

## DATE: 14/12/2021

TIME: 9.00-12.00 PM

### INSTRUCTIONS

- 1. ANSWER question ONE and any OTHER THREE questions. In total answer four questions
- 2. Question ONE carries 30 marks, while the rest of the questions accounts for 20 marks each
- 3. Use of suitable real practical examples and creative thinking is encouraged

### **QUESTION ONE (30 MARKS)**

Angel is an engineer in Gothenburg. Gothenburg is a city with many options for lunch and dinner. Many people walk around during the lunch and dining hours and try to choose a restaurant in daily basis. Angel has developed a Smartphone app in order to better serve this need. The app alerts the user when the mobile is 20 meters far from a restaurant. The user then can click and see the menu of the day or another daily offer that the restaurant wants to promote. In order to market the idea she presents the business plan to an entrepreneur who can market and sell the app to restaurants and or Smartphone users. The business plan suggests a pilot commercialization in Gothenburg center the first year. There are different business models in order to commercialize this product. One is to charge the restaurant owners with a standard fixed fee and have the application free for the Smartphone user. Another business model would be to have the subscription for restaurants free of charge and charge the Smartphone users for downloading the app instead. In the first business model, in order to cover for the initial development cost and reach break-even, the price per unit can go down to Kshs 2000 if 100 restaurants subscribe. In the second business model the price per unit can go down to Kshs 100 if 2000 people download the app. The entrepreneur hires you, working as a consultant, to make a quantitative analysis in order to decide if the business can be profitable.

#### Required

a)	Define your Research Question/s	(4 marks)
b)	Which is the population in this case and how could we measure it?	(4 marks)
c)	You are going to use a survey in order to estimate the potential customers	within the
	population. How would you choose your sample in order to achieve maximum repr	esentative?
		(4 marks)
d)	Write down 8 survey questions which your survey should include in the data coll	lection tool
	in order to answer your research question/s.	(8 marks)
e)	Discuss the issue of reliability in your survey and give specific example from you	r questions
	on what reliability means in your case.	(4 marks)
a)	What does discussion of findings involve and why will it be necessary in reporting	ng research
	findings in this study?	(6 marks)

## **QUESTION TWO (20 MARKS)**

Following a prolonged period of marketing activity, a chain of private health clinics has recently opened a number of clinics in thirty (30) towns across the country Kenya it had not previously operated in. Despite the efforts put to promote and raise awareness of their services, the uptake of the offered services is still very low. The organization now wants to carry out a study to aid in understanding the possible explanations behind this low uptake. Your research agency has been awarded the contract to carry out this research.

a)	Suggest the possible research topic for this study.	(2 marks)
b)	Describe at least two sampling methods which could be used for this survey, or	utlining the
	advantages and disadvantages of each of the methods chosen.	(6 marks)
c)	Which sampling method will you recommend and why?	(3 marks)
d)	Discuss the type of data that is appropriate for this study.	(3 marks)
e)	What data analysis techniques will be appropriate for the study? Justify	(3 marks)
f)	Discuss three ethical dimensions you will need to give attention as you execute	this study.
		(3 marks)

### **QUESTION THREE (20 MARKS)**

- a) Using appropriate examples, discuss the hallmarks of Scientific Research as identified and narrated by Umma Sekaran. (10 marks)
- b) Using suitable examples describe and discuss the seven-step process in the Hypothetico-Deductive Method in research. (10 marks)

# **QUESTION FOUR (20 MARKS)**

A theoretical framework is an essential component of research that shapes the quality and scope of investigations. More specifically, Kerlinger, (2014) defines a theory as a set of interrelated constructs, definitions, and propositions that presents a systematic view of phenomena by specifying relations among variables, with the purpose of explaining and predicting phenomena. With reference to this;

a) Use five points to evaluate the centrality of the theoretical review in social research.

(10 marks)

b) Subject to your area of specialization, formulate a researchable topic and from it, develop a well labelled conceptual framework, show links between independent, intervening and dependent factors, identify at least three possible measures of each factor. (10 marks)

## **QUESTION FIVE (20 MARKS)**

- A Company having a chain of restaurants in Nairobi wants to start a new one in Nakuru.
  Before starting, it wants to conduct a survey of the employees of various institutions in that area to know about their eating habits, preferences, cost etc.
  - i. Suggest and explain a suitable sampling scheme for the same. (4 marks)
  - ii. Discuss four major forms of internal validity with regards to the measurement tools a researcher would use in this study. (8 marks)
- b) Using suitable examples, discuss the nature of research where the following data analysis techniques could be appropriate
  - i. Descriptive statistics (4 marks)
  - ii. Inferential statistics (4 marks)