**11) ANOVA Table:**

**a)**

|  |  |  |
| --- | --- | --- |
|  | **Degree of Freedom** | **Sum of Squares** |
| **Explained** | **3** | **1211** |
| **Unexplained** | **36-3-1=32** | **1356** |
| **Total** | **35** | **2567** |

**b) MSR=SSR/ITS degree of freedom=1211/3=403.67**

**MSE=SSE/ ITS degree of freedom =1356/32=42.357**

**F Calculated =MSR/MSE =403.67/ 42.357= 9.53**

**F Critical =**4.459

**So, F Calculated > F Critical so** **three explanatory variables have some power in explaining variation in the dependent variable, so this model is useful to predict the dependant variable.**