

FA Module 14 Pension fair value assets practice exam questions

(The attached PDF file has better formatting.)

A defined benefit pension plan has the following entries for 20XX.

• Employer contributions	72
• Current service costs	49
• Past service costs	52
• Discount rate used to estimate plan liabilities	3%
• Benefit obligation at beginning of year	5,134
• Benefit obligation at end of year	4,957
• Actuarial loss due to increase in plan obligation	52
• Fair value of plan assets at beginning of year	4,698
• Actual return on plan assets	295
• Expected rate of return on plan assets	4%

Question 14.1: Total service cost

What is the total service cost?

Answer 14.1: $49 + 52 = 101$

(total service cost = past service cost + current service cost)

Question 14.2: Interest cost

What is the interest cost on the benefit obligation?

Answer 14.2: $3\% \times 5,134 = 154.02$

(interest cost on the benefit obligation = discount rate $\times$ benefit obligation at the beginning of the year)

Question 14.3: Pension benefits paid

What are the pension benefits paid during the year?

Answer 14.3: $5,134 - 4,957 + 52 + 154.02 + 101 = 484.02$

(pension benefits paid during the year = benefit obligation at the beginning of the year – benefit obligation at the end of the year + actuarial loss (or – actuarial gain) + interest expense on the benefit obligation + total service cost)

Question 14.4: Fair value of plan assets

What is the fair value of the plan assets at the end of the year?

Answer 14.4: $4,698 + 72 + 295 - 484.02 = 4,580.98$

(fair value of plan assets at the end of the year = fair value of plan assets at the beginning of the year + employer contributions + actual return on plan assets – pension benefits paid)

Question 14.5: Periodic pension cost

What is the periodic pension cost for the year?

Answer 14.5: $101 + 52 + 154.02 - 295 = 12.02$

(periodic pension cost = total service cost + actuarial loss (or – actuarial gain) + interest expense on the benefit obligation – actual return on plan assets)