

MTH302 SOLVED ASSIGNMENT ENJOY

Solution: (1)

Basic salary = 20,000

Allowances = 50%

Gross salary = 20,000 + 5000 = 25,000

Q (2)

Only tell me the correct formula

$I = P \cdot R \cdot T / 100$?

$S = P(1+r/100)^5$?

basic salary 20000

allowances

Solution: From (2.1) the present value of the annuity is

$$100 a_{\overline{5}|} = 100 \times \left[\frac{1 - (1.09)^{-5}}{0.09} \right] = \$388.97,$$

which agrees with the solution of Example 2.1. The future value of the annuity is

$$(1.09)^5 \times (100 a_{\overline{5}|}) = (1.09)^5 \times 388.97 = \$598.47.$$

Alternatively, the future value can be calculated as

$$100 s_{\overline{5}|} = 100 \times \left[\frac{(1.09)^5 - 1}{0.09} \right] = \$598.47.$$

Solution: summarizes the present values of the payments as well as their total.

Table 2.1: Present value of annuity

Year	Payment (\$)	Present value (\$)
1	100	$100 (1.09)^{-1} = 91.74$
2	100	$100 (1.09)^{-2} = 84.17$
3	100	$100 (1.09)^{-3} = 77.22$
4	100	$100 (1.09)^{-4} = 70.84$
5	100	$100 (1.09)^{-5} = 64.99$
Total		388.97

$$= .5 * 20000 = 10000$$

Gross Salary = 30000

casual leaves = 20250

earned leaves = 20250

sick leave = 13500

total = 20250 + 20250 + 13500 = 54000

total cost of leaves as percent = 15%

leaves cost = 4500

total social charges = 15% + 5% + 5.8 = 25.8% = 7740