Question Number	Scheme	Marks
1(a)	Resolving horizontally: $5 = T\cos 65°$ $T =$ 12, 11.8, or better (N)	M1A1 A1 (3)
(b)	Resolving vertically: $W = T\cos 25°$ $= 11.8\cos 25° =$ 11, 10.7 or better (N)	M1A1 A1 (3)
		[6]

Notes for Question 1

Question 1(a)

First M1 for resolving horizontally with correct no. of terms and T term resolved.
First A1 for a correct equation in T only.
Second A1 for 12 (N) or 11.8 (N) or better.
N.B. The M1 is for a *complete method* to find the tension so where two resolution equations, neither horizontal, are used, the usual criteria for an M mark must be applied to *both* equations and the first A1 is for a correct equation in T *only* (i.e. W eliminated correctly)

Alternatives:

Lami's Theorem: $\frac{T}{\sin 90^\circ} = \frac{5}{\sin 155^\circ}$ (same equation as → resolution) M1A1

Question 1(b)

First M1 for resolving vertically with correct no. of terms and T (does not need to be substituted) term resolved.
First A1 for a correct equation in T only.
Second A1 for 11 (N), 10.7 (N) or better.

Alternatives:

Triangle of forces: $W = 5\tan 65^\circ$ M1A1

Lami's Theorem: $\frac{T}{\sin 90^\circ} = \frac{W}{\sin 115^\circ}$ M1A1

Or Resolution in another direction e.g. along the string M1 (usual criteria) A1 for a correct equation.