**PATAN MULTIPLE CAMPUS**

Practical – 7 Correlation and Regression

|  |  |
| --- | --- |
| Roll No.: 23 | Date: 2081-05-30 |
| Program: BIT | Semester: 2nd |
| Subject: Basic Statistics | Section: A |

**Question**: Find correlation and regression of the following data and also find coefficient of determination.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marks of Mathematics | 14 | 20 | 15 | 13 | 15 | 20 | 25 |
| Marks of Statistics | 55 | 50 | 45 | 60 | 55 | 58 | 62 |

Also find the regression equation of marks of statistics on marks of mathematics. Estimate the marks of Statistics when mark of Mathematics is 50.

**Working Expressions:**

**Calculation**:

1. **Data**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Marks of Mathematics | 14 | 20 | 15 | 13 | 15 | 20 | 25 |
| Marks of Statistics | 55 | 50 | 45 | 60 | 55 | 58 | 62 |

1. **Syntax**

DATASET ACTIVATE DataSet0.

CORRELATIONS

/VARIABLES=math stat

/PRINT=TWOTAIL NOSIG FULL

/MISSING=PAIRWISE.

REGRESSION

/MISSING LISTWISE

/STATISTICS COEFF OUTS R ANOVA CHANGE

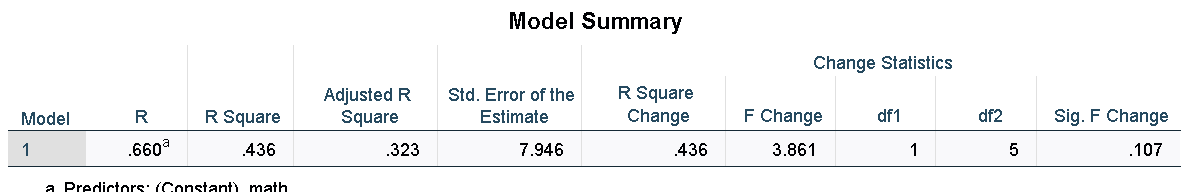
/CRITERIA=PIN(.05) POUT(.10)

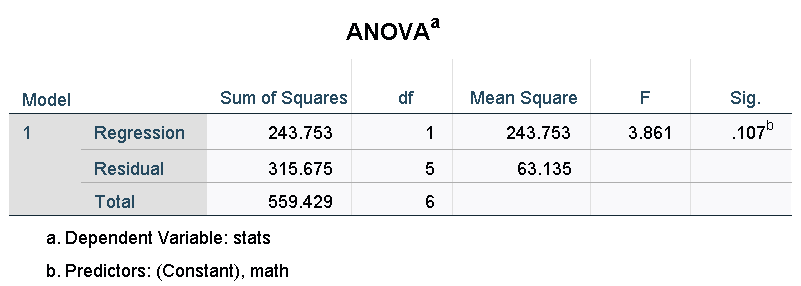
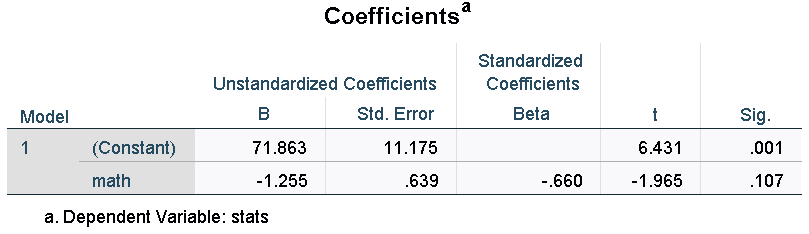
/NOORIGIN

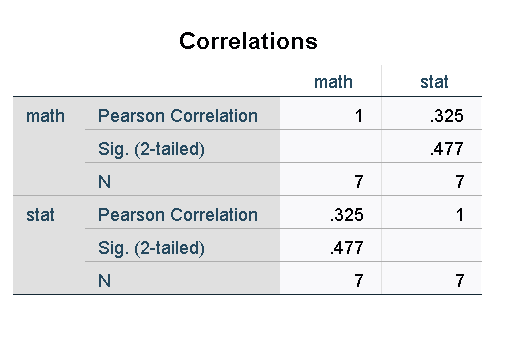
/DEPENDENT stats

/METHOD=ENTER math.

1. **Output**



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