



Private & Confidential

**FACULTY OF BUSINESS**

**FINAL EXAMINATION**

Student ID (in Figures) : 

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Student ID (in Words) : \_\_\_\_\_

Course Code & Name : **STA1014 INTRODUCTION TO MATHEMATICS AND STATISTICS**  
Semester & Year : May – August 2020  
Lecturer/Examiner : Rosnah Mohamad Noor  
Duration : 2 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 written 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.

**Total Number of pages = 7 (Including the cover page)**

**PART B****: PROBLEM SOLVING QUESTIONS (70 MARKS)****INSTRUCTION(S)**

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

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**Question 1**

Using matrices, calculate the value of the unknowns in each of the following simultaneous equations.

a)  $x+y = 8$   
 $2y-x = 4$  (5 marks)

b)  $3p-1+q=0$   
 $9p-4q+9=0$  (5 marks)

c)  $3b=2a+13$   
 $5a-7b=20$  (5 marks)

d)  $7=5m-8n$   
 $6=5m-2n$  (5 marks)

**(Total: 20 marks)**

**Question 2**

Calculate the value of the unknowns in each of the following simultaneous equations. Use the elimination method.

a)  $2x+3y= 10$   
 $5x+3y= 15$  (5 marks)

b)  $3x+6y= 12$   
 $x+3y= 9$  (5 marks)

**(Total: 10 marks)**

### Question 3

Calculate each of the following sets of data.

2	5	6	9	10	5	9	9	8
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Calculate the following:

- a) Mean (2 marks)
- b) Mode (3 marks)
- c) Median (3 marks)
- d) Quartile 1 (3 marks)
- e) Quartile 3 (3 marks)
- f) Inter quartile (3 marks)
- g) Quartile deviation (3 marks)

**(Total: 20 marks)**

### Question 4

- a) Briefly explain the following terms.
  - i. Statistics (3 marks)
  - ii. Primary data (3 marks)
  - iii. Secondary data (3 marks)
  - iv. Inferential statistics (3 marks)
  - v. Descriptive statistics (3 marks)
- b) On the data collection method, explain **TWO (2)** advantages of face to face interview. (5 marks)

**(Total: 20 marks)**

**END OF EXAM PAPER**