UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2009/2010

SUBJECT NAME	:	QUANTITATIVE RESEARCH METHODS
SUBJECT CODE	:	BPF 4193
COURSE	:	3 BPB
EXAMINATION DATE	:	APRIL / MAY 2010
DURATION	:	2 HOURS 30 MINUTES
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSIST OF 5 PAGES

Q1 As a marketing manager, you would like to study whether your product packaging (in this case, it is a bagpack) is related to sales among university students. You have decided to conduct a survey among UTHM students to seek their opinions and their likelihood to buy your product.

(a) Prior to conducting the research, you are required to prepare a research proposal that include the research objective for management's approval.

(i) Identify independent variable and dependent variable in the study mentioned above.

(2 marks)

(ii) Formulate a research objective for the study mentioned above.

(3 marks)

(iii) Formulate hypothesis null and alternative based on the research objective.

(4 marks)

(b) Operationalization is the process of translating concepts into variables. It is an important step in the questionaires development to ensure that the questions asked are valid.

In the case mentioned above, there are two concepts that need to be operationalized; product packaging and sales.

(i) Construct **ONE (1)** questions to measure 'sales'.

(1 mark)

(ii) Construct **FOUR(4)** questions to measure 'product packaging'.

(4 marks)

(iii) Discuss at least **SIX (6)** principles of good questionaires writing by giving appropriate examples.

(6 marks)

Q2 Sampling is an important issue in survey research design.

(a) Define sampling and sample.

(2 marks)

(b) Identify your target population and sampling frame using the case study in **Q1**.

(4 marks)

(c) As a reseacher, you can choose whether you would like to conduct a random probability sampling and a non random probability sampling.

(i) Differentiate a random non probability sampling and a non random probability sampling.

(4 marks)

(ii) Describe **FOUR (4)** different types of sampling methods.

(8 marks)

(iii) Identify your sampling of choice of the case study mentioned in **Q1** by providing a sound reasoning.

(2 marks)

Q3 (a) Based on the following items in a questionnaires, decide whether the variable is nominal, ordinal, interval or ratio;

(i) Do you drink carbonated drinks/soda?
- (i) Yes ____
- (ii) No ____

(ii) If you have ticked 'Yes' to the previous question, which of the following brands do you drink most frequently?
- (i) Coke
- (ii) Pepsi
- (iii) Sprite
- (iv) F&N
- (v) 7 Up
- (vi) Others

(iii) How frequently do you drink?
- (i) Daily
- (ii) Most Days
- (iii) Once or twice a week
- (iv) Once or twice a month

(iv) How many bottle/tin did you drink last week?
- (i) _____ bottle/tin(s)

(v) How old are you when you start drinking carbonated drinks/soda?
- (i) _____ years

(vi) Does your parents drink carbonated drinks/soda?
- (i) Yes ____
- (ii) No ____

(6 marks)

(b) Levels of measurement have implications for how measurement and statistical analysis can proceed.

(i) Desribe the measure of central tendency appropriate for nominal, ordinal, interval and ratio.

(4 marks)

(ii) Desribe the measure of dispersion appropriate for nominal, ordinal, interval and ratio.

(c) 5, 4, 8, 9, 7, 6, 1, 1, 2, 2, 2, 7, 8

(i) Describe **THREE (3)** measures (mean, mode, median) of central tendency using the set of scores mentioned above.

(6 marks)

(ii) Draw a frequency distribution table and a histogram for the set of scores mentioned above.

(2 marks)

(iii) Compute the z scores for the following raw scores where the mean is 50 and the standard deviation is 5. Show your workings.

a. 55
b. 50
c. 60
d. 57.5

(8 marks)

Q4 Reliability and validity are central issues in all measurement. All researchers want their measures to be reliable and valid.

(a) Define reliability and validity.

(4 marks)

(b) Discuss **THREE (3)** types of validity.

(6 marks)

(c) In experimental design, threats to internal validity are a great concern. Internal validity means that all alternative explanations of the dependent variable are eliminated.

Describe at least **FIVE (5)** threats to internal validity in experimental design with appropriate examples.

(10 marks)

Q5 SPSS is a useful software to analyze data. However, prior to use of SPSS for data analysis, there are basic SPSS navigation that need to be understood.

(a) State **TWO (2)** purposes using RECODE function.

(2 marks)

(b) The purpose of data screening is to check if data have been entered correctly and to check for missing values.

If you have missing values, identify **THREE (3)** options that you can select to deal with them.

(3 marks)

(c) Identify **THREE (3)** indicators that you can use to check whether your data is normally distributed or not.

(3 marks)

(d) Describe the appropriate test of association of the following;

(i) The relationship between gender (nominal) and race (nominal).
(ii) The relationship between income (ratio) and age (ratio).

(2 marks)

END OF QUESTION PAPER