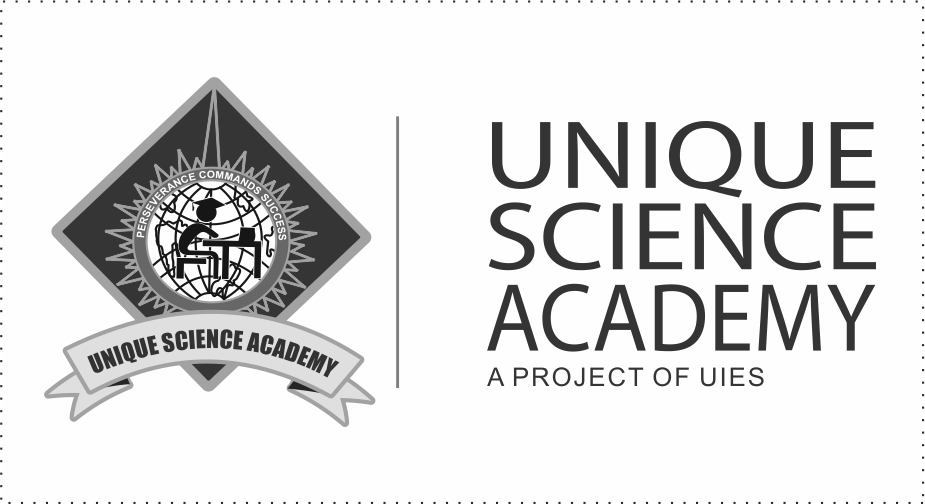
**Unique Science Academy, 60 – D Nawab Town, Lahore**

**Statistics 12 Monthly Test**

(Chapter 15 and 16 – Association and Time Series)

07 August 2024 Allowed Time: 40 minutes

Total Marks: 25

**Question 1: Test the association / dependence between Desired way of being asked out and Gender.** (Data is on the backside of the page)

Marks

1. Use 5% Level of Significance. (5)
2. Use 1% Level of Significance. (5)

Question 2: The following time series data is given as follows:

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Year | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 |
| Values | 12 | 23 | 37 | 48 | 41 | 37 | 48 | 61 | 70 |

(Marks)

1. Fit the line using semi – average method. (5)
2. Calculate three years moving average. (5)
3. Fit the straight line using least square method. (5)