Name:
Enrolment No:

UPES
UNIVERSITY WITH A PURPOSE

UNIVERSITY OF PETROLEUM & ENERGY STUDIES
End Semester Examination (Online) – 8th July, 2020
Set A

Program: MBA(OG+Core+BA) | **Semester: II**
Subject/Course: Business Research Methods | **Max. Marks: 100**
Course Code: (DSRM 7002) | **Duration: 3 hours**

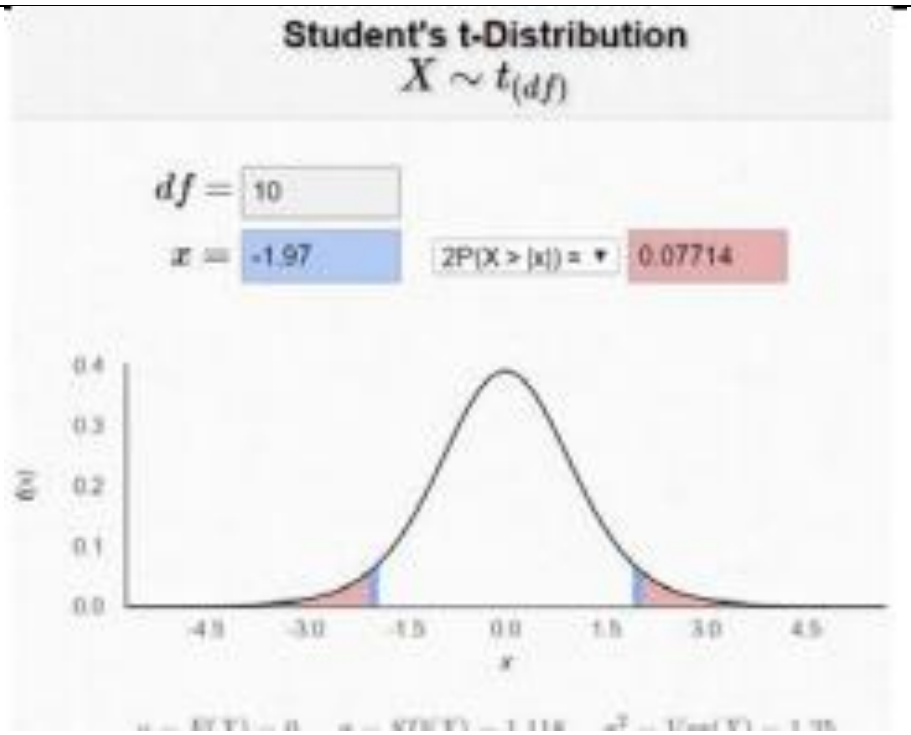
IMPORTANT INSTRUCTIONS

1. *The student must write his/her name and enrolment no. in the separate answer sheet (document created by students). Do not include questions(in the answer sheet) while answering otherwise it will show copy under plagiarism*
2. *Create your answer sheet as MS Word document.*
3. *Save your document with your (name-last four digit sap ID- Prog.-RM) for example (Ankit-3476-OG-RM)*
4. *After attempting the questions in this document, the student has to upload this MS Word document on Blackboard.*
5. *Write all the answers in bullet points and **bold** your keyword in the statement.*

	Attempt five questions in which Question 1-4 is compulsory	**Marks**	**COs**
Q.1	a) Why & When to do the literature review in qualitative research? Before, after or during analysis?	10	CO1
	b) Sometime the "correct" answer is not the best solution in hypothesis testing. Explain with example.	10	CO2
Q.2	(a) When do we use one-sample z statistic instead of the one-sample t statistic?	8	CO3
	b) What are the characteristics of a good researcher and how can you practice ethics in research as a habit?	6	CO1
	c) Have you ever confronted any situation where you have found the researcher is unethical? Explain the situation.	6	CO2

Q.3	a) what is the significance of p-value and how it helps in taking decision about Null Hypothesis? b) Suppose we were interested in determining if there were differences in the average prices between two local supermarkets. We randomly pick six items to compare at both supermarkets. Which statistical procedure would be best to use for this study and why?	10 10	CO2 CO3
Q.4	In a research study, researcher surveyed 250 adults who own pets and 250 adults who do not own pets on their interpersonal capacities. The questions asked of both those who own pets and those who do not own pets included tests for 'computational requirements', which is, tuning in to all the little signals necessary to operate as a couple. While members of each group displayed outstanding interpersonal capacities, in general, the adults who own pets were much more empathetic than those who do not own pets. This indicates that people who are especially empathetic are more likely to adopt a pet in spite of the personal sacrifice and the occasional inconvenience than people who are less empathetic.(In a correlation test the Spearman 'Rank correlation coefficient was found to be 0.75 for having pets(yes/no) and in 5-point Likert scale the score of being empathetic. In order to prove it formulate Research Hypothesis /statement.	20	CO4
Q.5	a) Suppose you plan to take an SRS(simple random sampling) of n=50 files. Explain why it may be reasonable to assume that the average $\bar{x}$ (mean) is approximately normal even though the population distribution is highly skewed.	10	CO3

	b) To test the hypothesis that eating fish makes one smarter, a random sample of 12 persons take a fish oil supplement for one year and then are given an IQ test. Here are the results: 116 111 101 120 99 94 106 115 107 101 110 92 In order to test the hypotheses, Formulate null and alternate hypothesis, report the test statistic value with the P-value so as to summarize your conclusion and business interpretation. Steps: **Hypotheses:**? H0: Ha: Test Statistic: From the data, we obtain $\bar{x} = 106$ and $s_x = 8.83$. Then we get $$t = \frac{\bar{x} - \mu_0}{\frac{s_x}{\sqrt{n}}} = \frac{106 - 100}{\frac{8.83}{\sqrt{12}}} = \frac{6}{2.55} = 2.35.$$ **P-value:?** **Conclusion?** **Business Interpretation?**	10	CO4
Q.6	A significance test for comparing two means gave t=−1.97 with 10 degrees of freedom. Can you reject the null hypothesis that the μ's are equal versus the two-sided alternative at the 5% significance level? Interpret the results based on following results.	20	CO4


Student's t-Distribution
$X \sim t_{(df)}$
$df =$ 10
$x =$ -1.97
2P(X > |x|) =
0.07714
0.4
0.3
0.2
0.1
0.0
f(x)
-4.5
-3.0
-1.5
0.0
1.5
3.0
4.5
x