

# **GCSE MATHEMATICS**

## **PLC PROJECT**

**INSTRUCTIONS:**

# Indices 1

## Content

- Use index notation and index laws for positive and negative powers

### Question 1

Simplify

(i)  $x^4 \times x^3$

.....  
(1)

(ii)  $y^6 \div y^2$

.....  
(1)

### Question 2

Write as a power of 5

(i)  $5^4 \times 5^2$

.....

(ii)  $5^9 \div 5^6$

.....  
(2)

### Question 3

(a) Simplify  $a^3 \times a^4$

.....  
(1)

(b) Simplify  $3x^2y \times 5xy^3$

.....  
(1)

**Question 4**

Work out the value of  $5^2 \times 10^3$

.....  
(2)

**Question 5**

Simplify

(a)  $4^5 \div 4^3$

.....  
(1)

(b)  $4^{13} \div 4^3$

.....  
(1)

**Total Mark / 10**