



**UNIVERSITY OF PETROLEUM & ENERGY STUDIES
DEHRADUN**

End Semester Examination-May 2017

Program/course: MBA (PM)

Subject: Business Research Methods

Code : MBCQ732

No. of page/s:

Semester – II

Max. Marks : 100

Duration : 3 Hrs

Section A – Multiple Choice Questions, 2marks each

Q1. The step by step method by which the research project is conducted and completed is known as:

- a. The process of describing research
- b. The research process
- c. The process of developing research ideas
- d. The process of gathering data for a research project

Q2. Data collection methods are:

- a. The means by which literature is sourced for a project:
- b. The means by which data is analysed for a research project
- c. The means by which data is gathered for a research project
- d. The means by which the researcher develops the theoretical framework

Q3. Data is:

- a. Literature gathered for a research project
- b. Information or evidence gathered for a research project
- c. Always difficult to source for a research project
- d. Always complex when used in a research project

Q4. A case study research methodology is useful in:

- a. Large populations
- b. The study of a bounded entity such as a business, a club, a class or an event
- c. Population spread over large geographical area
- d. Statistical analysis

Q5. A process by which we estimate the value of dependent variable on the basis of one or more independent variables is called:

- (a) Correlation (b) Regression (c) Residual (d) Slope

Q6. The value we would predict for the dependent variable when the independent variables are all equal to zero is called:

- (a) Slope (b) Sum of residual (c) Intercept (d) Difficult to tell

Q7. Concepts when created and developed and related to other concepts are:

- a. The building blocks of theory

- b. Relevant to the methodological framework
- c. Meaningful only in the context of literature review
- d. Meaningful only in the context of theoretical framework

Q8. Going from specific examples to a generalized principle is called:

- a. Deductive reasoning
- b. Theoretical reasoning
- c. Applied reasoning
- d. Inductive reasoning

Q9 In simple regression equation, the numbers of variables involved are:

- (a) 0 (b) 1 (c) 2 (d) 3

Q10. The straight line graph of the linear equation $Y = a + bX$, slope will be downward If:

- (a) $b > 0$ (b) $b < 0$ (c) $b = 0$ (d) $b \neq 0$

Q 11. A statement about a population developed for the purpose of testing is called:

- (a) Hypothesis (b) Hypothesis testing (c) Level of significance (d) Test-statistic

Q 12. A statement that is accepted if the sample data provide sufficient evidence that the null hypothesis is false is called:

- (a) Simple hypothesis (b) Composite hypothesis (c) Statistical hypothesis (d) Alternative hypothesis

Q 13. The probability of rejecting the null hypothesis when it is true is called:

- (a) Level of confidence (b) Level of significance (c) Power of the test (d) Difficult to tell

Q 14. The dividing point between the region where the null hypothesis is rejected and the region where it is not rejected is said to be:

- (a) Critical region (b) Critical value (c) Acceptance region (d) Significant region

Q15. If value of x for normal distribution is 35, mean of normal distribution is 65 and standard deviation is 25 then standardized normal random variable value is

- A. -1.5
- B. -1.2
- C. -1.7
- D. -4

Q16. Considering normal distribution, spread is increased and height of curve is decreased for the

- A. smaller value of variance
- B. equal value of variance
- C. larger value of standard deviation
- D. smaller value of standard deviation

Q17. The list of all units in a population is called

- a) Random sampling
- b) Sampling Frame
- c) Bias
- d) Parameter

Q18. Which of the following techniques yields a simple random sample?

- a. Choosing volunteers from an introductory psychology class to participate
- b. Listing the individuals by ethnic group and choosing a proportion from within each ethnic group at random.
- c. Numbering all the elements of a sampling frame and then using a random number table to pick cases from the table.
- d. Randomly selecting schools, and then sampling everyone within the school.

Q19. People who are available, volunteer, or can be easily recruited are used in the sampling method called _____.

- a. Simple random sampling
- b. Cluster sampling
- c. Systematic sampling
- d. Convenience sampling

Q20. In which of the following nonrandom sampling techniques does the researcher ask the research participants to identify other potential research participants?

- a. Snowball
- b. Convenience
- c. Purposive
- d. Quota

Section B Short Answer Questions, 5marks each

Q1. Discuss the concepts of nominal, ordinal, interval and ratio scales?

Q2. How do propositions and hypotheses differ? Critically examine through examples.

Q3. What are forward and backward linkages in research and why is their knowledge important?

Q4. Critically examine the twin concepts of reliability and validity of research?

Section C Descriptive questions, 10 marks each. Answer any 3.

Q1. Business research helps in arriving at a sound decision when the manager is faced with many alternatives. However in many situations it would be better to take decisions through experience and gut feel at the spur of the moment. With the help of a flow chart clearly outline as to how to determine when business research should be conducted?

Q2. Explain in detail the concept of sampling. Why is sampling used? Discuss sampling frame. Explain random sampling error and non sampling error. Explain probability sampling and nonprobability sampling. Discuss in detail the various types of probability and nonprobability sampling techniques?

Q3. Discuss briefly the following concepts: a) Mean b) Median c) Mode d) Standard Deviation e) Normal Distribution

Q4. a) Assume you have the following data: $H_0: \mu = 200$, $S = 30$, $n = 64$, and Sample Mean = 218. Conduct a hypothesis test at the 0.05 level of significance?

b) Calculate the following probabilities of a normal distribution of X with $\mu = 50$ and $\sigma = 25$.

1) Prob. ($X > 100$) 2) Prob. ($50 < X < 100$) 3) Prob. ($X < 0$) 4) Prob ($0 < X < 70$)

5) Prob ($100 < X < 150$)

Section D Analytical Case Study, 15 marks each, Answer any 2.

Q1. David Feld founder of Today's Man, a \$204 million retailer based in Moorestown, New Jersey, guessed that many men equated buying clothes with going to the dentist, but he didn't know why. Feld paid for focus groups to uncover the truth. But he never met a focus group he trusted.

Finally, Feld's advertising agency recommended he talk to a company of professional hypnotists based in New York. Feld was doubtful, but he was desperate and curious enough to commission a study focused on why men feel uncomfortable in clothing stores. "The results really shook us up," Feld reports. The comments the men made under hypnosis had the ring of authenticity he had been searching for.

Hypnotized men revealed that they often hated the way their clothes fit but didn't know how to complain. "One guy told us that the last time he bought a suit, it didn't fit right – but he didn't say anything," Feld says. "He then told the hypnotist how insecure and foolish he felt when he wore that suit." Further, some of the hypnotized men admitted to a sense of powerlessness in front of their wives and pushy sales people. "We had never gotten that answer before," Feld says.

Questions:

1. Evaluate the research methods used by the company?

2. Would you recommend any additional research? Kindly elaborate and justify.

Q2. Quality motors is an automobile dealership that regularly advertises in its local market area. It claims that a certain make and model of car averages 30 miles to a gallon of gas and mentions that this figure might vary with the driving conditions. A local consumer group wishes to verify

the advertising claim. To do so, it selects a sample of recent purchasers of this make and model. It asks them to drive their cars until they have used two tanks of gas and to record the mileage. The group then calculates and records the miles per gallon for each car. Following are the results of the tests:

Purchaser	Miles per Gallon	Purchaser	Miles per Gallon
1.	30.9	14.	27.0
2.	24.5	15.	26.7
3.	31.2	16.	31.0
4.	28.7	17.	23.5
5.	35.1	18.	29.4
6.	29.0	19.	26.3
7.	28.8	20.	27.5
8.	23.1	21.	28.2
9.	31.0	22.	28.4
10.	30.2	23.	29.1
11.	28.4	24.	21.9
12.	29.3	25.	30.9
13.	24.2		

- Formulate a statistical hypothesis that accommodates the consumer group's purpose.
- Calculate the mean for miles per gallon. Compute the sample variance and sample standard deviation.
- Conduct the appropriate statistical test of your hypothesis using a 0.05 statistical significance level.

Q3. An organizational researcher conducts an experiment to measure the impact of perceptions of task difficulty on level of aspiration for performing the task a second time. Group 1 was told that the task was very difficult, Group 2 was told the task was somewhat difficult but manageable and Group 3 was told the task was easy. Perform an ANOVA on the following data:

Subject	SUBJECTS LEVEL OF ASPIRATION (10 Point Scale)		
	Group 1	Group 2	Group 3
1	6	5	5
2	7	4	6
3	5	7	5
4	8	6	4
5	8	7	2
6	6	7	3

