**Name: Sulav Adhikari**

**Roll Number: 23081003**

**Subject: Statistics II, Lab 4**

**Section: B**

**Q. No. 7:**

## Working Expression:

**t =** 𝐦𝐞𝐚𝐧 𝐨𝐟 𝐟𝐢𝐫𝐬𝐭 𝐬𝐚𝐦𝐩𝐥𝐞 – 𝐦𝐞𝐚𝐧 𝐨𝐟 𝐬𝐞𝐜𝐨𝐧𝐝 𝐬𝐚𝐦𝐩𝐥𝐞

𝐬𝐭𝐚𝐧𝐝𝐚𝐫𝐝 𝐞𝐫𝐫𝐨𝐫

## Working Procedure:

Define variables manure 1, manure 2 and value in variable view →label them as manure and value→ assign type as numeric for manure 1 and manure 2 →assign measure as scale→ go to analyze → compare means → independent sample t –test → put values of manure in

test variables and values in grouping variable

→ continue → ok

## SPSS OUTPUT:

## 

→ go to options give level of confidence

## Setting of Hypothesis:

Ho: There is no significant difference between the mean yields

H1: There is significant difference between the mean yields (two tailed test).

## Level of significance

α = 0.05

## 

## Decision:

For Levene’s test for equality of variances, p- value = 0.399 > α = 0.05, we accept Ho Hence, equal variances assumed.

Since 2p = 0.577 > α = 0.05, we accept Ho.

## 

## Conclusion:

## Hence, we conclude that there is no significant difference between the mean yields

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**Q. No. 8:**

## Working Expression:

**t =** 𝐦𝐞𝐚𝐧 𝐨𝐟 𝐟𝐢𝐫𝐬𝐭 𝐬𝐚𝐦𝐩𝐥𝐞 – 𝐦𝐞𝐚𝐧 𝐨𝐟 𝐬𝐞𝐜𝐨𝐧𝐝 𝐬𝐚𝐦𝐩𝐥𝐞

𝐬𝐭𝐚𝐧𝐝𝐚𝐫𝐝 𝐞𝐫𝐫𝐨𝐫

## Working Procedure:

Define variables company A, company B and value in variable view →label them as company and value→ assign type as numeric for company A and company B →assign measure as scale→ go to analyze → compare means → independent sample t –test → put values of company in test variables and values in grouping variable → go to options give level of confidence 95% → continue → ok

## SPSS OUTPUT:

**Independent Samples Test**

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
| F | Sig. | t | df | Sig. (2-  tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the  Difference | |
| Lower | Upper |
| values of company | Equal variances assumed | 3.361 | .097 | .735 | 10 | .479 | 1.000 | 1.361 | -2.032 | 4.032 |
| Equal variances  not assumed | .804 | 9.759 | .441 | 1.000 | 1.244 | -1.781 | 3.781 |

## Setting of Hypothesis:

Ho: There is no significant difference between the durability of RAM.

H1: There is significant difference between the durability of RAM. (two tailed test).

## Level of significance

α = 0.05

Decision:

For Levene’s test for equality of variances, p- value = 0.097> α = 0.05, we accept Ho Hence, equal variances assumed.

Since 2p = 0.479 > α = 0.05, we accept Ho.

## Conclusion:

Hence, we conclude that there is no significant difference between the durability of RA