

POSTGRADUATE INSTITUTE OF MEDICINE
UNIVERSITY OF COLOMBO

MD (MEDICAL ADMINISTRATION) PART II EXAMINATION
AUGUST 2022

Date:- 23rd August 2022

Time:- 9.00 a.m. – 12.00 noon

Answer **all four (04)** questions.

Answer each question in a separate book.

PART A – PAPER I

1. The Institute of Medicine (IOM) in 1990 defined quality as 'the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge'.
Some scholars argue that this definition only addresses technical aspects of quality and not the other aspects.
Critique the scholars' argument. (50 marks)

2. You are the director of a Teaching Hospital. Recently it was brought to your notice that the waiting list for Cardiac Bypass surgery (CABG) in your hospital is longer than three years. This is partially due to the fact that the recent COVID-19 epidemic in the country had limited the number of surgical procedures that could be performed. It has also been brought to your attention that the data on waiting list is not regularly updated. The number of cardiothoracic surgeons available is adequate and there is no deficit in other human resources. Two dedicated operating theaters with four operation tables are also available.
 - 2.1. List and briefly describe the **strategies** you may use to improve this situation. (20 marks)
 - 2.2. Discuss the **process** by which you as the director suggest to improve the situation with respect to cardiac bypass surgery in your hospital based on the strategies listed by you above. (30 marks)

3. The Deputy Director General (Biomedical Engineering Services) has highlighted the fact that medical equipment is a widely mismanaged resource in the country. You have been requested by the Director General of Health Services to suggest measures to improve the management of medical equipment.

Discuss the measures you would recommend to improve management of medical equipment in each stage of the health care technology management cycle. (50 marks)

4. It has been published in the media that following the recent economic crisis and for many other reasons, vital and essential drugs are out of stock at the Medical Supply Division (MSD). It has also been reported that many well-wishers wish to donate drugs to the Ministry of Health.

4.1. How would you verify whether there is an actual shortage of drugs in the country? (10 marks)

4.2. List and briefly describe the criteria you would use to decide upon the acceptance or rejection of proposed donations of drugs to the country. (15 marks)

4.3. Discuss the strategies you would propose to improve availability of drugs in the short term (one year) and in the medium term (three years). (25 marks)

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MD (MEDICAL ADMINISTRATION) PART II EXAMINATION
AUGUST 2022

Date:- 24th August 2022

Time:- 9.00 a.m. – 12.00 noon

Answer **all ten (10)** questions.

Answer each question in a separate book.

PART A – PAPER II
(SHORT ANSWER QUESTIONS)

1. A 30-year-old patient who was on warfarin prescribed at the medical clinic of a district general hospital for a previous mitral valve surgery was admitted to a ward in the same hospital for a minor illness. Warfarin was not prescribed for the patient during the stay in the ward. Subsequently, the patient had a stroke and passed away during the same admission.
 - 1.1. As the Director of the hospital, what measures will you take to investigate this incident? (10 marks)
 - 1.2. Briefly describe how you would prevent such incidents from recurring. (10 marks)
2. The following is an extract of the report of an efficacy trial of a vaccine widely used for the prevention of COVID-19 infection:

“....13,765 persons were given the vaccine compared with 13,765 persons who were given placebo. 21 cases of COVID-19 infection were observed among those who received the vaccine, and 95 cases of COVID-19 infection were observed among those who received placebo.....”

From the information given above, answer the following questions:

 - 2.1. Represent the data given above in a 2 x 2 contingency table. (04 marks)

Based on the table constructed above, calculate the following and give the interpretation of each of them:

 - 2.2. Odds ratio. (04 marks)
 - 2.3. Crude vaccine efficacy rate. (04 marks)
 - 2.4. Based on the above, write a note on the criteria which you would use to recommend the inclusion of a vaccine which could be deployed in the fight against COVID-19 infection in the country. (08 marks)

3.

3.1. Critique the statement “antimicrobial resistance is a global health threat”
(10marks)

3.2. The National Action Plan for combating antimicrobial resistance was launched in 2017 by the Ministry of Health. Antimicrobial stewardship was one of the objectives of the plan.

As the Director of a teaching hospital, what actions would you propose to establish an antimicrobial stewardship programme in your hospital?
(10 marks)

4. As the Director of a District General Hospital, it was reported to you that there is an undue delay in updating personal files and other related activities in the human resource department. It was also reported that there are differences in performance level among the subject clerks.

4.1. List and briefly describe the possible reasons for the above issues. (08 marks)

4.2. Briefly discuss how you would plan to solve the above issues. (12 marks)

5.

5.1. List and briefly describe the possible effects of the current economic crisis on health and healthcare delivery in Sri Lanka. (08 marks)

5.2. Discuss the possible solutions for the above. (12 marks)

6. You have been appointed as a member of a team to evaluate the National Programme for Tuberculosis Control & Chest Diseases.

6.1. Outline the main aspects you would take into consideration in designing the above evaluation. (08 marks)

6.2. Briefly describe the evaluation methods you will use. (07 marks)

6.3. List Five (05) indicators you will use to evaluate different aspects of the programme. (05 marks)

7. There has been an increase in the incidence of Healthcare Associated Infections (HAI) in your district general hospital.

7.1. As the Director of this hospital, discuss the strategies you will initiate to overcome this problem. (12 marks)

7.2. List and briefly describe the output and outcome indicators you would use to monitor and evaluate these strategies. (08 marks)

8. You wish to publish an article based on the study which you have recently completed as part of your MD course. You have good reason to believe your article will be accepted because the subject is a very important and topical issue currently in the world. You have enough evidence to show that the intervention you have implemented in your study could be applied widely.

Usually, an abstract of only 250 words without any figures needs to be sent for a decision on article acceptance.

- 8.1. How will you select a journal to submit this article? (05 marks)

- 8.2. How would you plan your abstract? (15 marks)

9.

- 9.1. Distinguish between the terms "medical travelling" and "medical tourism". (05 marks)

- 9.2. A private hospital wishes to promote medical travelling and medical tourism. As an administrator of this hospital, how would you apply environmental and industry analysis (analysis of competitive forces) to assist the hospital in promoting medical travelling and medical tourism. (15 marks)

10. You are the Director of the Medical Supplies Division (MSD). Antivenom Serum is an essential lifesaving drug and it is out of stock at MSD for the past 2 weeks. The death of a child has been recently reported to have been caused directly by the non-availability of this item. Also, it has been reported to you that supply of antivenom serum is not assured for the next two months.

In this situation, a donor immediately agrees to supply antivenom serum for the next two months and you agree to receive the drug.

Antivenom serum reaches the MSD from the port as a "non-cool" item. The temperature in the supply box was reported being 37°C at the time of arrival of the item. The donor assures you that it was imported maintaining the cold chain. But there were no data logs to confirm maintenance of the cold chain.

- 10.1. Will you order for the drug to be distributed to hospitals? Justify your answer. (10 marks)
- 10.2. Briefly describe other actions you would take to ensure safety and efficacy of the donated antivenom serum. (10 marks)