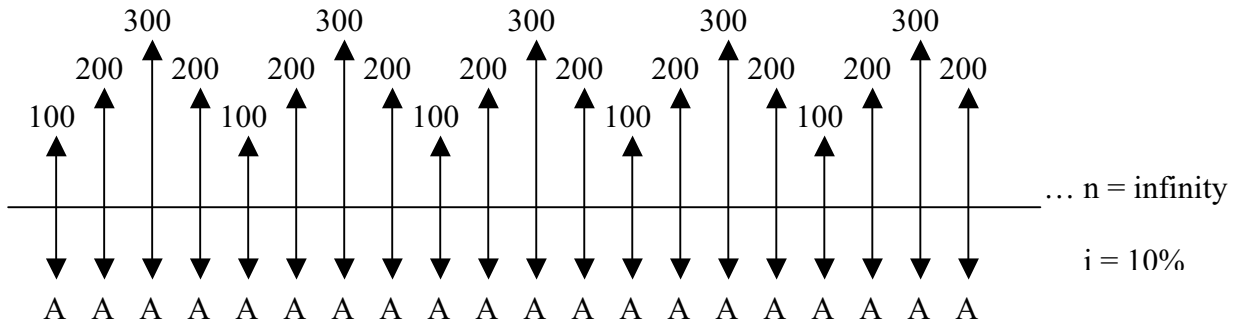


Time : 50 minutes

Question (1) 6 points

For the following cash flow diagram, find the value of A .



Question (2) 6 points

Consider the following mutually exclusive alternatives that have 10 years useful life each. If your MAR = 10% which alternative should be selected ?

Use **either** rate of return analysis **or** benefit cost ratio analysis .:

| | Alternative A_1 | Alternative A_2 | Alternative A_3 |
|----------------------------|----------------------|----------------------|----------------------|
| Initial cost \$ | 800 | 300 | 150 |
| Uniform annual benefits \$ | 142 | 60 | 34 |

Question (3) 9 points

A local club offers a one-year membership for 150 JD and a two years membership for 270 JD .
Memberships are paid in advance .

(a) What is the incremental rate of return ?

(b) Suppose that you need to join the club for three years, how many feasible alternatives could be formed ? **Only draw the cash flow diagrams for these alternatives .**

(c) Refer to part (b) , if your MAR is 20% , which alternative is best ?

Hint : you may make use of part (a) to answer this question without making any further calculations ! If so , only **draw** the cash flow diagram of the best alternative and briefly **explain** why it must be the .

Question (4) 6 points

An investor is considering the purchase of one of two bonds. The first bond matures in 5 years and pays 70 JD every year and is offered for 700 JD . The second bond matures in 4 years and pays 40 JD every six months , it is being offered for 800 JD . Both bonds have a par value of 1000 JD .
If the investor desires to earn 12% or more per year compounded semiannually , what is your advice to the investor ?
