1 Write down the value of 7^2

$7^2 = 7 \times 7 = 49$

49 (1)

(Total for Question 1 is 1 mark)

2 Work out 3^2

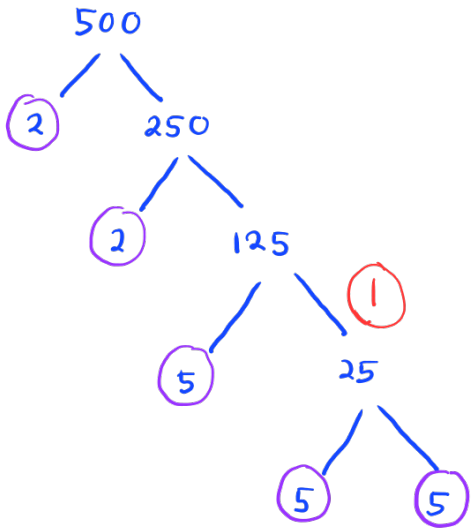
$3^2 = 3^1 \times 3^1$

$= 9$

9 (1)

(Total for Question 2 is 1 mark)

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



$2 \times 2 \times 5 \times 5 \times 5 = 2^2 \times 5^3$ (1)

(1)

$2^2 \times 5^3$

.....

(Total for Question 3 is 3 marks)

4 Simplify $(2 \times 2^8)^2$

Give your answer as a power of 2

$(2^{(-5+8)})^2$ (1)

multiplication or division of power = + or −

$= (2^3)^2$

$= 2^{3 \times 2}$

$= 2^6$ (1)

2^6

(Total for Question 4 is 2 marks)

5 Find the square root of 64

$\sqrt{64} = 8$

8 (1)

(Total for Question 5 is 1 mark)

6 (b) Find the value of 2^5

$2^5 = 2 \times 2 \times 2 \times 2 \times 2$

$= 32$

32 (1)

(1)

(Total for Question 6 is 1 mark)

7 Write down the value of 10^0

1

.....

(Total for Question 7 is 1 mark)