

College Name: \_\_\_\_\_

Seat No: \_\_\_\_\_ Student's Name: \_\_\_\_\_

Copy No: \_\_\_\_\_

**KARACHI UNIVERSITY BUSINESS SCHOOL**  
**UNIVERSITY OF KARACHI**  
**FINAL EXAMINATION, JUNE 2017; AFFILIATED COLLEGES**  
**STATISTICS; BA(BS)-532**  
**BBA – VI**

Date: July 3, 2017

Max Time: 1.5 Hrs  
Max Marks: 30

**INSTRUCTIONS:**

1. Attempt all questions. Do not write anything on the question paper.
2. **TABLES ARE NOT REQUIRED.**
3. **Mobile phone(s) or any other communicating device will not be allowed in the examination room. Students will have to remove the batteries of these devices before entering the examination hall.**

Q1 a) The following data represents the running times of films produced by two company

Company I	150	160	145	150	140	155
Company II	170	150	145	160	140	165

Calculate which company is more consistent.

- b) Write two properties of
- a) Coefficient of Variation
  - b) Coefficient of Correlation
- c) Give reason why
- i) Chi square test of independence is always a right tail test.
  - ii) If a hypothesis is rejected at 10% then it will also be rejected at 5%, but vice versa is not always true.

Q2) Mr. Bean and Mr. Gray work at the same office and live next door to each other. Each day they leave for work together but travel by different routes. Mr. Bean claims that his route is quicker, on the average, by atleast 4 minutes. Both men time their journey in minutes over a period of 10 weeks. The results obtained were:

Mr Bean          n= 50                  mean=21 min Standard deviation = 10.24 min  
Mr Gray          n= 50                  mean=24 min Standard deviation = 7.84 min

Assume normal distribution and common population variance. Test at 5% level whether Mr Brown claim's can be accepted. Table value (1.645)

Q3) Calculate the equation of regression line y on x for the following distribution:

X	25	30	35	40	45	50
Y	78	70	65	58	48	42

Is it possible to calculate from the equation?

- a) An estimate for the value of x when y=54 ?
  - b) An estimate for the value of y when x=37 ?
- In each case it the answer is "YES" calculate the estimate, if the answer is "No" give reason why not.

**END OF SUBJECTIVE PAPER**