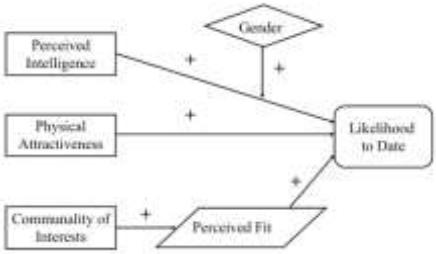
Name: **Enrolment No:**	UPES UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM & ENERGY STUDIES
Online End Semester Examination, June 2021

Course: Business Research Methods — Semester: II
Program: MBA (LM) — Max. Marks: 100
Course Code: DSRM 7002 — Duration: 3Hours

Q.No	Section A Choose the Correct Answer in each of the following:	Marks	COs
Q1	Which example isn't a qualitative data? a) interview notes b) transcripts of records of focus groups c) answers to close-ended questions such as using Likert-scale d) news articles	**5**	CO1
Q2	What type of the scale is used below? How pleased are you with your new estate agent? Extremely Pleased 7 6 5 4 3 2 1 Extremely Displeased a) Numerical scale b) Likert scale c) Category scale d) Dichotomous scale	**5**	CO1
Q3	In quantitative analysis, reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring. Which one isn't the content in reliability? a) stability of measurement b) consistent measurement c) internal consistency d) construct validity	**5**	CO1

Q4	If you want to capture how respondents in a survey feel about individual items, measuring positive of negative to a question or statement. Which scale can be used? a) ranking scales b) rating scales c) nominal scales d) no scale can used	**5**	CO1
Q5	Which sampling method is a Probability sampling? a) Convenience Sampling b) Judgment Sampling c) Stratified Random Sampling d) Quota Sampling	**5**	CO1
Q6	Which statement is true about the trade-off between precision and confidence when we determine the sample size? a) Narrower range, greater precision b) the narrower the range, the higher the confidence. c) More confidence, more precision d) Less precision, less confidence.	**5**	CO1
	Section B		
Q7	Please put the following steps of operationalizing in order (from number 1 to 6). Put 1 on the row of first step, 2 on the row of second step, go on. ( ) Test the reliability and validity of the instrument ( ) Collect data from representative sample from the population. ( ) Decide on response format (e.g., 5 point Likert-scales with end-points 'strongly disagree' and 'strongly agree'). ( ) Provide conceptual definition of construct. ( ) Select items for your scale using 'item-analysis'. ( ) Develop pool of items related/important to the construct.	**10**	CO2

<table>
<tr><td>Q8</td><td>Identify the object and the attribute/characteristics of the measurement, if you try to measure the price consciousness of car buyers as a researcher.</td><td>10</td><td>CO2</td></tr>
<tr><td>Q9</td><td>What is Cronbach’s alpha? How can we use it?</td><td>10</td><td>CO2</td></tr>
<tr><td>Q10</td><td>What kinds of sampling design would be used for the following: The generalizability of the attitudes of blue-collar workers from a sample of 184, to the total population of 350 blue collar workers in the entire factory of a particular company.</td><td>10</td><td>CO3</td></tr>
<tr><td>Q11</td><td>Please read the conceptual model and determine the independent variables, dependent variable, mediator and moderator.
 
</td><td>10</td><td>CO3</td></tr>
<tr><td></td><td>Section C (Case Study)</td><td></td><td></td></tr>
<tr><td>Q12</td><td>Three Tables summarize the results of data analyses of research conducted in a sales organization that operates in 50 different cities of the country and employs a total sales force of about 500. The number of salespersons sampled for the study was 150.
<table>
<tr><th colspan="5">Means, Standard Deviations, Minimum and Maximum</th></tr>
<tr><th>Variable</th><th>Mean</th><th>Std. deviation</th><th>Minimum</th><th>Maximum</th></tr>
<tr><td>Sales (in 1000s of $)</td><td>75.1</td><td>8.6</td><td>45.2</td><td>97.3</td></tr>
<tr><td>No of salespersons</td><td>25</td><td>6</td><td>5</td><td>50</td></tr>
<tr><td>Population (in 100s)</td><td>5.1</td><td>0.8</td><td>2.78</td><td>7.12</td></tr>
<tr><td>Per capita income (in 1000s of $)</td><td>20.3</td><td>20.1</td><td>10.1</td><td>75.9</td></tr>
<tr><td>Advertising (in 1000s of $)</td><td>10.3</td><td>5.2</td><td>6.1</td><td>15.7</td></tr>
</table></td><td>20</td><td>CO4</td></tr>
</table>

Correlations Among the Variables					
	Sales	**Salespersons**	**Population**	**Income**	**Ad. expenditure**
Sales	1.0				
No. of salespersons	0.76	1.0			
Population	0.62	0.06	1.0		
Income	0.56	0.21	0.11	1.0	
Ad. expenditure	0.68	0.16	0.36	0.23	1.0

All figures above 0.15 are significant at $p = 0.05$.

All figures above 0.35 are significant at $p \leq 0.001$.

Results of Regression Analysis			
Multiple *R*	0.65924		
R-square	0.43459		
Adjusted *R*-square	0.35225		
Standard error	0.41173		
df	(5.144)		
F	5.278		
Sig.	0.000		
Variable	Beta	*t*	Sig. *t*
Training of salespersons	0.28	2.768	0.0092
No. of salespersons	0.34	3.55	0.00001
Population	0.09	0.97	0.467
Per capita income	0.12	1.200	0.089
Advertisement	0.47	4.54	0.00001

a) Interpret the information contained in each of the tables in as much detail as possible.

b) Summarize the results for the CEO of the company.

c) Make recommendations based on your interpretation of the results.