TECHNICAL UNIVERSITY OF MOMBASA
Faculty of Business & Social Studies

DEPARTMENT OF BUSINESS STUDIES

UNIVERSITY EXAMINATIONS FOR
MASTERS IN BUSINESS ADMINISTRATION

BMS 5200: PROBLEM SOLVING FOR CONSULTANTS

END OF SEMESTER EXAMINATIONS
SERIES: APRIL 2015
TIME: 3 HOURS

INSTRUCTIONS:

– Attempt question **ONE (Compulsory)** and any other **THREE** questions
– Do not write on the question paper.

This paper consists of Three printed pages

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QUESTION 1 (Compulsory)

a) Your department has really worked hard over the past 18 months. Your boss wants to implement an employee recognition program spamming a twelve-month period. He wants some form of recognition to take place every month, and at the end of the year when your department has its annual team meeting. He wants a trophy awarded to one outstanding employee and a plaque awarded to section of the department that preformed the best. How will your employee recognition team to go about implementing this challenge? What responsibilities and timeline will you follow.   **(10 marks)**

b) Your team of cardiovascular nurses has been assigned the duty of developing some patient education materials. Your patient population is primarily comprised non-English speakers. First however, you must identify the risk of hearts attacks. In three weeks, two members of your team will be presenting to 25 patients at a health forum. The problem is how will you design and implement training for

these patients? Before the actual forum, your team should have a practice run of the training sessions. **(10 marks)**

c) Ronnie owns a spa and salon. Generally her customers leave satisfied and she has developed a loyal client base. However, recently she had an incident where a customer came into the spa to receive a facial and a microdermabrasion. Prior to the service the front desk staff explained the procedures and the risks, which included skin irritation. After the service, the client's face was red as it normally should be. The client did not indicate as she was checking out. Two days later the client calls the spa to speak to Ronnie. The client is unpset because her face is still red and she has an important engagement to attend where she is a speaker. What should Ronnie do? **(5 marks)**

QUESTION 2

a) What is a cognitive map? **(4 marks)**

b) Clearly explain the jointly, understanding, reflecting and negotiating strategy (JOURNEY) making methodology. **(9 marks)**

c) Apply the methodology to two problems with which you are familiar. **(12 marks)**

QUESTION 3

a) Clearly describe soft system methodology (SSM). **(15 marks)**

b) Illustrate SSM by applying it to any two examples. **(10 marks)**

QUESTION 4

Briefly explain each of the following techniques:

a) Problem structuring methods. **(9 marks)**

b) SODA **(9 marks)**

c) Scenario planning **(7 marks)**

QUESTION 5

a) Explain the concept of Strategic Choice Approach (SCA). **(10 marks)**

b) Give one example illustrating the application of SCA. **(15 marks)**

QUESTION 6

The following data relates to 4 branches of bank with two outputs (i.e personal transaction and business transaction) and one input (i.e number of staff).

Branch	Personal transaction	Business transaction	No. of staff
Nairobi	125,000	50,000	18
Mombasa	44,000	20,000	16
Malindi	80,000	55,000	17
Kwale	23,000	12,000	11

a) Apply Data Envelopment Analysis (DEA) to compare the relative performance of these branches. Which branches are efficient? For the inefficient branches find their efficiencies and reference sets.

(10 marks)

b) Should the analysis be done on a monthly or yearly basis? Give reasons. **(3 marks)**

c) Express the formulation as non-linear programming and then convert it into linear programming with the objective of calculating efficiency for Mombasa.

(12 marks)