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Enrolment No:	

UPES
End Semester Examination, May 2024

Course: Business Research Methods Program: MBA Course Code: DSRM7002	Semester: II Time: 03 hrs Max. Marks: 100
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Instructions:

SECTION A
10Qx2M=20Marks

S. No.		Marks	CO
Q 1	Select the most appropriate		CO1
	<p>i. A simple random sample is one in which: A From a random starting point, every nth unit from the sampling frame is selected B A non-probability strategy is used, making the results difficult to generalize C The researcher has a certain quota of respondents to fill for various social groups D Every unit of the population has an equal chance of being selected</p> <p>ii. Closed ended questions are those that: A Have a fixed range of possible answers B Prevent respondents from allocating themselves to a category C Encourage detailed, elaborate responses D Relate to the basic demographic characteristics of respondents</p> <p>iii. The purpose of a coding manual is to: A Provide a form onto which the data can be entered B Provide researchers with instructions about how to code the data C List all the categories that have been omitted from the schedule D Test researchers' knowledge of statistics</p> <p>iv. What is meant by the term "grounded theory"? A Theories should be tested by rigorous scientific experiments B As a social researcher, it is important to keep your feet on the ground C Theories should be grounded in political values and biases D Theoretical ideas and concepts should emerge from the data</p>	10x2	

	<p>v. Which of the following is an advantage of qualitative interviewing relative to participant observation? A It allows you to find out about issues that are resistant to observation B It is more biased and value-laden C It is more likely to create reactive effects D None of the above</p> <p>vi. How might qualitative research facilitate quantitative research? A By providing hypotheses that can later be tested B By helping with the design of survey questions C By informing the schedule of a structured interview D All of the above</p> <p>vii. Which of the following is not a limitation of the focus group method? A The researcher has little control over how the discussion proceeds B It reveals the way social meanings are jointly constructed C It produces a large volume of data that can be difficult to analyse D People in groups tend to agree and express socially desirable views</p> <p>viii. Which of the following is not a type of research question? A Predicting an outcome B Evaluating a phenomenon C Developing good practice D A hypothesis</p> <p>ix. If a study is "reliable", this means that: A The measures devised for concepts are stable on different occasions B It was conducted by a reputable researcher who can be trusted C The findings can be generalized to other social settings D The methods are stated clearly enough for the research to be replicated</p> <p>x. When planning to do social research, it is better to: A Approach the topic with an open mind B Do a pilot study before getting stuck into it C Be familiar with the literature on the topic D Forget about theory because this is a very practical undertaking</p>		
SECTION B 4Qx5M= 20 Marks			
Q 2.	Discuss Delphi technique and Special focused group (SFG) discussions as methods for gathering qualitative data in research. Elaborate on some situations where these techniques may be useful.	5	CO2

Q 3.	A local grocery store is interested in gathering feedback from its customers about their shopping experience. The store manager decides to conduct a survey by asking customers to fill out a questionnaire at the checkout counter. What sampling method would you recommend for the grocery store's survey, and why?	5	CO2																																																				
Q 4.	A multinational corporation specializing in technology products is experiencing declining sales for one of its flagship smartphones in a specific market segment. The company wants to investigate the reasons behind this decline and develop strategies to reverse the trend. Which research approach will you use and also state the research problem.	5	CO2																																																				
Q 5.	A marketing research firm is hired by a cosmetics company to conduct a study on consumer preferences for skincare products. The company wants to understand which factors influence consumers' purchasing decisions and which product features are most important to them. What data collection methods would you recommend the marketing research firm to use for this study and why?	5	CO2																																																				
SECTION-C 3Qx10M=30 Marks(Answer any three)																																																							
Q 6.	A farming company wants to know if a new fertilizer has improved crop yield or not. Historic data shows the average yield of the farm is 20 tonne per acre. They decide to test a new organic fertilizer on a smaller sample of farms and observe the new yield is 20.175 tonne per acre with a standard deviation of 3.02 tonne for 12 different farms. Did the new fertilizer work?	10	CO3																																																				
Q 7.	<p>Twelve cars were equipped with radial tires and driven over a test course. Then the same 12 cars (with the same drivers) were equipped with regular belted tires and driven over the same course. After each run, the cars' gas economy (in km/l) was measured. Is there evidence that radial tires produce better fuel economy? (Assume normality of data, and use level of significance = .05)</p> <table style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th colspan="12" style="text-align: center;">Car</th> </tr> <tr> <th style="text-align: left;"><u>Gas eco.</u></th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> </tr> </thead> <tbody> <tr> <td>Y_1 (radial)</td> <td>4.2</td> <td>4.7</td> <td>6.6</td> <td>7.0</td> <td>6.7</td> <td>4.5</td> <td>5.7</td> <td>6.0</td> <td>7.4</td> <td>4.9</td> <td>6.1</td> <td>5.2</td> </tr> <tr> <td>Y_2 (belted)</td> <td>4.1</td> <td>4.9</td> <td>6.2</td> <td>6.9</td> <td>6.8</td> <td>4.4</td> <td>5.7</td> <td>5.8</td> <td>6.9</td> <td>4.7</td> <td>6.0</td> <td>4.9</td> </tr> </tbody> </table>		Car												<u>Gas eco.</u>	1	2	3	4	5	6	7	8	9	10	11	12	Y_1 (radial)	4.2	4.7	6.6	7.0	6.7	4.5	5.7	6.0	7.4	4.9	6.1	5.2	Y_2 (belted)	4.1	4.9	6.2	6.9	6.8	4.4	5.7	5.8	6.9	4.7	6.0	4.9	10	CO3
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Q 8.	<p>In Trichy district, 450 persons were considered regular consumers of tea out of a sample of 1000 persons. In another district, Pudukkottai, 400 were regular consumers of tea out of a sample of 800 persons. Do these facts reveal a significant difference between the two districts as far as a tea-drinking habit is concerned? Test this at 1% level of significance.</p>	10	CO3																				
Q 9.	<p>B.Tech. Students of UPES studied which vehicles come to a complete stop at an intersection with four-way stop signs, selecting at random the cars to observe. They looked at several factors to see which (if any) were associated with coming to a complete stop. (They defined a complete stop as “the speed of the vehicle will become zero at least for an instant”). Some of these variables included the age of the driver, how many passengers were in the vehicle, and type of vehicle. The variable we are going to investigate is the arrival position of vehicles approaching an intersection all traveling in the same direction. They classified this arrival pattern into three groups: whether the vehicle arrives alone, is the lead in a group of vehicles, or is a follower in a group of vehicles. The students studied one specific intersection in Dehradun at a variety of different times. Because random assignment was not used, this is an observational study. Also note that no vehicle from one group is paired with a vehicle from another group. In other words, there is independence between the different groups of vehicles. Use a 0.05 level of significance.</p> <table border="1" data-bbox="228 1310 1135 1640" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Single Vehicle</th> <th style="text-align: center;">Lead Vehicle</th> <th style="text-align: center;">Following Vehicle</th> <th style="text-align: center;">Total</th> </tr> </thead> <tbody> <tr> <td>Complete Stop</td> <td style="text-align: center;">151</td> <td style="text-align: center;">38</td> <td style="text-align: center;">76</td> <td style="text-align: center;">265</td> </tr> <tr> <td>Not Complete Stop</td> <td style="text-align: center;">25</td> <td style="text-align: center;">5</td> <td style="text-align: center;">22</td> <td style="text-align: center;">52</td> </tr> <tr> <td>Total</td> <td style="text-align: center;">176</td> <td style="text-align: center;">43</td> <td style="text-align: center;">98</td> <td style="text-align: center;">317</td> </tr> </tbody> </table>		Single Vehicle	Lead Vehicle	Following Vehicle	Total	Complete Stop	151	38	76	265	Not Complete Stop	25	5	22	52	Total	176	43	98	317	10	CO3
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SECTION-D
2Qx15M= 30 Marks

<p>Q 10.</p>	<p style="text-align: center;">Keep Your City Clean: Environmental Concerns</p> <p>Over the last decade, recycling of household waste has become an extremely important behavior across the nations. However, in Asian countries this fluctuates from one country to the other. China is the leader amongst waste management while India, an equally large country. Still has a long way to go. Though these are essentially policy driven or community driven initiatives, there are a number of attitudinal and motivational barriers to recycling, acting at an individual level. Punita Nagarajan, a business studies graduate with a keen interest in environmental issues, read about this in a special report in the newspaper. She recognizes a potential business opportunity. It seemed obvious to her that there was scope for a potentially lucrative business related to some aspect of household recycling. All she had to do was work out some way of alleviating the inconvenience people associated with recycling.</p> <p>Punita decided that a door-to-door recycling service may be a profitable way to get people to recycle. She believed that households would be willing to pay a small fee to have their waste collected on a weekly basis, from outside their home. Punita discussed this idea with a few friends, who were very receptive. Reinforcing Punita's views that this was indeed a good business opportunity. However, before she developed a detailed business plan, she decided it was necessary to confirm her thoughts and suspicions regarding the consumer's views about recycling. In particular, she needed to check that her ideas, about convenience and recycling, were on the right track. To do this, she decided to conduct some research into attitudes towards household recycling.</p> <ol style="list-style-type: none"> 1. What is the kind of research design you would advocate here? 2. Identify your variables and the population under study. 3. Can you suggest any alternative design? Why/why not? 	<p>15</p>	<p>CO4</p>
<p>Q 11.</p>	<p>Shameem had been with the organization for a fortnight now and was due to meet Raghu. He opened the door and walked in.</p> <p>Raghu asked him to be seated and said, ‘So doctor, what is the diagnosis?’</p> <p>Shameem Naqib had been recently hired as the company counsellor at Danish International, as Raghu Narang, the CEO, felt that he was fed up with his team of non-performers. He had hand-picked the Band II decision makers from the most prestigious and growing enterprises. Each one came with a proven track record of strategic turnarounds they had managed in their respective roles. So why this inertia at DI? The salaries and perks were</p>	<p>15</p>	<p>CO4</p>

competitive, reasonable autonomy was permitted in decision-making and yet nothing was moving.

There had been two major mergers and the responsibilities had increased somewhat. When Shameem went to meet Sid Malhotra, the bright star who had joined six months back, he was reported absent and seemed to be suffering from hypertension and angina pain. His colleague in the next cabin was not aware that Sid had not come for the past four days. As he was talking to Raghu's secretary, he could hear Kamini Bansal, the HR head, yelling at the top of her voice at a new recruit, who after six weeks of joining had come to ask her about her job role.

The Band III executives had been with the company for a tenure of 5–15 years and yet had not been able to make it to the Band II position (except two lady employees). They were laidback, extremely critical and yet surprisingly were not moving.

Raghu also seemed a peculiar guy, he had hired him as the counsellor and was also making some structural changes as suggested by a Vastu expert, to nullify the effect of 'evil spirits'. He had a history of hiring the best brains, and then trying to fit them into some role in the organization. And in case someone did not fit in, firing him without any remorse. He had changed his nature of business thrice and on the personal front, he was on the verge of his second divorce. The company had a great infrastructure, attractive compensation packages and yet the place reeked of apathy. It was like a stagnant pool of the best talent. Was it possible to undertake-operation clean up?

(a) What is the management decision problem that Shameem is likely to narrate to Raghu Narang?

(b) Convert and formulate it into a research problem and state the objectives of your study.