POSTGRADUATE INSTITUTE OF MEDICINE UNIVERSITY OF COLOMBO

MD (COMMUNITY MEDICINE/COMMUNITY DENTISTRY) EXAMINATION COMPONENT I – (2015 PROSPECTUS) – FEBRUARY 2016

Date: - 1st February 2016

Time: -2.00 p.m. -4.00 p.m.

PAPER I

Answer all four questions.

Answer each question in a separate book.

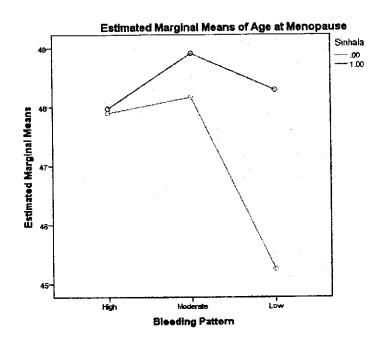
- 1. A study was conducted to assess the validity of Kessler Psychological Distress Scale (K10) among the Sinhala speaking attendees of an Out Patient Department (OPD). K10 has 10 items, each item with five responses (1-5 Likert scale). Scores range from 10 to 50. A translated version of K10 was administered to 40 apparently healthy people selected from a Healthy Lifestyle Clinic and 40 psychiatric patients selected from a psychiatry clinic. Criterion measure used was the diagnosis made by a psychiatrist. Results showed that the sensitivity and specificity of K10 were 90% and 85%, respectively at a cut-off point of 30/31.
- 1.1. Briefly describe how the validity of the Sinhala translation of K10 could be ensured. (20 marks)
- 1.2. Comment on the study population selected for the validation. (15 marks)
- 1.3. Briefly explain how the internal validity of this study could be further elaborated. (30 marks)
- 1.4. Briefly explain how the results could be further elaborated for better interpretation of the validity of K10. (35 marks)

2. A research article based on a cross sectional study to determine the factors associated with the age at menopause has been submitted to a scientific journal. Authors claim that the content validity of the questionnaire is ensured. The reported results are given in Table 1 and Figure 1.

Table 1 - Analysis of variance of age at menopause

Source	Sum of Squares	Degrees	Mean	F value	P value
		of	Square		
		freedom			
Bleeding Pattern	238.601	A	В	Е	0.001
Race - Sinhala	169.593	1	169.593	10.184	0.001
Bleeding Pattern x Race-Sinhala	123.778	2	C	3.716	0.025
Error	15071.454	905	D		
Total	2145757.685	911			

Figure 1 - Age at menopause by bleeding pattern and race



- 2.1. Explain what is meant by content validity. (10 marks)
- 2.2. Calculate the measures indicated by A, B, C, D and E in Table 1. (15 marks)
- 2.3. Interpret the results of the above study. (30 marks)
- 2.4. A reviewer of the above article suggested logistic regression analysis as an alternative to analysis of variance in the results section.

Describe briefly how you would do a logistic regression analysis on this data set. (25 marks)

- 2.5. List the advantages of logistic regression analysis compared to the analysis of variance done in this study. (20 marks)
- 3. A researcher is interested in assessing the environment related risk factors of breast cancer in Sri Lanka.
- 3.1. Comment on the suitability of using a case control study design for this purpose. (20 marks)
- 3.2. Discuss the advantages and disadvantages of recruiting a hospital control group for this study. (40 marks)
- 3.3. Discuss the precautions that could be taken to minimize measurement errors in assessing environment related risk factors. (40 marks)

4.

- 4.1. Discuss how you would establish "trustworthiness" of data generated from a qualitative study. (60 marks)
- 4.2. Discuss the essential "professional attributes" in a specialist in Community Medicine for his optimal performance. (40 marks)

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MD (COMMUNITY MEDICINE/COMMUNITY DENTISTRY) EXAMINATION COMPONENT I – (2015 PROSPECTUS) – FEBRUARY 2016

Date: - 2nd February 2016

Time :- 9.30 a.m. - 11.30 a.m.

PAPER II

Answer all four questions.

Answer each question in a separate book.

1.

- 1.1. It is planned to amend the National Authority of Tobacco and Alcohol Act.
 - 1.1.1. Discuss the gaps in the current Act with regard to tobacco.

 (50 marks)
 - 1.1.2. Suggest three (03) amendments to address the gaps identified above. (15 marks)
- 1.2. You are the Regional Director of Health Services in a district. The Regional Epidemiologist verbally complains to you that a minor staff member has refused to carry out an official duty assigned to him despite several reminders. This has resulted in the disruption of a planned training programme.

Describe the disciplinary procedure that should be taken by you with regard to this insubordination. (35 marks)

Contd..../2-

- 2. The Ministry of Health intends to introduce clinical audits in diabetes clinics in Sri Lanka.
 - 2.1. List five (05) stakeholders that need to be engaged when introducing clinical audits in diabetes clinics in Sri Lanka. (15 marks)
 - 2.2. Describe briefly each stakeholder's role in introducing these clinical audits. (35 marks)
 - 2.3. List three (03) programme indicators that could be used to monitor the implementation of these clinical audits. (15 marks)
 - 2.4. Describe a plan to collect data for one of the above programme indicators. (35 marks)
- 3. Intrauterine contraceptive device is usually not accepted by a large number of women even though it is considered as one of the most effective reversible methods in family planning
 - 3.1. Briefly describe five (05) factors which could lead to this behaviour among women in Sri Lanka. (30 marks)
 - 3.2. Name three (03) models which could explain the adoption of this health behaviour. (15 marks)
 - 3.3. Briefly describe how you would plan a behaviour change communication programme to address this health behaviour among working women. (55 marks)

4.

- 4.1. Write short notes on:
 - 4.1.1. Sustainable Development Goals (SDG) (25 marks)
 - 4.1.2. Emerging environmental health issues due to rapid urbanization. (25 marks)
- 4.2. At present, healthcare workers in the public health sector are being supervised by a wide range of supervising officers at regular intervals. Despite this, there are many concerns about their efficiency.

Discuss the place of supervision in the development of human resources in public health in Sri Lanka. (50 marks)