FINAL EXAM

Name:

Date	June 5-19, 2017
Lecturer	Dr. Samuel Prasetya
Fac./Study Prg.	Business & Social Sciences/IBA, MGT, HTM
Semester/Year	4/2017
Time	100 minutes

Score :

STATISTICS & PROBABILITY

I. Examination Conditions (completed by the lecturer with check "√")

No.	Condition	Completed by the lecturer with "√"		Remark (Completed by the lecturer)
		Allowed	Not Allowed	
1.	Using Open Book		X	
2	Using Laptop	X		• Permissible to use **MS Excel & SPSS**, including softcopies of notes, slides & other materials • **Calculations & Results in Excel & SPSS must be saved into a flash disc**. The flash disc (with your name) is to be submitted upon leaving the room
3	Using Cheat Sheet		X	
4	Using Calculator		X	
5	Using Pencil		X	
6	Using Pen	X		
7	Students may **NOT** remove the staples from the exam materials.			

II. Examination Regulation

Cheating or dishonest conduct

a. Cheating or dishonest conduct are strictly prohibited.
b. Students found cheating or showing dishonest conduct will be failed in the respective subject.
c. Students have to retake the course for the respective subject completely.
d. The invigilator has the right to judge cheating or dishonest conduct based upon objective evidence.

Leaving the room during the exam

a. Leaving the exam to go to the toilet must be avoided as much as possible.
b. In case it happens, the invigilator must escort the student to the toilet.
c. Students may leave the room if they have finished the exam without disturbing others.

Dress code

a. Students have to dress appropriately.
b. Sandals, short pants or inappropriate dress are not allowed in the examination room.

This examination material has been verified by:
Date:

_____

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FINAL EXAM **Name:**

You were given a selected sample of data, as shown in the table. Please calculate the following;

1. (**5 points**) Please calculate the **standard deviation**
2. (**10 points**) What is the **purpose & meaning** of the standard deviation?

Year	Interest Rate (%)	Exchange Rate (Rp/US$1)	Inflation (%)
2000	9.15	7,785	10.00
2001	10.40	9,350	9.68
2002	13.11	8,750	11.60
2003	9.77	10,125	6.50
2004	11.83	11,830	25.87
2005	12.75	9,781	-4.00
2006	9.75	8,975	1.21
2007	8.00	9,372	1.10
2008	9.25	10,895	-4.00
2009	8.75	9,353	33.00
2010	6.50	8,946	72.00
2011	6.00	9,023	57.00
2012	5.75	9,622	34.00
2013	3.50	12,128	45.00
2014	2.25	12,750	20.00
2015	1.75	13.125	15.00
2016	2.87	13,900	5.15

3. (**10 points**) Please develop **frequency table** based on the available data

4. Using Excel and/or SPSS, and based on the available data set, please provide the details on;
   a) (**5 points**) descriptive statistics
   b) (**5 points**) the meaning on significance when the chosen alpha is 10% (or α=0.1)
   c) (**5 points**) 40th percentiles
   d) (**5 points**) please calculate the **geometric means** of the data set
   e) (**5 points**) what is the difference between the **arithmetic mean** and **geometric mean**?

5. Based on the following **one-sample t-test** results, please address the following questions;
   a) (**10 points**) Please write down the hypotheses (both H_0 & H_1)
   b) (**10 points**) What is your conclusion for the GPA with the test value of 3.5?

One-Sample Test

	Test Value = 3.5					
	t	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
GPA	-3.196	15	.006	-.4150	-.692	-.138

6. Based on your data set that you have been working on throughout the semester, and with the use of Excel or SPSS, please calculate the following;
   a) (**10 points**) based on the results of the descriptive statistics, in your opinion, would the data set be considered **normally distributed**? Why or why not? Please do make sure that you provide all the necessary details based on the results of the descriptive statistics
   b) (**10 points**) **Independent-sample t-test** between stock prices of company A (your own stocks) & company B (your friends' stock).
   c) (**10 points**) Develop the **hypothesis** & provide the **conclusion**

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