

Syllabus – ABS CAA Placement Test
Mathematics

### **Topics:**

## Module I: Linear Algebra

#### **Simultaneous Equations**

Solve systems of linear equations using methods such as substitution, elimination, and matrices.

#### **Straight Line**

Analyze the equation of a straight line, including slope, intercepts, and distance between two points.

# **Module II: Trigonometry and Geometry**

### **Basic Trigonometry**

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Introduction to trigonometric functions, identities, and applications in problem-solving.

#### Percentage

Understanding percentage calculations, including percentage increase/decrease and practical applications.

# **Module III: Arithmetic and Applied Mathematics**

#### Speed, Distance, and Time

Solve problems involving the relationship between speed, distance, and time using algebraic methods.

#### **Sequence and Series**

Explore arithmetic and geometric sequences and series, including formulas for the nth term and sum.

## **Module IV: Probability**

## **Probability**

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Introduction to probability concepts, including probability of single and multiple events and their applications.

# **Module V: Statistics and Data Handling**

#### Mean, Median, and Mode

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Calculate and interpret measures of central tendency (mean, median, mode) from a given data set.

### **Data Handling**

Organize, summarize, and interpret data using graphical and numerical methods for better understanding.