

Q1.

Question Number	Answer	Additional guidance	Mark
(ii)	substitution (1) $3500 = \frac{670\,000}{t}$ rearrangement (1) $(t =) \frac{670\,000}{3500}$ evaluation (1) 190(s)	accept substitution and rearrangement in either order accept any answer that round to 190(s) power of ten error award 2 marks maximum award full marks for the correct answer without working	(3)

Q2.

Question	Answer	Additional guidance	Mark
(i)	substitution (1) $(P =) \frac{130\,000}{87}$ evaluation (1) $(P =) 1494$ (W) value to 2sf (1) 1500 (W)	award two marks for the correct answer without working independent mark for any number to 2sf	(3) AO2.1

Q3.

Question number	Answer	Additional guidance	Mark
(ii)	recall $P = \frac{E}{t}$ (1) substitution (1) $\frac{18}{20}$ evaluation (1) 0.9 W (1)	allow 1 mark for a correct substitution of values into an incorrect equation independent mark watt(s) award full marks for correct answer without working	(4)

Q4.

Question Number	Answer	Acceptable answers	Mark
(a)(i)	60 (kW h/ units) (1) 60 x 20 (= 1200) (p) (1)	15459 - 15399 £12 ecf Award full marks for correct answer with no working £12 scores 2 Power of Ten error scores maximum 1 60 in answer space with no working scores 1	(2)

Question Number	Answer	Acceptable answers	Mark
(a)(ii)	60 / 15 (1) 4 (kW) (1)	Allow ecf from 6(a)(i) marking point 1 Award full marks for correct answer with no working	(2)

Q5.

Question Number	Answer	Acceptable answers	Mark
(a)(iii)	$(\text{saving}) = 2 \times 3 \times 15$ (1) 90 (p) (1)	award full marks for correct answer with no working $2 \times 3 \times 0.15$ (£) 0.90	(2)

