

FA Module 14 Pension funded status practice exam questions

covering current service cost, past service cost, actuarial gain (or loss), benefit obligations, benefits paid, actual return on plan assets, employer contributions, remeasurement gain or loss, total service cost, interest cost on the benefit obligation, fair value of plan assets, periodic pension cost, funded status

(The attached PDF file has better formatting.)

A firm reporting under IFRS has a defined benefit pension plan, with a discount rate of 6%. For 20XX:

!	current service cost	49
!	past service cost	54
!	actuarial gain (or loss)	25
!	benefit obligations at beginning of year	3,024
!	benefits paid	149
!	fair value of plan assets at beginning of year	2,517
!	actual return on plan assets	141
!	employer contributions	82

Question 14.1: Fair value of plan assets

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

Answer 14.1: $2,517 + 141 + 82 - 149 = 2,591$

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

Question 14.2: Remeasurement gain or loss

What is the remeasurement gain or loss?

Answer 14.2: $25 + (141 - 6\% \times 2,517) = 14.98$

(remeasurement gain or loss = actuarial gain or loss + actual return on plan assets – expected return on plan assets)

Question 14.3: Total service cost

What is the total service cost?

Answer 14.3: $49 + 54 = 103$

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

Question 14.4: Interest cost on the benefit obligation

What is the interest cost on the benefit obligation?

Answer 14.4: $3,024 \times 6\% = 181.44$

(interest cost on the benefit obligation = discount rate × benefit obligation at the beginning of the year)

Question 14.5: Benefit obligation

What is the benefit obligation at the end of the year?

Answer 14.5: $3,024 + 181.44 - 149 - 25 + 103 = 3,134.44$

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

Question 14.6: Net interest expense

What is the net interest expense (net interest income)?

Answer 14.6: $6\% \times (3,024 - 2,517) = 30.42$

(net interest expense = discount rate × (benefit obligation at the beginning of the year – fair value of plan assets at the beginning of the year))

Question 14.7: Periodic pension cost

What is the periodic pension cost?

Answer 14.7: $103 + 30.42 - 14.98 = 118.44$

(periodic pension cost = total service cost + net interest expense – remeasurement gain or loss)

Question 14.8: Funded status at the beginning of the year

What is the funded status at the beginning of the year?

Answer 14.8: $2,517 - 3,024 = (507)$

(funded status = fair value of plan assets – benefit obligation)

Question 14.9: Funded status at the end of the year

What is the funded status at the end of the year?

Answer 14.9: $2,591 - 3,134.44 = (543.44)$

(funded status = fair value of plan assets – benefit obligation)