



FACULTY OF BUSINESS

FINAL EXAMINATION

Student ID (in Figures) :

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Student ID (in Words) : _____

Course Code & Name : **STA2114 Business Statistics**
 Trimester & Year : September-December 2020
 Lecturer/Examiner : Dr Smitha Geetha
 Duration : 3 Hours

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 2 parts:
 PART A (30 marks) : THIRTY (30) multiple-choice questions. Answers are to be shaded in the Multiple Choice Answer Sheet provided.
 PART B (70 marks) : FOUR (4) problem-solving questions. Answers are to be written in the Answer Booklet provided.
2. Candidates are not allowed to bring any unauthorized materials except writing equipment into the Examination Hall. Electronic dictionaries are strictly prohibited.
3. This question paper must be submitted along with all used and/or unused rough papers and/or graph paper (if any). Candidates are NOT allowed to take any examination materials out of the examination hall.
4. Only ballpoint pens are allowed to be used in answering the questions, with the exception of multiple-choice questions, where 2B pencils are to be used.

WARNING: The University Examination Board (UEB) of BERJAYA University College regards cheating as a most serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed, and in accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from BERJAYA University College.

PART B : PROBLEM SOLVING QUESTIONS (70 MARKS)

INSTRUCTION(S) : Answer all **FOUR (4)** questions. Write your answers in the Answer Booklet(s) provided.

Question 1

Calculate the following by using the data given below

Size	20-25	25-30	30-35	35-40	40-45	45-50
Frequency	50	70	100	180	150	120

- a) Mean, median and mode. (9 marks)
- b) Quartile deviation, mean deviation from median and standard deviation. (9 marks)
- c) Coefficient of range. (2 marks)

[Total: 20 marks]

Question 2

- a. The variable X follows a Normal Distribution with Mean 30 and Standard Deviation 5. Find the probability that
- (i) $X > 45$ (4 marks)
- (ii) $26 < X < 40$ (4 marks)
- b. In an aptitude test administered to 1000 students, the mean score is 60 and the standard deviation being 20. Find the number of students
- (i) Whose scores are between 35 and 75 (4 marks)
- (ii) Whose scores exceeds 70 (4 marks)
- (iii) Whose scores are below 45 (4 marks)

[Total: 20 marks]

Question 3

a. Discuss the probability theory.

(3 marks)

b. Elaborate how to test the hypothesis.

(7 marks)

[Total: 10 marks]

Question 4

From the data given below find:

Marks in Economics	25	28	35	32	31	36	29	38	38	32	30
Marks in Statistics	43	46	49	41	36	32	31	30	33	39	---

a. The two regression equations.

(10 marks)

b. The coefficient of correlation between the marks in Economics and Statistics.

(6 marks)

c. The most likely marks in Statistics when marks in Economics are 30.

(4 marks)

[Total: 20 marks]

END OF EXAM PAPER