Federal Technical and Vocational Education and Training Institute Department of TVET Pedagogy, Leadership and Management Research Methodology in TVET (VPD 202) Final Examination AY 2017/2009-Second Semester

NAME	ID.NO	DEP'T

- 1. Write your name and ID number before you begin.
- 2. The examination is a written form with different kinds of questions (Identification, Matching type, Multiple Choices, Case study and Subjective type questions).
- 3. Time to fulfill the examination is two (2) hours.
- 4. Check your copy of test question first; it has Nine (9) pages including the answer sheet.
- 5. Write your answers on the answer sheet provided at the end. (Answer written on the test questions papers are not considered/counted as correct answers.)
- 6. Cheating or any attempt to cheat will nullify your results.
- 7. The total mark allotted for this exam is 50%.

Part I: Identification Items (1 point each)

Instruction: Identify the correct word or phrase from the table below for the questions from 1 to 10 and write your answer on the space provided in the answer sheet.

Variable Discussion

Hypothesis Data Gathering Instruments

Sample Research Proposal

Population Generalization

Probability Sampling Non-probability Sampling

- 1. A characteristic that has two or more mutually exclusive values or properties. variable
- 2. A conjectural statement or educated guess about the relationships between two or more variables. Hypothesis
- 3. A small group extracted from a larger group in a study. sample
- 4. A larger group from which the sample is extracted and to which the results obtained from a sample may apply. population
- 5. Tests, questionnaires, Interview guides or schedules, and observation checklists. data gathering instruments
- 6. A technique which gives all the individual subjects of the larger population equal opportunities of being selected and included as members of the drawn samples. probability sampling
- 7. A technique where individual subjects of the larger population are not provided equal chances of being included as members of the drawn sample. Non-probability sampling
- 8. Applying the results obtained from the sample to the larger population of your study.

 Generalization
- 9. A document that describes openly the problem (project objectives) for research and how research will be done. proposal
- 10. Portion of a research that compares the results of the current study with those that have been done in previous researches. discussions

Part II: Matching Items (1 point each)

Instruction: Match items in Column "A" with the statistical test that best correspond in Column "B"

Column A	Column B
1. Allows the comparison of two groups.	A. Linear regression
2. Allows the comparison of three or more groups.	B. Spearman's correlation coefficient
3. Allows an examination of association/relationship between two ordinal variables.	C. Pearson's correlation coefficient
4. Allows an examination of association/relationship between two categorical variables.	D. Standard deviation
5. Allows to make predictions.	E. T-test
	F. Univariate analysis
	G. ANOVA

Part III: Multiple choice Items (1 point each)

Instruction: For each of the following questions choose the best answer and write the letter of your choice on the space provided on the answer sheet

- 1. Which of the following is the correct order of the four levels of measurement?
 - A. Ordinal, nominal, ratio, interval
 - B. Nominal, ordinal, interval, ratio
 - C. Interval, nominal, ordinal, ratio
 - D. Ratio, interval, nominal, ordinal
- 2. Which one of the following in <u>not</u> a method of data collection?
 - A. Questionnaires
 - **B.** Interviews
 - C. Observational checklist
 - D. All of the above are methods of data collection
- 3. Which of the following sampling techniques is an equal probability selection method in which every individual in the population has an equal chance of being selected?
 - A. Simple random sampling

B. availability sampling

C. Snow ball sampling

D. Deliberate sampling

4. Which of the following is **not** a type of nonrandom sampling?

	C.	Quota sampling	D. Purposive sampling		
5. S	. Suppose you are carrying out a quantitative research whose findings will be generalized				
the entire population of the study. Then which one of the following sampling strategies is t					
a	appropriate one?				
	A.	Random sampling			
	B. Non-Random sampling				
	C.	Purposive Sampli	ng		
	D.	Biased Sampling			
6. Th	ne mo	st frequently occur	ing number in a set of values is called the		
	A.	Mean	B. Median		
	C.	Mode	D. Range		
7. The term "middle score" defines which one of the following measure of central tendency?					
	A.	Mean	B. Mode		
	C.	Median	D. Midrange		
8. W	hich (of the following is I	NOT a measure of dispersion?		
	A.	Median	B. Variance		
	C.	Standard deviation	D. Range		
9. Th	nis lev	vel of data can be or	dered and has visible distances between points:		
	A.	Ordinal data	B. Interval data		
	C.	Nominal data	D. Ratio data		
10. A researcher plans to evaluate FTVET students' reactions to a new policy on campus					
disciplinary matters. He locates himself near the office of the dean, where he interviews					
every fourth student who visits the dean. He eventually secures data from 100 interviews					
and publishes his findings as the "Reactions of FTVET students to a new policy for campus					
disciplinary matters." What may be wrong with this approach?					
	A.	Too small a sample	B. Inadequately defined problem		
C. Inadequate techniques of analysis D. Biased sample					
11. Dawit is conducting a study in which he hypothesizes that students who receive his					
intervention will display more self-confidence than students who do not. His hypothesis can be					
CC	considered as:				

A. Cluster sampling B. Convenience sampling

A.	A non-directional hypothesis	B. A null hypothesis
C.	A directional hypothesis	D. None of the above
12. To ope	rationalize a variable means to	the variable.
A.	manipulate B. control	
C.	define D. me	diate
13. Operat	ional framework or Methodology	section of research:
A.	Focuses only on the method of co	lata collection.
В.	Focuses only on the research des	sign of the research.
C.	Defines the structure and strateg	y of investigation to achieve the objectives
D.	Is concerned with why the resea	rch is to be undertaken.
14. If you	are constructing your research i	nstruments, one of the following is not an issue that
you sh	ould take in to consideration:	
A.	Reliability	
В.	Validity	
C.	Objectivity	
D.	None	
15. Which	one of the following is not an ex	ample of a technical developmental research?
A.	Evaluating Curriculum	
В.	Developing prototype	
C.	Producing instructional material	S
D. De	veloping fabrications	
16. Which	one of the following statements	is wrong?
A.	A research report is prepared to	communicate to others the findings of study.
В.	The summary puts together the s	salient findings of the investigation.
C.	Generalization not supported by	results and findings should be tolerated.
D.	The conclusions must be extract	ed from the findings and the results.

17. Which one of the following should **not be** presented in Results and Discussion chapter of a social science research report?

- A. Summary of collected data
- B. the statistical treatment used
- C. presentation and analysis of findings
- D. Conclusions drawn from your findings
- 18. Which one of the following statements **is correct**?
 - A. The summary of research puts together all the findings of the investigation.
 - B. The conclusions of a research are extracted from the findings and the results.
 - C. Recommendations should comprise only suggestions for further research.
 - D. Drawing conclusions is one of the easiest things to accomplish in a research.
- 19. Which one of the following statements **is true** about the comparison of social science and technical development research?
 - A. Both use a scientific method in their investigation
 - B. The area of study they focus on is the same
 - C. Both use the same kind of Research design
 - D. They follow the same Research process
- 20. Which of the following component is included in a research proposal and a research report?
 - A. Resources to be used and time required for the work
 - B. Statement of the problem
 - C. Review of related literature
 - D. Conclusion and recommendation

Part IV: Case study question (7 points)

Instruction: Read the following summary of a research report and answer the questions that follow:

This study intended to assess risk factors for hypertension among patients attending Zewditu hospital. Data on risk factors for cardiovascular diseases such as hypertension are scarce especially in sub Saharan Africa, including Ethiopia. Hypertension affects approximately 26% of adults' population worldwide. A descriptive survey design was conducted in one Ethiopian public Hospital between October and May 2009 E.C. The study was conducted on 323 randomly sampled patients aged 18 years and above. It was anticipated that age, socio economic status and lack of physical exercise contribute to hypertension. Data was collected using a close-ended questionnaire, structured interview and physical measurement. The data was analyzed using Spearman's rank order correlation coefficient and chi square test with the aid of SPSSv20 software.

- 1. Identify the problem or gap (2 marks)
- 2. Identify the dependent and the independent variables (2 marks)
- 3. Formulate three null hypotheses (3 marks)

Part V: Subjective type (8 points)

Instruction: Formulate your own research topic, write a statement describing the problem, formulate a research question to guide the study and write the general and specific objectives of the study.

- 1. Research topic (1 point)
- 2. Statement of the problem (Not more than five lines) (2 points)
- 3. Research question (2 points)
- 4. General objective (1 point)
- 5. Specific objectives (at least two) (2 points)

Federal Technical and Vocational Education and Training Institute

Department of TVET Pedagogy, Leadership and Management Research Methodology in TVET (VPD 202)

Final Examination AY 2017/2009-First Semester

ANSWER SHHET

NAME		ID.NO	DEP'T
1 2 3 4 5	6 7 8 9 10		
ITEM II 1 2 3 4 5 ITEM III 1 2 3 4 5 5	7 8 9	12 13	16 17 18 19 20

ITEM IV

1.

2.

3.

ITEM IV

1.

2.

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