



UNIVERSITY WITH A PURPOSE

**UNIVERSITY OF PETROLEUM & ENERGY STUDIES**

**End Semester Examination – Dec, 2021**

**Program: BBA-FT**

**Subject/Course: Research methodology & Report Writing**

**Course Code: DSRM2001**

**Semester : III**

**Max. Marks: 100**

**Duration : 3 Hours**

**Note : Attempt All Sections**

	<b>Section-A</b> <b>Attempt all. Each question carries 2 marks</b> <b>Instruction: Choose the correct answer/Complete the statement</b>	<b>CO</b>
Q.1	Increasing the size of the sample is likely to: a) Decrease sampling error but increase non-sampling error b) Increase sampling error but decrease non-sampling error c) Decrease both sampling error and non-sampling error d) Increase both sampling error and non-sampling error e) Increase sampling error but have no impact on non-sampling error	CO1
Q.2	An advantage of computer-assisted telephone interviewing is: a) Interviewing time is reduced b) Data quality is enhanced c) Questionnaires do not have to be coded d) There is little opportunity for interviewer bias e) This method tends to achieve high response rates compared to other methods	CO1
Q.3	Mr. Roy goes to a fast food restaurant and records how many people order veg burgers versus cheeseburgers and whether or not they order a coke versus a diet coke. He is involved in a _____: a) Case study b) Naturalistic observation c) Survey d) Experiment	CO1
Q.4	If a nominal scale is used, it is permissible to calculate which of the following statistics? a) Mean b) Standard deviation c) Range d) Percentile e) Mode	CO1

Q.5	Type-I Error occurs if _____ a) The null hypothesis is rejected even though it is true b) The null hypothesis is accepted even though it is false c) Both the null hypothesis as well as alternative hypothesis are rejected d) None of the above	CO1
Q6.	Which of the following statement is correct? a) Discoveries are researches b) Researches lead to discovery c) Invention and Research are related d) None of the above	CO1
Q7.	The first step of research is: a) Finding a problem b) Selecting a problem c) Searching a problem d) Identifying a problem	CO1
Q8.	Formulation of hypothesis may NOT be required in: a) Survey method b) Historical studies c) Normative studies d) Experimental studies	CO1
Q9.	When a research problem is related to heterogeneous population, the most suitable sampling method is a) Lottery Method b) Stratified Sampling c) Cluster Sampling d) Convenience Sampling	CO1
Q10.	Sampling error decreases with the a) Process of analysis b) Increase in sample size c) Decrease in sample size d) Process of randomization	CO1
<b>Section-B</b>		
<b>Attempt all questions. Each question carries 5 marks</b>		
<b>Instruction: Write short/brief notes</b>		
Q11.	Under what circumstances would you recommend cluster sampling.	CO2
Q12.	Why the managers need to know research when management means management means managing men, money, machine and materials.	CO2
Q13.	What is the difference between Z- test and T-test. What conditions are necessary to apply Z-test	CO1
Q14.	Discuss the characteristics of good report	CO2
<b>Section-C</b>		
<b>Attempt all three, each question carries 10 marks</b>		

Q15.	In business situations, it is not always possible or feasible to collect information related to every unit of the population under study. Researchers have to adopt a sampling technique best suitable to study a given population. Discuss various types of sampling methods with relevant examples?	CO3
Q16.	We have the maize yield from 15 different farms. We know that the standard maize yield for the given variety is $\mu=23$ . $x = [21.5, 24.5, 18.5, 17.2, 14.5, 23.2, 22.1, 20.5, 19.4, 18.1, 24.1, 18.5]$ Test if the maize yield from these farms is significantly better than the standard yield.	CO3
Q17.	Mr. Gupta is having a super market in Dehradun city. During pandemic his business has dripped down drastically, you as a research student need to help Mr. Gupta by designing a questionnaire for his customers to find the customers experience and reasons of shifts to online purchase during pandemic.	CO3
	<b>Section-D</b> <b>Attempt all two, each question carries 15marks</b> <b>Instruction: write long answer</b>	
Q18.	The amount of certain trace element in blood is known to vary with a standard deviation of 15.3 ppm(parts per million) for male blood donors and 8.7 ppm for female blood donors. Random samples of 80 male donors and 60 female donors yield concentration means of 30 and 37 ppm respectively, what is the likelihood that the population means for concentrations of the elements are same for males and females?	CO4
Q19.	Dr. Den attempted to cross a tiger and a cheetah. He predicted an outcome of the to be in the ratio 5 stripes only: 4 spots only: 12 both stripes and spots. After the cross was performed and the counting was done of offsprings it was found 60 with stripes only, 45 with spots only and 90 with both. According to the Chi-square test, did Dr. Den get the predicted outcome?	CO4