FINAL EXAMINATION
FIRST SEMESTER SESSION 2011/2012

COURSE CODE / NAME : SQQS3073 / RESEARCH METHODS
DATE : 31 DECEMBER 2011 (SATURDAY)
TIME : 9.00 – 11.00 A.M. (2 HOURS)
VENUE : DSB KOLEJ MAS

INSTRUCTION :
1. This exam paper contains TEN (10) questions in ELEVEN (11) printed pages, excluding the cover page.
2. Answer ALL QUESTIONS on the space provided.
3. total marks is EIGHTY (80).
4. You are NOT ALLOWED to take the examination paper out of the examination hall.

MATRIC NO : ________________________________
( with word ) ________________________________ 
( with number ) ________________________________
IDENTIFICATION CARD NO. :
LECTURER : ________________________________
GROUP : [ ] TABLE NO. : __________________

DO NOT OPEN THIS EXAMINATION PAPER UNTIL INSTRUCTED

CONFIDENTIAL
QUESTION 1 (4 MARKS)

Interviewer: Good afternoon, sir. My name is Miss Alia and I am from the credit card services. We are conducting a survey concerning credit card. Do you own a credit card? Please answer yes or no.

Respondent: Hmm... (no answer)

Interviewer: You do have a credit card, do you?

Respondent: Yes.

Interviewer: On average, how much do you spend on your credit card per month?

Respondent: Sorry, I'm not interested.

Interviewer: Would you say it's between one to two thousand?

Comment the above interview conversation in terms of rights and obligations of the respondent and the interviewer.

(4 marks)
QUESTION 2 (4 MARKS)

Evaluate the following statements of business research problems. Provide a research question and corresponding research objective.

a) The producer of television show: We have a marketing problem. The program’s ratings are low. We need to learn how we can improve our rating.

(2 marks)

b) A manufacturer of fishing boats: The problems are to determine sales trend over the past five years by product category and to determine the seasonality of unit boat sales by quarters and by regions of the country.

(2 marks)

QUESTION 3 (8 MARKS)

The following four articles have been found while doing literature review about ‘stress among college students’. Write a critical literature review using the correct APA format by referring to the text in the articles.


Text: Setting high goals, being a perfectionist, comparing the self with others and self-degradation may all cause stress and result in depression.


Text: School is one of the main sources of stress among adolescents. Such stress comes from too much homework, unsatisfactory academic performance, preparation for tests, lack of interest in a particular subject and teacher’s punishment.


Text: Developing a heterosexual relationship is a challenge and also a stressor for adolescents.

Text: Stress is a mental or physical phenomenon. The existence of stress depends on the existence of the stressor where stressor can be defined as anything that challenges an individual’s adaptability or stimulates an individual’s body or mentality

(8 marks)
QUESTION 4 (6 MARKS)

A detergent manufacturer plans to do a research on two different marketing strategies. The first strategy is 50 cents off coupon during November and the second is buy one get one free coupon during December. The research will take place at two different stores in one selected city. Sales will be recorded by scanners from which mean sales for each store for each month can be computed and interpreted.

a) What type of research design used in the above research?

b) What are the independent variable and the dependent variable?

c) Prepare a dummy table that would describe what the results of the experiment would look like.

QUESTION 5 (4 MARKS)

Proposal is a written statement of research design.

a) How does a research proposal assist the researcher?

b) Give two (2) common mistakes researchers did in their proposal.
QUESTION 6 (8 MARKS)

a) Sally visits the website for the ‘European Federation of Pharmaceutical Industries and Associations’ company and collect the relevant data to be use in her study.

i. What type of data is Sally using? (1 mark)

ii. Give one advantage and one disadvantage of using this kind of data. (2 marks)

iii. Name two factors that can be used to evaluate the source of this data. (2 marks)

b) Based on the objectives of the study given below, determine the most appropriate method of data collection.

i. To examine the behavior of people or events. (1 mark)

ii. To compare the effect of temperature on the drying time. (1 mark)

iii. To examine the customer satisfaction towards the service provided. (1 mark)
QUESTION 7 (8 MARKS)

Different types of scales can be used while measuring a concept through questions.

a) What advantage do numerical scales have over semantic differential scales? (2 marks)

b) Give one example for each of the two types of measurement scale mentioned in (i). (2 marks)

c) If you are to design a questionnaire, construct a question for:

i. rapport question using nominal scale. (2 marks)

ii. branching questions using ordinal scale. (2 marks)
QUESTION 8 (18 MARKS)

a) Give two situations where non-probability sampling is preferred to probability sampling. Comment with examples.

(4 marks)

b) Give one advantage and one disadvantage of using probability sampling while collecting data.

(2 marks)

c) In the questionnaire, a 1 to 5 rating scale has been used. The researcher assumed that the measure for the characteristic to be estimated follows normal distribution and the acceptable level of precision is specified as 1/4 of a unit. Besides that, a confidence level of 95% is desired. What is the minimum number of sample size need for this study?

(hint: \( n = \frac{DC \times TV/DP^2}{ } \))

(4 marks)
d) A survey is carried out at a university to estimate the percentage of undergraduates living at home during the current semester. The university's registrar keeps an alphabetical list of all undergraduates with their current addresses. Suppose there are 10,000 undergraduates registered in the semester during which this research is conducted. Mr. A proposes to choose a number at random between one and one hundred, count that far down the list, then take that name and every hundredth name after it for the sample.

i. What will the sample size be?  

(1 mark)

ii. What is the name of this sampling method? Is this a probability method?  

(2 marks)

iii. Assume now that the registrar's list is not alphabetical, but rather ordered by GPA (from low to high). Would this method of sampling be adequate? Give your reason.  

(2 marks)

iv. Mr. B proposes to go out and take the first hundred undergraduates he sees as the sample. Is this method as good as the method proposed by Mr. A? Give one advantage and one disadvantage of the method proposed by Mr. B.  

(3 marks)
QUESTION 9 (4 MARKS)

One of the content in 'Applied Business Research Report' is executive summary. What is an executive summary and its content?

(4 marks)

QUESTION 10 (16 MARKS)

a) A business researcher uses two-way ANOVA in a report for a client. The researcher does not check the assumptions of using the technique. Is this a problem? Explain your answer.

(4 marks)

b) A question of interest to many educators and college admissions officers is whether the students' performance at pre-college level can predict their performance in college. That is, how well a student do on a test before entering college bear any relationship to his/her performance in college?

Anna used data collected from one Malaysian college to examine this question. The data contain information about students' final CGPA in college, their GPA during matriculation and their high school GPA. She estimated models to examine the relationship between CGPA in college and these two separate pre-college measures. Besides that, other information about the students that also available are their gender and races.
The students' final CGPA in college are in two different categories; more or equal to 3.0 and less than 3.0 while their matriculation and high school GPA are in numeric numbers. To come out with conclusion, Anna analyzed the data with multiple regression technique and obtains the output given in APPENDIX 1.

i. Comment on the multiple regression technique used by Anna. (6 marks)

ii. Suggest two types of analysis that Anna can do with the other two variables; gender and races. State the related objectives of using these two types of analysis. (6 marks)

END OF QUESTIONS
APPENDIX 1

### SUMMARY OUTPUT

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<th>Regression Statistics</th>
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<tbody>
<tr>
<td>Multiple R</td>
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<td>R Square</td>
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<td>Adjusted R Square</td>
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* dependent variable: College CGPA