

Marks copy

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SELECTION EXAMINATION FOR MD (COMMUNITY
MEDICINE/COMMUNITY DENTISTRY) JULY 2018

Date: 10th July 2018

Time: 1.00 p.m. – 2.00 p.m.

Answer **all** questions.

Answer each question in a separate book.

1. A researcher carried out a study to assess the prevalence of upper body muscular skeletal pain among office workers and to compare the difference in the pain score among clerical staff, labourers and managers working in government institutions in the Colombo District. A self administered, twenty (20) item likert scale was used to assess pain and a pain score was calculated.
 - 1.1. Suggest a suitable study design, giving reasons. (10 marks)
 - 1.2. Outline an appropriate sampling procedure to select a representative sample for this study. (30 marks)
 - 1.3. Describe the advantages and disadvantages of using the above self administered questionnaire. (30 marks)
 - 1.4. Table 1 and 2 show the results of the above study. Interpret the findings. (30 marks)

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Table 1: Descriptive statistics of pain scores in the three employment categories

Employment category	Sample size	Mean	Standard Deviation
Clerical	398	43.7	10.2
Labourers	510	42.9	10.5
Managers	412	38.2	11.1

Table 2: Analysis of variance between pain score and employment categories

	Sum of Squares	Degrees of freedom	Mean Square	F	p value
Between Groups	7653.6	2	3826.8	34.2	0.0001
Within Groups	147012.3	1317	111.6		
Total	154665.9	1319			

2. A study was conducted in the Colombo District to determine alcoholism as a risk factor for road traffic accidents among three wheeler drivers. Multiple logistic regression analysis showed that alcoholism was associated with road traffic accident (Odds ratio 7.2; 95% confidence interval 3.6 to 14.4).
- 2.1. Name the study design, with reasons. (15 marks)
 - 2.2. Discuss three (3) biases that could occur in the above study and steps that would be taken to minimize the said biases. (45 marks)
 - 2.3. Justify the reason to analyze the data using multiple logistic regression. (20 marks)
 - 2.4. Interpret the 95% confidence interval. (20 marks)