



FCPHM(SA)

## THE COLLEGES OF MEDICINE OF SOUTH AFRICA

Incorporated Association not for gain  
Reg No 1955/000003/08

Examination for the Fellowship of the  
College of Public Health Medicine of South Africa



24 July 2017

Paper 1

Long Questions

(3 hours)

*Each question to be answered in a separate book (or books if more than one is required for the one answer). Candidates must answer **three** of the following four questions. All the questions carry equal marks. The use of personal hand-held calculators is permitted.*

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- 1 VISION 2020 is a global initiative that aims to eliminate avoidable blindness by the year 2020. South Africa is a signatory to this initiative, and one of our key priorities is to increase the cataract surgery rate. You have been appointed as the Public Health Medicine specialist to a Provincial Department of Health in South Africa. Discuss your approach to reducing blindness by increasing the cataract surgery rate in that province given the resource constraints that the health system is currently facing. [33/1/3]
- 2 Extreme drug-resistant tuberculosis (XDR-TB) poses a major public health threat at international and national level. Prevention of XDR-TB is therefore critical. Discuss the two major ways in which people can acquire XDR-TB and use this as a framework to outline public health medicine strategies to reduce the rise in XDR-TB cases. [33/1/3]
- 3 The World Health Organization (WHO) recommends that life-long ART for all HIV positive pregnant and breastfeeding women regardless of their CD4 count or WHO clinical stage. PMTCT Option B+ should form part of a comprehensive approach to the prevention of mother-to-child transmission of HIV (PMTCT). South Africa has attained MTCT rates below 5% and this is attributed to improved PMTCT coverage. Given South Africa's success, you are appointed as an advisor to assist WHO Africa Regional Office in their efforts to reduce MTCT and in childhood HIV infections in other African countries where PMTCT access remains a significant problem. As part of your brief, prepare a technical document which conceptualizes what a comprehensive approach to PMTCT entails; identifies and critically discusses potential access barriers that should be considered (highlighting both supply-and demand-side barriers), and proposes strategies for overcoming these barriers. [33/1/3]
- 4 The Global status report on road safety 2015, reflecting information from 180 countries, indicates that *'worldwide the total number of road traffic deaths has plateaued at 1.25 million per year, with the highest road traffic fatality rates in low-income countries. In South Africa alone, WHO estimated road traffic fatalities rate 25.1 per 100 000 population, one of the highest in the world.'*
  - a) Critically discuss the current state of road safety in South Africa. (10)
  - b) What measures could be undertaken to prevent road traffic fatalities in South Africa and how the success/failure of these interventions could be measured? (23 1/3)[33/1/3]



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26 July 2017



Paper 3

Short Questions

(3 hours)

*Each question to be answered in a separate book (or books if more than one is required for the one answer). The use of personal hand-held calculators is permitted.*

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- 1 Briefly discuss the different dimensions of the universal health coverage and proposed organisation of the health care system and services under National Health Insurance (NHI) for improvement of primary health services in South Africa. [10]
- 2 You wish to design a cohort study to determine whether lack of physical activity increases the risk of coronary heart disease (CHD). Briefly describe the following aspects of your protocol
  - a) Study population (sampling not needed), the measurement methods for the exposure(s), for the outcome(s) and for two potential confounders.
  - b) For one of the confounders, explain why you think this is a potential confounder. [10]
- 3 Several international organizations advocate for the introduction of tobacco cessation services in respiratory care programmes, including in TB services
  - i) Briefly explain the rationale for this strategy.
  - ii) Name key tobacco cessation interventions that could be considered. [10]
- 4 Obesity and overweight among high school learners in South Africa is a growing problem and result in decreased productivity, increased absenteeism due to ill health, and an increase in the incidence of diabetes, hypertension and other lifestyle related diseases. Effective health promotion interventions to address weight reduction and obesity among high school learners are needed. Discuss how you would use a Health Promotion matrix in implementing your intervention. [10]
- 5 During a Hospital Budget Committee meeting, there was disagreement whether some of the expenditure incurred was unauthorized expenditure, irregular expenditure or fruitless or wasteful expenditure. Explain the differences among these terms and briefly indicate how these expenditures are managed in terms of the Public Finance Management Act (Act 1 of 1999, as amended). [10]
- 6 Poor hand hygiene has been documented as a major problem at primary health care clinics in your district. Describe how you will implement a quality improvement programme using a theoretical framework for quality. [10]

- 7 Discuss the importance of studying health care costs for Public health Medicine specialists. [10]
- 8 Discuss the impact of Section 130 (regulating HIV testing of children) of the Children's Act of South Africa (Act 38, 2005) on health care delivery at a district level. [10]
- 9 You, a Public Health Medicine specialist, were asked to lead a team tasked with developing a plan to expand the availability of school health services in your province (as mandated by the national programme for Re-engineering of Primary Health Care). You have decided to conduct a situational analysis to prepare the plan. Briefly summarise your overall approach and steps for conducting the situational analysis and outline the kinds of information you will gather. [10]
- 10 The Department of Health in your province is preparing to implement the human papilloma virus vaccination programme which entails providing girls in Grade 4, two doses of HPV vaccine 6-months apart. The Directors for maternal and child health and for M&E ask you to advise them on how to set up a system for monitoring and evaluating the HPV programme. List the steps they should follow in setting up and implementing the M&E, outlining issues to consider at each step – illustrate with examples. [10]