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

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, December 2019

Course: Research Methodology and report writing	Semester: III
Program: BBA(AO)	Time: 03 Hours
Course code: DSRM2001	Max. Marks: 100

SECTION A	(20 Marks)

Each question in section A is a multiple-choice question with four answer choices. Read each question and choose the one best answer.

1.	Which is the limitation of business research (a) Access to information (b) Time management (c) Access to resources (d) All the above	2	CO1
2.	Which study is similar to descriptive research study but with a different focus? (a) Experimental research (b) Diagnostic research (c) Qualitative research (d) All the above	2	CO1
3.	Which is the process of summarizing raw data and displaying the same in compact form for further analysis? (a) Tabulation (b) Coding (c) Editing (d) Interpretation	2	CO1
4.	Which variable is presumed to cause a change in the dependent variable? (a) Dependent Variable (b) Independent Variable (c) Confounding Variable (d) Extraneous Variable	2	CO1

5.	Which of the following is the least of the elements from which the sample may be drawn?
	    (a) Sampling plan
	    (b) Sampling frame
	    (c) Sampling unit
	    (d) Survey
		2	CO1

6.	In which sampling the entire population is segmented into mutually exclusive groups?
	    (a) Convenience sampling
	    (b) Quota sampling
	    (c) Judgment sampling
	    (d) Snowball sampling
		2	CO1

7.	In which scale has a natural zero point and further numbers are placed at equally appearing intervals?
	    (a) Nominal
	    (b) Ordinal
	    (c) Interval
	    (d) Ratio
		2	CO1

8.	Which of the following techniques are useful in giving respondents opportunities to express their attitudes without personal embarrassment?
	    (a) Projective techniques
	    (b) Focus group
	    (c) Case study method
	    (d) Depth interview
		2	CO1

9.	Which one of the following is advantage of Latin square design?
	    (a) You can control variation in two direction
	    (b) The number of treatments must equal the number of replication
	    (c) The experimental error is likely to increase with the size of the square
	    (d) All the above
		2	CO1

10.	Which of the following group refers to another group assigned to the experiment on which treatment not applied (a) Treatment group	2	CO1

	(b) Experimental group		
	(c) Control group		
	(d) Random group		

	SECTION B (20 Marks)		
	Attempt all the questions:		
11.	Distinguish between correlation and regression with the help of an example. How are the two concepts used together ?	5	CO1, CO2
12.	An investigator wants to estimate the proportion of freshmen at his University who currently smoke cigarettes (i.e., the prevalence of smoking). How many freshmen should be involved in the study to ensure that a 95% confidence interval estimate of the proportion of freshmen who smoke is within 5% of the true proportion?	5	CO1, CO2
13.	Explain layout of the research report.	5	CO1, CO2
14.	Distinguish between independent, dependent and extraneous variable.	5	CO1, CO2

	SECTION-C (30 Marks)		
	Attempt any three questions:		
15.	The following table gives the data on the quantity demanded, price and income of a commodity for the period 1996 to 2005. 	Year	Demand (X)	Income(I)	 |------|------------|-----------| 	1996	100	1000	 	1997	75	600	 	1998	80	1200	 	1999	70	500	 	2000	50	300	 	2001	65	400	 	2002	90	1300	 	2003	100	1100	 	2004	110	1300	 	2005	60	300	 (a) Estimate the linear regression of the demand on the income. (b) Compute r^2 and interpret the same.	10	CO1, CO2, CO3

16.	The manager of ABC ice-cream parlour has to take a decision regarding how much of each flavour of ice-cream he should stock so that the demands of the customers are satisfied. The ice-cream supplies claim that among the four most popular flavours, 62 percent customers prefer vanilla, 18 percent chocolate, 12 percent strawberry and 8 per cent mango. A random sample of 200 customers produces the results below. At the $\alpha=0.05$ significance level, test the claim that the percentages given by the supplies are correct.	10	CO1, CO2, CO3

Flavour	vanilla	chocolate	Strawberry	Mango
No Preferring	120	40	18	22

17.	Two salesmen ,A and B are employed by a company. Recently, it has conducted a sample survey yielding the following data:	10	CO1, CO2, CO3

	Salesman A	Salesman B
No of sell	20	22
Average sell	800	780
Standard deviation	70	60

Is there any significant difference between the average sales of the two salesmen?

18.	The following table gives the number of good and defective parts produced by each of the three shifts in a factory.	10	CO1, CO2, CO3

Shift	Good	Defective	Total
Day	900	130	1030
Evening	700	170	870
Night	400	200	600
Total	2000	500	2500

Is there any association between the shifts and the quality of the parts produced? Use a 0.05 level of significance.

	SECTION-D (30 Marks)		
	Answer the question based on following Case Study:		

	Peter decided to base his research project on the Chinese firms. The main objective of his proposed research was to better understand the internationalization and global brand development of Chinese firms. The aim is not only to evaluate internationalization and the reasons China lacks a truly global brand, but also to Analyse what types of strategy Chinese firms need to take in order to achieve 'global brand' status.		
19.	Give the suitable research design for the above case. Give reasons in support of your answer.	10	CO1, CO2, CO3, CO4
20.	Can you suggest a better design?	10	CO1, CO2, CO3, CO4
21.	What are the main objectives of the study?	10	CO1, CO2, CO3, CO4