UTHM
Universiti Tun Hussein Onn Malaysia

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FINAL EXAMINATION
SEMESTER II
SESSION 2013/2014

COURSE NAME : RESEARCH METHODOLOGY

COURSE CODE : BPB 32403

PROGRAMME : 3 BPA

EXAMINATION DATE : JUNE 2014

DURATION : 3 HOURS

INSTRUCTION : ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FOUR (4)** PAGES

Q1 "Recently, many companies have recognized the concepts of green or environmental innovation. However, relatively little research attention has been devoted to the consideration of relations between green product innovation, firm performance and competitive capability. Hence, this paper aims to bridge this gap by providing empirical evidence to encourage companies to implement green product innovation in order to improve their firm performance and to enhance their competitive capability. It also includes the moderating role of managerial environmental concern in this relation. A model is constructed to link the aforementioned constructs. Data, which are collected through a questionnaire-based survey across 140 Turkish manufacturer firms from various sectors, are analyzed using Structural Equation Modeling. According to statistical results, green product innovation significantly positively affects both firm performance and competitive capability. On the other hand, managerial environmental concern only moderates the relationship between green product innovation and firm performance. The results also provide various implications for managers and present some suggestions for future researches."

Based on the abstract provided above, answer the following questions.

(a)   State the research objective.

(2 marks)

(b)   Identify independent variable(s) and dependent variable(s).

(6 marks)

(c)   Illustrate the conceptual framework that links all variables identify in question **Q1(b)**.

(4 marks)

(d)   Construct appropriate hypotheses based on the conceptual framework in question **Q1(c)**.

(10 marks)

(e)   Identify the research design.

(2 marks)

(f)   Identify the sampling technique.

(2 marks)

(g)   Analyze the ethical issues that might arise with examples.

(7 marks)

(h)   Justify whether this study is 'representative' of other industries in other countries.

(7 marks)

Q2 "Approximately one-third of college students are overweight or obese and the average student gains 5 kg during college. Previous research has identified a relationship between emotional eating and weight gain in young adults, but outside the realm of eating disorders, few studies qualitatively capture why individuals cope with emotions by eating. Exploratory qualitative research was conducted, including 3-day food journals and in depth interviews, with proportionate quota sampling of eight male and eight female undergraduate students to gain an understanding of students' perceptions of their emotional eating behaviors. Participants were purposively selected based on their emotional eating scores on the Weight Related Eating Questionnaire from a larger survey assessing student eating behaviors. Participants' (n = 16) mean age was 19.6 ± 1.0 years and all self-reported their race to be white. Mean Body Mass Index (BMI) for females and males was 24.1 ± 1.2 kg/m2 and 24.8 ± 1.7 kg/m2, respectively. Findings from the qualitative analyses indicated gender differences and similarities. Females identified stress as the primary trigger for emotional eating, frequently followed by guilt. Males were primarily triggered by unpleasant feelings such as boredom or anxiety turning to food as a distraction; however, males were less likely to experience guilt after an emotional eating episode than females. During emotional eating episodes, both genders chose what they defined as unhealthful foods. These findings indicate a multidisciplinary intervention focusing on emotion and stress management in addition to dietary behavior change should be developed to reduce the potential for weight gain associated with emotional eating in the college-aged population."

Source: Bennett, J., Greene, G., & Schwartz-Barcott, D. (2013). Perceptions of emotional eating behavior. A qualitative study of college students. *Appetite*, *60*(1), 187–92.

Based on the above information, answer the following questions.

(a) Describe **TWO (2)** advantages of conducting qualitative research.

(6 marks)

(b) Describe the sampling technique used and its limitations.

(6 marks)

(c) Discuss **THREE (3)** types of questions that the reseachers could use in the field interviews

(9 marks)

(d) Propose other data sources instead of primary data from the interview session that can be used in the study with justification.

(6 marks)

(e) Discuss how to ensure validity in qualitative research.

(3 marks)

Q3 (a) Tests of significance such as t-test and ANOVA automatically calculate the statistical significance and produce probability estimates.

Explain the meaning of statistically significant result at 0.05 level.

(6 marks)

(b) Describe **THREE (3)** main measures of central tendency for the following set of data.

| 1 | 2 | 3 | 1 | 5 | 6 | 3 | 8 | 3 |

(9 marks)

(c) Describe **THREE (3)** measures of dispersion using data in **Q3(b).**

(9 marks)

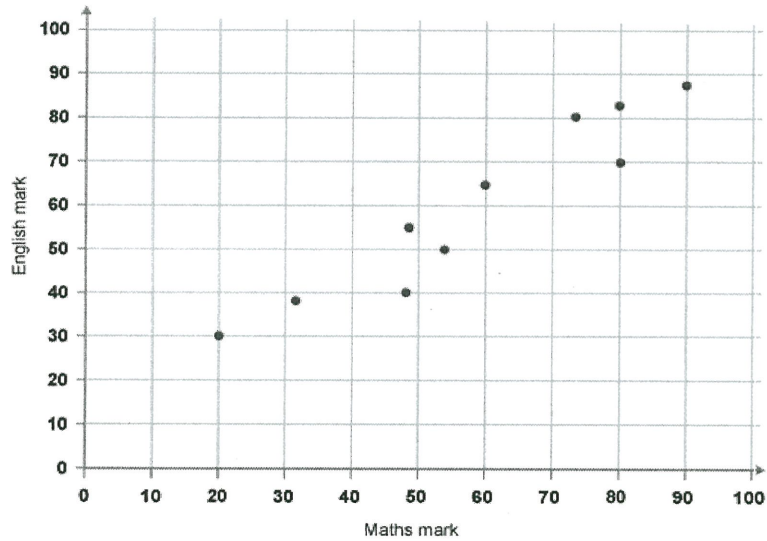(d) Figure **Q3(d)** shows the scattergram of English and Maths marks received by high school students.

Figure Q3(d)

Explain **THREE (3)** aspects of bivariate relationship in Figure **Q3(d)**.

(6 marks)

-END OF QUESTION-

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FINAL EXAMINATION
SEMESTER II
SESSION 2013/2014

COURSE NAME	:	PRODUCTION AND OPERATION MANAGEMENT
COURSE CODE	:	BPB 31103
PROGRAMME	:	3 BPB
EXAMINATION DATE	:	JUNE 2014
DURATION	:	2 HOURS 30 MINUTES
INSTRUCTION	:	ANSWER **ALL** QUESTIONS

THIS QUESTION PAPER CONSISTS OF **FIVE (5)** PAGES

Q1   (a)   Discuss **THREE (3)** chase strategy options.

(6 marks)

(b)   Based on the **Q1**(a).
Explain **ONE (1)** advantage and disadvantage of each options discussed.

(6 marks)

(c)   ZH company has developed the following supply, demand, cost and inventory data.

Table Q1

Supply available:				
Period	**Regular time**	**Overtime**	**Subcontract**	**Demand Forecast**
1	30	10	5	40
2	35	12	5	50
3	30	10	5	40

Initial inventory	20 unit
Regular-time cost per unit	RM100
Overtime cost per unit	RM150
Subcontract cost per unit	RM200
Carrying cost per unit per month	RM4

(i)   Prepare a transportation schedule

(3 marks)

(ii)   Calculate production capacity to meet demand at a minimum cost using transportation method.

(8 marks)

(iii)   Determine the production cost.

(2 marks)

2

Q2 (a) Define the meaning of Assignment Method.

(4 marks)

(b) Discuss **TWO (2)** techniques of demand management in services scheduling.

(6 marks)

(c) MH marketing Sdn Bhd, headquatered in Kuala Lumpur, plan to assign three new Marketing Manager Ali, Asiah and Ahmad to regional offices. The cost to transfer these managers are as listed below:

Table Q2

	Johor	Kelantan	Sarawak
Ali	RM800	RM1100	RM2000
Asiah	RM1600	RM600	RM1300
Ahmad	RM500	RM1000	RM1400

(i) Propose assignment office to each manager using an assignment method.

(10 marks)

(ii) Compute total cost of assignment.

(5 marks)

Q3   Perdana Store has its own manufacturing facility in which it produces Ironcoat paint. The ordering cost is RM150, carrying cost is RM0.75.   The store receives 10,000 gallons orders of Ironcoat paint per year. The facility operates 311 days a year and produces 150 gallons of paint per day.

   (a)   Determine the optimal order size.

   (5 marks)

   (b)   Calculate total inventory cost.

   (4 marks)

   (c)   Calculate the length of time to receive an order.

   (4 marks)

   (d)   Determine the number of order per year.

   (4 marks)

   (e)   Determine the maximum inventory level.

   (4 marks)

   (f)   Sketch the Production Order Quantity Model for Perdana Store.

   (4 marks)

Q4 Zaman Oil & Gas Company is a company which builds offshore oil platforms. Recently, it has been experiencing problems with its profiling machine, a computer-driven device that cuts the ends of pipe so that it can be welded to another pipe, as shown in **Table Q4**.

Table Q4

Number of breakdowns	0	1	2	3	4	5
Breakdown frequency	2	2	2	6	7	1

Each time a machine breaks down, the company loses about RM3,000. If the company implements preventive maintenance, it will be able to reduce the number of breakdowns to one per month. Preventive maintenance costs would be RM500 a month.

(a) Calculate the breakdown ratio frequency.

(5 marks)

(b) Calculate the expected number of breakdown.

(5 marks)

(c) Propose to the management the best solution to overcome the breakdown problems.

(15 marks)

- **END OF QUESTION** -