	FACULTY OF INDUSTRIAL SCIENCES & TECHNOLOGY		MARKS
			/10
DISCRETE MATHEMATICS AND APPLICATIONS	CODE: BUM 1233	TOPIC: NUMBER THEORY	
ASSESMENT: QUIZ 1	SET A	DURATION: 10 MINUTES	
NAME:	MATRIC NO:	SECTION: 4	

**Instructions:** Please answer all question and show your workings clearly.

**Question 1**

Given  $\text{GCD}(12, b) = 6$  and  $\text{LCM}(12, b) = 60$ . What is the value of  $b$ ?

*(2 Marks)*

**Question 2**


Let  $p = 25 \text{ div } 7$  and  $q = 17 \text{ mod } 3$ . Determine the value of  $p + q$ .

*(3 Marks)*

**Question 3**

Determine the  $\text{GCD}(6, 28, 45)$  using prime factorization method. Are these integers relatively prime?

*(5 Marks)*

	FACULTY OF INDUSTRIAL SCIENCES & TECHNOLOGY		MARKS
			/10
DISCRETE MATHEMATICS AND APPLICATIONS	CODE: BUM 1233	TOPIC: NUMBER THEORY	
ASSESMENT: QUIZ 1	SET A	DURATION: 10 MINUTES	
NAME:	MATRIC NO:	SECTION: 4	

**Instructions:** Please answer all question and show your workings clearly.

**Question 1**

Given  $\text{GCD}(12, b) = 6$  and  $\text{LCM}(12, b) = 60$ . What is the value of  $b$ ?

*(2 Marks)*

**Question 2**


Let  $p = 25 \text{ div } 7$  and  $q = 17 \text{ mod } 3$ . Determine the value of  $p - q$ .

*(3 Marks)*

**Question 3**

Determine the  $\text{GCD}(6, 28, 45)$  using prime factorization method. Are these integers relatively prime?

*(5 Marks)*

	FACULTY OF INDUSTRIAL SCIENCES & TECHNOLOGY		MARKS
			/10
DISCRETE MATHEMATICS AND APPLICATIONS	CODE: BUM 1233	TOPIC: NUMBER THEORY	
ASSESMENT: QUIZ 1	SET A	DURATION: 10 MINUTES	
NAME:	MATRIC NO:	SECTION: 4	

**Instructions:** Please answer all question and show your workings clearly.

**Question 1**

Given  $\text{GCD}(12, b) = 6$  and  $\text{LCM}(12, b) = 60$ . What is the value of  $b$ ?

*(2 Marks)*

**Question 2**

Let  $p = 25 \text{ div } 7$  and  $q = 17 \text{ mod } 3$ . Determine the value of  $p \cdot q$ .

*(3 Marks)*

**Question 3**

Determine the  $\text{GCD}(6, 28, 45)$  using prime factorization method. Are these integers relatively prime?

*(5 Marks)*