



BERJAYA BUSINESS SCHOOL

FINAL EXAMINATION

Student ID (in Figures) :

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Student ID (in Words) : _____

Subject Code & Name : **BBM2312 Business Decision Making**
 Semester & Year : January – April 2017
 Lecturer/Examiner : Ms. Chong Poh Ling
 Duration : 3 Hours

INSTRUCTIONS TO CANDIDATES

1. This question paper consists of 2 parts:
 - PART A (30 marks) : SEVEN (7) Short essay questions. Answer any FIVE (5) questions. Answers are to be written in the Answer Booklet provided.
 - PART B (70 marks) : SIX (6) Problem solving questions. Answer ALL 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 of Hospitality 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 of Hospitality.

Total Number of pages = 5 (Including the cover page)

PART A : SHORT ESSAY QUESTIONS (30 MARKS)

INSTRUCTION(S) : SEVEN (7) short essay questions. Answer any **FIVE (5)** questions in the Answer Booklet provided.

1. Describe “Mean” and “Standard Deviation”.
(6 marks)
2. What is Confidence Interval? Explain lower/upper confidence bounds (or limits).
(6 marks)
3. What is t-test? Interpret the statement: *A t-test is most commonly applied when the test statistic would follow a normal distribution if the value of a scaling term in the test statistic were known.*
(6 marks)
4. Explain the risk analysis concept in your own words.
(6 marks)
5. What is Forecasting? List down the different types of forecasting method.
(6 marks)
6. Define Pivot Table. Discuss the necessity of using pivot table decision making.
(6 marks)
7. What do you understand by Allocation of Transportation with and without storage? Explain.
(6 marks)

END OF PART A

PART B : PROBLEM SOLVING QUESTIONS (70 MARKS)

INSTRUCTION(S) : SIX (6) problem solving questions. Answer ALL questions. Answers are to be written in the Answer Booklet provided.

Question 1

A sample of the variable x assumes the following values:

9 11 13 3 7 2 8 9 6 10

Compute:

- | | | |
|--------|------------------------------|-----------|
| (i) | n | (1 mark) |
| (ii) | $\sum x$ | (1 mark) |
| (iii) | \bar{x} | (1 mark) |
| (iv) | S | (1 mark) |
| (v) | s^2 | (1 mark) |
| (vi) | median | (1 mark) |
| (vii) | mode | (1 mark) |
| (viii) | range | (1 mark) |
| (ix) | coefficient of variation, CV | (2 marks) |

(Total = 10 marks)

Question 2

Classify each of the following departments in a factory as a Producing Department or a Support Department. Copy the whole table into the answer booklet and place a check mark (✓) in the appropriate column.

No.		Producing Department	Support Department
1.	Fabricating		
2.	Accounting		
3.	Machining		
4.	Finishing		
5.	Rework		
6.	Cafeteria		
7.	Maintenance		
8.	Grinding		
9.	Heat treat		
10.	Cutting		

(10 marks)

Question 3

A research has found that students spend two hours per class hour studying. A professor at your college wants to determine whether the time students spend at your college is significantly different from two hours. A random sample of fifteen statistics students is carried out and the findings indicate an average of 1.75 hours with a standard deviation of 0.24 hours. The t-test is to be conducted at the 5% level of significance.

- What is H_0 ? (3 marks)
- What is H_1 ? (3 marks)
- What is the critical value of t? (3 marks)
- What is the calculated value of t? (3 marks)
- What is our decision? (3 marks)

(Total = 15 marks)

Question 4

Draw the appropriate charts for the following table. Use the graph paper provided.

Table: Descriptive Statistics on Demographic

Variables	Frequency	Percentage (%)
Gender		
Male	95	61.3
Female	60	38.7
Age		
Less than 20	21	10.1
20 – 29	54	39.9
30 – 39	49	29.9
40 and above	31	20.1

(10 marks)

Question 5

Construct the primal-dual table and the dual problem for the following linear programming model fitting our standard form.

Maximize $Z = 5x_1 + 4x_2 - x_3 + 3x_4$
subject to

$$3x_1 + 2x_2 - 3x_3 + x_4 \leq 24$$

$$3x_1 + 3x_2 + x_3 + 3x_4 \leq 36$$

and

$$x_1 \geq 0, x_2 \geq 0, x_3 \geq 0, x_4 \geq 0$$

(15 marks)

Question 6

Assume a RM100,000 investment and the following cash flows for two alternatives.

Year	Investment A	Investment B
1	RM30,000	RM40,000
2	50,000	30,000
3	20,000	15,000
4	60,000	15,000
5	—	50,000

Which of the two alternatives would you select under the payback method?

(10 marks)

END OF EXAM PAPER