**Explanation:**

* **One-Way ANOVA**: Tests whether there are significant differences between the means of three or more independent (unrelated) groups based on one factor.

**5 Examples of One-Way ANOVA:**

1. **Effect of Different Diets on Weight Loss**:
   * **Groups**: Individuals following three different diets (e.g., Diet A, Diet B, Diet C).
   * **Response Variable**: Weight loss after 12 weeks.
   * **Question**: Is there a significant difference in weight loss between the three diets?
2. **Impact of Teaching Methods on Test Scores**:
   * **Groups**: Students taught using three different methods (e.g., Traditional, Online, Hybrid).
   * **Response Variable**: Test scores after a semester.
   * **Question**: Do students' test scores significantly differ based on the teaching method used?
3. **Comparison of Customer Satisfaction Across Stores**:
   * **Groups**: Customers from three different store locations (e.g., Store X, Store Y, Store Z).
   * **Response Variable**: Customer satisfaction score.
   * **Question**: Is there a significant difference in customer satisfaction among the three stores?
4. **Effect of Different Fertilizers on Plant Growth**:
   * **Groups**: Plants treated with different fertilizers (e.g., Fertilizer A, Fertilizer B, Fertilizer C).
   * **Response Variable**: Growth of plants measured in height after 8 weeks.
   * **Question**: Does the type of fertilizer used significantly affect plant growth?
5. **Impact of Training Programs on Employee Performance**:
   * **Groups**: Employees undergoing three different training programs (e.g., Program 1, Program 2, Program 3).
   * **Response Variable**: Employee performance score.
   * **Question**: Is there a significant difference in performance scores based on the training program attended?

**Explanation:**

* **Two-Way ANOVA**: Tests the effect of two independent variables on a dependent variable, including the interaction between these variables.

**5 Examples of Two-Way ANOVA:**

1. **Effect of Exercise and Diet on Weight Loss**:
   * **Factors**: Type of exercise (e.g., Aerobic, Strength Training) and type of diet (e.g., Low-Carb, Low-Fat).
   * **Response Variable**: Weight loss after 12 weeks.
   * **Question**: How do exercise and diet, as well as their interaction, affect weight loss?
2. **Impact of Study Method and Gender on Test Scores**:
   * **Factors**: Study method (e.g., Group Study, Self-Study) and gender (Male, Female).
   * **Response Variable**: Test scores after a semester.
   * **Question**: Do study method and gender, as well as their interaction, significantly affect test scores?
3. **Effect of Temperature and Pressure on Chemical Reaction Rate**:
   * **Factors**: Temperature (e.g., 25°C, 50°C) and pressure (e.g., 1 atm, 2 atm).
   * **Response Variable**: Rate of a chemical reaction.
   * **Question**: How do temperature and pressure, as well as their interaction, influence the reaction rate?
4. **Influence of Medication Type and Dosage on Blood Pressure**:
   * **Factors**: Type of medication (e.g., Medication A, Medication B) and dosage (Low, High).
   * **Response Variable**: Blood pressure after 4 weeks.
   * **Question**: How do medication type and dosage, as well as their interaction, affect blood pressure?
5. **Impact of Advertising Medium and Time of Day on Sales**:
   * **Factors**: Advertising medium (e.g., TV, Social Media) and time of day (Morning, Evening).
   * **Response Variable**: Sales generated.
   * **Question**: Do the advertising medium and time of day, as well as their interaction, significantly affect sales?