

4/5

**CAT II PENSION AND RETIREMENT BENEFITS**

- a. A company has a pension scheme which provides a pension upon retirement of  $(1/80)$ th of the final salary per year of service. In addition the sum of Shs10,000 is paid on death in service of a member. If all contributions are paid by the employer, find the contribution rate as a percentage of salary required for a new entrant aged 40 with a salary rate of Shs10,000. Use the basis of Formulae and AM 92 Tables" (with the supplement); final salary is the average annual salary in the 3 years prior to retirement. (5 marks)
- b. An employee plans to retire in five years. Current gross annual income and savings are respectively 90,000 and 360,000. Projected average annual rates of inflation, income growth and investment net returns are respectively 3%, 4% and 11%. Compulsory employer and employee superannuation contributions are respectively 17% and 8.25% of gross annual income. Tax-deductible and non-tax-deductible work-related expenses are currently 1,500 and 2,400 respectively. Life expectancy at time of retirement is assumed to be 24 years. Pension payment fees are currently \$150 per year. Superannuation contribution tax is payable at the rate of 15% and personal tax is 202S0. A Medicare levy is payable at the rate of 1.5% of taxable income.
- a. Calculate the income required in the first year of retirement. (4 marks)
- b. Calculate the capital base required to fund the post-retirement cash flows. (4 marks)
- c. Calculate the value of current superannuation contribution net of contribution tax. (5 marks)
- c. Consider a life aged 35 with current salary rate \$10,000 who contributes 5% of his salary to a pension scheme. Using the AM 92 Tables, calculate the mean present value of the employee's future contributions. (3 marks)
- d. Discuss any four principles of a pension scheme. (8 marks)