

**DEPARTMENT OF MANAGEMENT
SCHOOL OF MANAGEMENT & BUSINESS STUDIES
JAMIA HAMDARD**

Ph.D. Course Work (Online Examination) September 2021

Subject Name: **Research Methodology and Statistics**

MM: 75

Subject Code: **DRM-101**

Time: 03Hours

Email Id of the Examiner: **sadafsiraj@jamiahamdard.ac.in**

Email Id of the Assistant Superintendent of Exams: **matloobullahkhan@jamiahamdard.ac.in**

Email Id of Dean: **deanmanagement@jamiahamdard.ac.in**

Note:

1. Students have to submit the **Scanned hand written solutions** to the Examiner, Assistant Superintendent of Examination and Dean on the email ids as mentioned above.
2. Students shall use **ruled white paper & blue ink** to write the solution. Each page must have a **serial number and the signature** of the student.
3. An additional ½ an hour will be given to the examinees to scan the answer sheets, convert it into single PDF and upload it on the id's given on the question papers.
4. In Special circumstances the copy may be accepted till 2:00 pm with approval of deputy Superintendent of examination and this facility can be availed not more than one time in Ph.D. course work examination
5. If any two copies are found to be similar then both the copies shall be cancelled. Such students will be considered/ tried for unfair means.
6. The attached PDF shall be named as follows –
 - a. Roll No- Full Name-Enrollment Number-Course--Subject Abbreviation (Example: 209334032-Rabia Shaheen-2020-334-032-DRM-101) and students shall also mention the same in subject line of the email & his/her answer copy also.
7. Answer All Questions, each carry equal marks.

Q1. A large national chain is considering sponsoring a new general purpose credit card. Before making a decision, it seeks to find out more about the methods currently used to pay for goods or services costing more than Rs 1000/- It wants the following information;

- a) What method is preferred by consumers- cash, check, credit card, or electronic fund transfer?
 - b) Which of the above methods is used the most times in a 30-day period?
 - c) Do people of different sex, age, education and income handle payments differently?
 - d) Do people use different methods of payment for personal expenses versus business expenses?
- Should a descriptive study or experimentation be used? Detail out the complete research process to be adopted for the purpose.

Q2 (a) Discuss the important factors to be considered while writing a thesis. You may make a flowchart for reference.

(b) What is referencing? Cite Examples of citing for journals, books, and internet sources in APA format

Q 3. Read the following case study and answers the questions given at the end.

Sridhar from Bengaluru, had developed an electric car- VERVE (it is a fully automatic, no clutch, no gears, two door hatchback, easily seating two adults & two children). It runs on batteries and as compared to other electric vehicle, has an onboard charger to facilities easy charging which can be carried out by plugging into any 15-ampere socket at home or work. A full battery charge takes less than seven hours and gives a range of 80 km. In a quick-charge mode (two-and -half hours) 80 percent charge is attained which is good enough for 65 km. A full charge consumes just about 9 unit of electricity. Somehow the product did not take off the way he expected.

He is contemplating about repositioning the car. As he stood looking at the prototype, he knew that there were a couple of questions to which he must find answer before he under took the repositioning exercise. Who should be the targeted segment -- old people, young students just going to college or housewives? What should be the positioning stance? What kind of image would these customers relate to? Was a new name or punch line required? How should the promotion be undertaken? Hyundai had done it with Shah Rukh Khan, should he also consider a celebrity? If yes who?

- Formulate the research objectives for the study? Which sampling technique should he adopt? (7 marks)
- Construct a questionnaire for conducting the study. (8 marks)

Q 4. A study has been conducted to understand the relationship between age and depression control, anxiety control, anger control & Self-control. SPSS output of the regression analysis is given below.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.168 ^a	.028	.019	9.051	1.377

a. Predictors: (Constant), self-control: Rosenbaum sched: rscs, anger control: cers, anxiety control: cecs, depression control: cecs

b. Dependent Variable: age

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	963.044	4	240.761	2.939	.020 ^b
	Residual	33259.701	406	81.920		
	Total	34222.745	410			

a. Dependent Variable: age

b. Predictors: (Constant), self-control: Rosenbaum sched: rscs, anger control: cers, anxiety control: cecs, depression control: cecs

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	20.474	4.397		4.657	.000
	depression control: cecs	-1.052	.987	-.110	-1.572	.117
	anxiety control: cecs	1.773	.804	.132	2.205	.028
	anger control: cers	-.965	.870	-.068	-1.109	.268
	self-control: Rosenbaum sched: rscs	1.596	.906	.088	1.762	.079

a. Dependent Variable: age

- a. State null and alternate hypothesis for the study
- b. What are the assumptions that need to be taken care of before applying regression on any data?
- c. Analyze and interpret the SPSS output table of regression analysis.

Q 5. In the following research questions, identify the Dependent and Independent variables and also the statistical tests applied in each case. Give justification for your answer.

- a. Which of the training method is best for the improving employee's performance?
- b. Does income increase the savings of the individual?
- c. Do men perform better in managerial jobs than women?
- d. Does flexible working hour increase productivity of employees?
- e. Is 24/7 work culture responsible for increasing level of anxiety and stress among employees?