College Name: _____

Seat No: _____   Student's Name: _____

Copy No: _____

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

Revised Date: January 18, 2018   **Max Time: 90 Mins**
                                                                              Max Marks: 30

<u>**INSTRUCTIONS:**</u>
1. **Attempt all questions. Do not write anything on the question paper. <u>EXCEPT</u> the initials mentioned above.**
2. **TABLES ARE NOT ALLOWED.**
3. **Mobile phones 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) A set of mathematics exam scores has a mean of 70 and a standard deviation of 8. A set of English examination scores has a mean of 74 and a standard deviation of 16. Mr Bean got score 78 in both English and maths. Explain in which exam he has the higher standing and why?

b) In an examination 10 scouts and 10 guides gave following results. Calculate mean, standard deviation and coefficient of variation for the following variables and comment on results.

| Scout: | 57 | 66 | 82 | 97 | 94 | 73 | 80 | 74 | 50 |
| Guides: | 79 | 86 | 69 | 74 | 79 | 68 | 61 | 63 | 94 |

Q2 a) For the following table calculate E(X) and V(X)

X	0	1	2	3	4
P (X)	0.3	0.2	0.4	0.05	0.05

b) Calculate coefficient of correlation for the data below and test the significance at 5% by using t-distribution.
[TABLE VALUE=2.7]

X	23	20	27	30	30	31
Y	6	8	9	7	10	11

Q3   Two machines are filling Sugar. Forty samples from the first machine find a sample mean of 4.95 kgs, and fifty samples from the second machine have a sample mean of 5.01 kgs. The population standard deviation of the first machine is 0.30 kg, and the population standard deviation of the second machine is 0.10 kgs. Test the claim that the machines are filling equally. Use 0.05 level of significance. Write all steps and conditions.
[TABLE VALUE=2]

END OF SUBJECTIVE PAPER