

# 1

## Questions

**1. What is the characteristic of a field where  $1 + 1 = 0$  holds true?**

- A. The field is ordered
- B. The field is finite
- C. The field has characteristic 2
- D. The field is infinite

**2. In modular arithmetic, what is the result of  $1 + 1$  in mod 2?**

- A. 0
- B. 2
- C. 3
- D. 1

**3. In set theory, what is the cardinality of the singleton set containing only the element 1?**

- A. 1
- B. 0
- C. 2
- D. Infinite

**4. In the context of matrices, what is the determinant of a 1x1 identity matrix?**

- A. It does not exist
- B. 2
- C. 1
- D. 0

**5. In the binary numeral system, what does a single digit '1' represent?**

- A. Zero
- B. Base-2
- C. Two
- D. A single unit or 'one'

**6. What is the sum of  $1 + 1$  in the decimal system?**

- A. 10
- B. 1
- C. 2
- D. 0