



PMFT 732: QUANTITATIVE RESEARCH

EXAMINATION –APRIL 2024

TIME: 3 HOURS

INSTRUCTIONS: Answer question one and any other three

QUESTION ONE [COMPULSORY] [10 MARKS]

- State and explain briefly four characteristics of Quantitative research [6 marks]
- The following is regression analysis output based on sleep data obtained from Staff of a university in Melbourne, Australia. The survey aimed to examine sleep behaviour (sleep hours per week) and gender and their impact on fatigue levels.

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.289 ^a	.084	.077	2.293

- Predictors: (Constant), sex, hours sleep/ week nights
Write a report about these findings [4 marks]

QUESTION TWO [10 MARKS]

- Outline five components of introduction (chapter 1) of a quantitative research proposal. [5 marks]
- Refer to question 1 b above, make a report for the ANOVA table below [5 marks]

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	122.544	2	61.272	11.650	.000 ^b
	Residual	1341.196	255	5.260		
	Total	1463.740	257			

- Dependent Variable: fatigued
- Predictors: (Constant), sex, hours sleep/ week nights

QUESTION THREE [10 MARKS]

i. Explain briefly the following approaches to research [6 marks]

(a) Qualitative methods

(b) Quantitative methods

(c) Mixed methods.

ii. Differentiate between the following terms as used in research methods.

a) Statement of the problem and significance of the study. [2 marks]

b) Objectives and Hypothesis of the study. [2marks]

QUESTION FOUR [10 MARKS]

Explain briefly five steps followed for conducting a good literature review. [10 marks]

QUESTION FIVE [10 MARKS]

i. Why are research objectives important? [4 marks]

ii. Refer to question 1 b above , make a report for the Coefficients table below[6 marks]

Coefficients^a

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	t	Sig.
1	(Constant)	8.514	.948		8.978	.000
	hours sleep/ week nights	-.461	.134	-.207	-3.453	.001
	sex	-.957	.288	-.199	-3.318	.001

a. Dependent Variable: fatigued

QUESTION SIX [10 MARKS]

i. Explain the concepts of Reliability and Validity in relation to Questionnaires as an instrument of data collection[6 marks]

ii. Correct the following references according to APA style.[4 marks]

a) A book with two authors

Banerjee A & Watson TF2011Pickard's manual of Operative dentistry9th ed
Oxford: Oxford University Press.

b) Citing in text a journal with more than three authors

Knapik JJ Cosio-Lima LM Reynolds, KL and others 2015 Efficacy of
functional movement screening for predicting injuries in coast guard
cities. Journal of Strength and Conditioning Research, 29(5), 1157-1162.