## PROBABILITY AND STATISTICS PROJECT-1

# **TASK-6 (1)**

#### Valuation of Investor A

By analyzing the data of the **HDFC Stock** we see the expected share price of the stock is **Rs.1493.818**. Whereas, the Variance was **5147.609**, therefore we can conclude that there is high spread in the data which means the share is voliatile.

Expected return on HDFC Stock is **0.03989%.** Whereas, the variance of return is **0.02244%.** Which concludes that there is wide gap between the returns.

#### Valuation of Investor B

By analyzing the data of the **ONGC Stock** we see the expected share price of the stock is **Rs.118.1319**. Whereas, the Variance was **384.4403**, therefore we can conclude that there is high spread in the data which means the share is voliatile.

Expected return on ONGC Stock is **0.16375%.** Whereas, the variance of return is **0.04623%.** There is comparatively **low Voliatility**.

#### Valuation of Investor C

By analyzing the data of the **Spice Jet Stock** we see the expected share price of the stock is **Rs.76.3241**. Whereas, the Variance was **79.04344**, therefore we can conclude that there is low spread in the data which means the share **is less voliatile**.

Expected return on Spice Jet Stock is -0.1589%. Whereas, the variance of return is 0.1306%. Which concludes that there is wide gap between the returns. There is overall Negative return.

#### Valuation of Investor D

The Expected return on the combination of (HDFC & ONGC) is **0.0945%** and variance of return is **0.0215%**. The correlation between the two stocks is **positive**.

#### Valuation of Investor E

The Expected return on the combination of (SpiceJet & ONGC) is

**-0.0113%** and variance of return is **0.0355%.** The correlation between the two stocks is **negative.** 

#### Valuation of Investor F

The Expected return on the combination of (SpiceJet & HDFC) is

**-0.067%** and variance of return is **0.0255%.** The correlation between the two stocks is **negative.** 

#### CONCLUSION

According to us **Investor D& Investor B** is doing the best investment as it has comparatively **higher expected return and low voliatility**. But **Investor D** is doing best investment because he has **diversified** his portfolio and the risk is reduced.

(Diversification is a technique that reduces risk by allocating investments across various financial instruments, industries, and other categories. It aims to maximize returns by investing in different areas that would each react differently to the same event.)

## **TASK-6(2)**

There were 6 tasks in total we divided them equally.

Task 1 was done by Vivek Shah

Task 2 was done by Ronit Shah

Task 3 was done by Divya Sharma

Task 5 had 3 parts which we divided equally

Part 1 was done by Ronit Shah

Part-2 was done by Vivek Shah

Part-3 was done by Divya Sharma

For Task 4 the values were brought in by each of us which we confirmed the values which we got in Tasks 1,2,3.

For Task 6 we all discussed and debated and got to our conclusion

We did a virtual meet and divided our work equally and we helped each other in case of difficulties. Overall the level of teamwork was great.

### **THANKYOU**

**Efforts by-**

Vivek Shah (65)

Ronit Shah (67)

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