

Name:

Enrolment No:

**UNIVERSITY OF PETROLEUM & ENERGY STUDIES**

**End Semester Examination (Online) – 10<sup>th</sup> July, 2020**

**Program: BBA (OG+Core+ABD+AIS)**

**Semester : IV**

**Subject/Course: Research Methodology and Report Writing**

**Max. Marks : 100**

**Course Code: DSRM 2001**

**Duration: 3 Hours**

**IMPORTANT INSTRUCTIONS (Read before attempting)**

1. The student must write his/her name and enrolment no. in the separate answer sheet (MS word document created by the students). Do not include questions(in the answer sheet) while answering otherwise it will show copy under plagiarism
2. Create your answer sheet as separate 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,
6. Keep the font size 12 in 'bookman old style'.
7. Do not write/copy any question in your answer sheet (create separate MS Word document), only mention question number and start answering otherwise it will come under plagiarism.
8. Neither you copy nor you let copy your document or else both of them will be caught under plagiarism
9. Hope you have read all the guidelines sent earlier through announcement.
10. Before uploading, check twice whether you are uploading correct document, as there is only single attempt.

	<b>Attempt five questions including Question 1-4 which is compulsory</b>	<b>Marks</b>	<b>COs</b>
Q.1	a) Distinguish between <b>One-tailed</b> test and <b>Two-tailed</b> test with example	10	CO1
	b) Distinguish between <b>Type I error</b> and <b>Type II error</b> test with example	10	CO1

Q.2	<p>A study of medical utilization compares mean stay in the hospital for heart transplant operations in 2018 to the mean stay in 2000, for two separate samples of such operations in the two years. In the comparison, since the same variable (“length of stay in the hospital”) is measured for each sample, the data should be analyzed using which method and why?</p> <p>(i) dependent samples paired t -Test OR (ii) Independent samples t-Test</p>	20	CO1 & CO2																									
Q.3	<p>An Indian ethnic female clothe company ‘Global Desi’ is coming with new range of clothes. In order to map out his advertisement campaign, he wants to determine whether these designer clothes will appeal most to a particular age group or it will appeal equally to all age groups. The marketing manager takes a random sample form the ladies of all age group who has seen the advertisement and obtain the following results. Use chi square hypothesis testing five step process to find the results in your rough note book</p> <table border="1" data-bbox="334 888 1166 1136"> <thead> <tr> <th></th> <th colspan="4">Age Group</th> </tr> <tr> <th></th> <th>Under 20</th> <th>20-39</th> <th>40-50</th> <th>60 and above</th> </tr> </thead> <tbody> <tr> <td>Liked the Movie</td> <td>320</td> <td>80</td> <td>110</td> <td>200</td> </tr> <tr> <td>Disliked the Movie</td> <td>50</td> <td>15</td> <td>70</td> <td>60</td> </tr> <tr> <td>Indifferent</td> <td>30</td> <td>5</td> <td>20</td> <td>40</td> </tr> </tbody> </table> <p>(i) state <b>null and alternate Hypothesis</b> in main answer sheet. (ii) Derive the <b>conclusion</b> in main answer sheet observing your results from rough note book</p>		Age Group					Under 20	20-39	40-50	60 and above	Liked the Movie	320	80	110	200	Disliked the Movie	50	15	70	60	Indifferent	30	5	20	40	20	
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Q.4	<p>a) Explain the <b>need of Research Design</b> with suitable example b) Write down the various <b>components with explanation</b> while writing an academic <b>research report</b></p>	10 10	CO3 CO3																									
Q.5	<p>Yes Bank ATMs must be stocked with enough cash to satisfy customers making withdrawals over an entire weekend. On the other hand, If too much cash is unnecessarily kept in the ATMs, the bank is forgoing the opportunity of investing the money and earning interest. Suppose that at a particular branch the expected (population) average amount of money withdrawn from ATMs per customer transaction over the weekend Rs 15000 with an expected (population) standard deviation of Rs. 1500.</p>	20																										

- (a) State the null and alternate hypothesis.
- (b) If a random sample of 36 customer transactions is examined and it is observed that the sample mean withdrawal is Rs. 16,500, is there evidence to believe that the true average withdrawal is no longer Rs. 15000(use a 5%=.05 level of significance). Do the five step process in your rough note book and write your **result and conclusion** in main answer sheet
- (c) What will your answer be in (b) if you (use a 1%=.01 level of significance)
- (d) If a random sample of 26 customer transactions is examined and it is observed that the sample mean withdrawal is Rs. 16,500, is there evidence to believe that the true average withdrawal is no longer Rs. 15000(use a 5%=.05 LOS). Do the five step process in your rough note book and write your **result and conclusion** in main answer sheet

CO2  
  
&  
  
CO4

**Case Study-An IOCL Petrol Pump Consumer Satisfaction**

The management of a leading IOCL company which looks for downstream (distribution, demand and supply) in Delhi and NCR is keen to know its customers view for its services in petrol pumps so that necessary measures can be taken to improve upon and to beat the competitors. It has designed the following questionnaire, which is handed over to consumers in IOCL petrol pumps while they come for refueling their vehicle with the request that they will get their front glass clean free of cost.

Questionnaire

Q6.

	Strongly agree	Agree	Don't know	Strongly disagree	Disagree
1. The petrol pump staffs are courteous.					
2. The petrol pump is kept very clean and tidy.					
3. The overall service is of good quality.					
4. Variety of fuel is always available.					
5. Quality and quantity of fuel has no problem					
6. The queue is well arranged with comfortable ecofriendly shades.					
7. In case of any issue from consumer, it is immediately attended to.					
8. Toilets are clean and tidy.					

9. Facility for air filling is available.						
10. The space to accommodate 10 vehicles at a time is sufficient.						

**Questions**

1. Do you think that method used for acquiring information from Consumers is appropriate? Why or why not?
2. What type of **scale** is this?
3. Are there any **gaps** in the information sought? If so, develop your own **questionnaire**.