Answers and mark guide

Q	Answer	Working	Marks
1	**$2^3 \times 3^2$**	Use a factor tree or repeated division by primes.	2
2	**$2^2 \times 3^2$**	Use a factor tree or repeated division by primes.	2
3	**$2^2 \times 3 \times 5$**	Use a factor tree or repeated division by primes.	2
4	**$2^3 \times 3$**	Use a factor tree or repeated division by primes.	2
5	**$3^2 \times 5$**	Use a factor tree or repeated division by primes.	2
6	**6**	List the factors or use prime factors: HCF = 6	2
7	**4**	List the factors or use prime factors: HCF = 4	2
8	**3**	List the factors or use prime factors: HCF = 3	2
9	**60**	LCM = 60	2
10	**50**	LCM = 50	2
11	**$2^3 \times 3^2$; $2^2 \times 3^3$; HCF = 36**		3
12	**HCF = 36, LCM = 216**	Use prime factors.	3
13	**12**	Common prime factors of all three.	3
14	**1260**	Highest power of each prime.	3
15	**HCF = 24, LCM = 2520**	Use prime factors.	3
16	**08:24**	LCM(8,12) = 24 minutes after 08:00	4
17	**48**	LCM = 48	4
18	**30**	LCM of 6, 10, 15	4
19	**3**	$12 = 2^2 \times 3$; every prime needs an even power. n = 3; 12×3 = 36	5
20	**(a) 100 cm (b) 6 tiles**	HCF(300,200) = 100; (300÷100) × (200÷100)	5

My score: _____ / 57 Questions 1–15 = 35 marks (Foundation focus)