

Question Number	Acceptable Answer	Additional guidance	Mark
6(a)	$NPP = GPP - R$ (1)		(1)

Question Number	Acceptable Answer	Additional guidance	Mark
6(b)(i)	<p>A description that makes reference to the following:</p> <ul style="list-style-type: none"> • use of several quadrats of stated area placed at random (1) • heather placed in drying oven until constant mass (1) 		(2)

Question Number	Acceptable Answer	Additional guidance	Mark
6(b)(ii)	<ul style="list-style-type: none"> • (gradient) $46.875 \text{ (g m}^{-2} \text{ yr}^{-1}) \times 22.186 \text{ (kJ)} = 1039.97 \text{ (g kJ m}^{-2} \text{ yr}^{-1})$ (1) • $(1037.97 \div 3\,144\,000) \times 100 = 0.033\%$ (1) 	<p>Example</p> $750 \text{ g m}^{-2} \div 16 \text{ years} = 46.875 \text{ g m}^{-2} \text{ yr}^{-1}$	(2)

Question Number	Acceptable Answer	Additional guidance	Mark
6(b)(iii)	<p>An explanation that makes reference to the following:</p> <ul style="list-style-type: none"> • moss not all removed by burning so quickly re-grows (1) • mat grass colonises after 1 year and outcompetes moss for {light / minerals / water} so is the dominant plant after 5 years (1) • both decrease as heather colonises and becomes dominant as the heather outcompetes them both for {light / minerals / water} (1) 		(3)

(Total for Question 6 = 8 marks)