Name: Enrolment No:	

UNIVERSITY OF PETROLEUM AND ENERGY STUDIES
End Semester Examination, January 2021

Course: Research Methodology   Semester: 1st

Program: M.Sc. Clinical Research   Time 03 hrs.

Course Code: HSCC7008   Max. Marks: 100

Instructions:

SECTION A
1. Each Question will carry 5 Marks
2. Instruction: Complete the statement / Select the correct answer(s)

S. No.	Statement of question (Attempt all questions)	30	CO
Q 1	(A) The null hypothesis asserts that there is no true difference in the (a)……………. and (b)……………. in the Particular matter under consideration. (B) Type I error is committed when the hypothesis is true but our test (c)…………… it. (C) Type II errors are made when we accept a null hypothesis which is (d)………….. (D) The distribution formed of all possible values of a statistics is called (e)……………..	5	CO1
Q 2	Mark the following statements True (T) or False (F) The target population be defined in terms of a) sampling units - the set of elements available for selection during the sampling process b) extent - the geographical boundaries c) elements - the object about which information is desired d) time - the time period under consideration e) all of the above	5	CO4

Q 3	(A) The objective of …………….. research is to gather preliminary information that will help define the problem and suggest hypotheses. (B) …………sampling method is preferred for the population with finite size. (C) …………..is non-probability method of sampling. (D) A positive correlation occurs when ………………… (E) In an experiment, the group that does not receive the intervention is called………………..	5	CO2

Q 4	Mark the following statements True (T) or False (F)
	
	 Correlational research is that
	     a) the researcher can't manipulate either of the variable involved.
	     b) the researcher can manipulate either of the variable involved.
	     c) it doesn't matter how or where the variables are measured.
	     d) it does matter how or where the variables are measured
	     e) researcher could observe participants in a closed environment or a public setting.
		5	CO1

Q 5	Problems in research are a)……………..b)……………..c)…………d)…………and e)……………	5	CO4

Q 6	Mark the following statements True (T) or False (F)
	
	 The criterion for the selection of stratification variables in stratified sampling is:
	
	     a) Elements within a stratum should be as homogeneous as possible
	     b) Stratifications variables should not be closely related to the characteristic of interest
	     c) Stratification variables should be easy to measure and apply
	     d) The strata should be mutually exclusive and collectively exhaustive so that every population element should be assigned to one and only one stratum.
	     e) Across the strata, the elements should be as heterogeneous as possible
		5	CO2

SECTION B
1. **Each question will carry 10 marks. Answer all 5 questions.**
2. **Instruction: Write short / brief notes**

	Statement of question	50	CO
Q 1	(a) What are the characteristics of hypothesis? (b) What are the requirements of a good questionnaire?	10	CO1
Q 2	What are the guidelines needed to be followed by the researchers for selecting a Research Problem?	10	CO2
Q 3	What are the probability and non probability sampling techniques?	10	CO3
Q 4	(a) What is stratified sampling? (b) What are the advantages and demerits of snowball sampling?	10	CO3
Q 5	(a) How to write a good research paper? (b) How to avoid plagiarism in research paper?	10	CO4

SECTION C

1. Each question will carry 20 marks.

2. Instruction: Write Long Answer.

	Statement of question	20	CO
Q 1	"Research design is the planned sequence of the entire process involved in conducting a research study". Discuss. OR (a) Explain the meaning of sampling and non-sampling errors. (b) What are the various sources of these errors? Elaborate in detail.	20	CO2