1 Write 36 as a product of its prime factors.

.....

(Total for Question 1 is 2 marks)

2 Express 56 as the product of its prime factors.

.....

(Total for Question 2 is 2 marks)

3 Write 60 as a product of its prime factors.

.....

(Total for Question 3 is 2 marks)

4 Write 124 as a product of its prime factors.

.....

(Total for Question 4 is 2 marks)

5 Write 500 as a product of powers of its prime factors.

.....

(Total for Question 5 is 3 marks)

6 (a) Write 156 as a product of its prime factors.

.....

(2)

(b) Find the highest common factor (HCF) of 156 and 130

.....

(2)

(Total for Question 6 is 4 marks)

7 (a) Write 84 as a product of its prime factors.

.....

(2)

(b) Find the lowest common multiple (LCM) of 60 and 84

.....

(2)

(Total for Question 7 is 4 marks)

8 Find the highest common factor (HCF) of 72 and 90

.....

(Total for Question 8 is 2 marks)

9 (a) Find the Highest Common Factor (HCF) of 60 and 84

.....

(2)

(b) Find the Lowest Common Multiple (LCM) of 24 and 40

.....

(2)

(Total for Question 9 is 4 marks)

10 (a) Find the lowest common multiple (LCM) of 40 and 56

.....

(2)

$A = 2^3 \times 3 \times 5$ $B = 2^2 \times 3 \times 5^2$

(b) Write down the highest common factor (HCF) of A and B.

.....

(1)

(Total for Question 10 is 3 marks)

11 A and B are numbers such that

$$A = 2^2 \times 3^4 \times 7$$
$$B = 3^2 \times 7^2$$

(a) Find the highest common factor (HCF) of A and B.

.....

(1)

(b) Find the lowest common multiple (LCM) of A and B.

.....

(2)

(Total for Question 11 is 3 marks)

12 Here are three lamps.

lamp **A** lamp **B** lamp **C**

Lamp **A** flashes every 20 seconds.
Lamp **B** flashes every 45 seconds.
Lamp **C** flashes every 120 seconds.

The three lamps start flashing at the same time.

How many times in one hour will the three lamps flash at the same time?

.....

(Total for Question 12 is 3 marks)

13 Two numbers m and n are such that

m is a multiple of 5

n is an even number

the highest common factor (HCF) of m and n is 7

Write down a possible value for m and a possible value for n.

$m =$ .....

$n =$ .....

(Total for Question 13 is 2 marks)