

1(a)	A
1(b)(i)	(000)11000
1(b)(ii)	(0)1100101
1(b)(iii)	19
1(b)(iv)	34
1(c)(i)	0101 0001
1(c)(ii)	1110 0011
1(c)(iii)	82
1(d)	One mark for correct method of working, for example flip and add 1 One mark for correct answer 11111011
1(e)(i)	A
1(e)(ii)	Any three from: • Microprocessor compares the value from the sensor to a stored value • If the values do not match, the microprocessor sends a signal to increase or decrease the temperature • If the values match, no action is taken
1(f)	Any two from: • It has a single/limited function • It is difficult to change its function // cannot be reprogrammed • It has dedicated hardware • It has a microprocessor