

FN241 class 11 review questions

Provide precise and concise responses to the following questions referring to theories, concepts, and frameworks as discussed in the class materials and the main textbook. For quantitative problems, demonstrate the process of calculation and clearly highlight your answers as appropriate. Write down your answers clearly so that the lecturer can read them easily.

Review questions

1. Explain the basic defect in the traditional net cost method for determining the cost of life insurance.
2. Why is the rate of return on the saving component in most cash-value policies negative during the early years of the policy?
3. Briefly explain the yearly rate-of-return method that policyholders can use to determine the rate of return on the saving component of a cash-value policy.
4. Describe the suggestions that consumers should follow when life insurance is purchased.

Application questions

1. Tom, age 32, is an accountant. Tom believes that he will have average annual earnings of \$80,000 per year up until he retires in 30 years. Roughly 50% of Tom's average annual earnings are used to pay taxes, insurance premiums, and for self-maintenance; with the balance available for family support. Assuming a 6% interest rate, what is Tom's human life value?
2. Nicole, age 25, is considering the purchase of a \$20,000 participating ordinary life insurance policy. The annual premium is \$248.60. Projected dividends over the first 20 years are \$814. The cash value at the end of 20 years is \$4314. If the premiums are invested at 5 percent interest, they will accumulate to \$8631 at the end of 20 years. If the dividends are invested at 5 percent interest, they will accumulate to \$1163 at the end of 20 years. A \$1 deposit at the beginning of each year at 5 percent interest will accumulate to \$34.719 at the end of 20 years.
 - a. Based on the traditional net cost method, calculate the cost per \$1000 per year.
 - b. Based on the surrender cost index, calculate the cost per \$1000 per year.