Course: EDU 723 Basic Research Methods in Education   Credit Unit: 2

Instruction: Answer question ONE and any other two questions   Time Allowed: 2 Hours

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1.		The dean of Education at the University of Abuja is concerned about postgraduate students' Attitudes towards class attendance and how it varies with students' characteristics such as Age, Sex, Marital status, Employment Status and Mode of Admission. There are 500 postgraduate students (300 females and 200 males). A consultant plans to collect information from 65% of the students. From this information, answer the following questions:	
	i.	Formulate a suitable research topic for the study.	2 marks
	ii.	What is the problem of the study?	2 marks
	iii.	State the main and specific purposes;	6 marks
	iv.	Pose five research questions to guide the study;	5 marks
	v.	Formulate five null hypotheses from the research questions in (iv)	5 marks
	vi.	Numerically, what is the population and sample in this study?	4 marks
	vii.	If the following materials are used:	
		a. A textbook titled Educational Research: Concepts and Techniques by Professor Alice Eta Asim, published in 2020 by the University of Calabar Press, and	3 marks
		b. An unpublished thesis titled Assessment of Attitude towards Class Attendance among Undergraduate Students in Nigeria by Rev. Sr. Patricia Agbo Onah, and submitted to Postgraduate School, National Open University, Abuja.	3 marks
		Required: Carefully reference these sources using the 7th Edition of APA.	
2.	a.	Differentiate between the validity and reliability of an instrument. Give two types of each	6 marks
	b.	Practically describe how you would determine:	
		i. The content validity.	2 marks
		ii. The reliability of an instrument to measure students' behaviour.	2 marks
	c.	Using the 4-points Likert Scale of SA, A, D, and SD, construct a 5 items questionnaire on Attitude towards class attendance.	10 marks
3.	a.	Highlight 5 characteristics of good research in Education	5 marks
	b.	Explain the following briefly:	
		i. Operational definitions of variables	3 marks
		ii. Delimitations	3 marks
		iii. Limitations	3 marks
		iv. Null hypothesis	3 marks
		v. The most dangerous between Type I and II errors in Education	3 marks
4.	a.	Highlight five important sub-sections in the methodology of a research report.	5 marks
	b.	Differentiate between the following with relevant examples:	
		i. Sampling techniques and sample;	3 marks
		ii. Variable and constant;	3 marks
		iii. Independent and dependent variables;	3 marks
		iv. A proposal and research report;	3 marks
		v. The purpose of a study and the significance of a study.	3 marks