

**POSTGRADUATE INSTITUTE OF MEDICINE**  
**UNIVERSITY OF COLOMBO**

**MSc (MEDICAL ADMINISTRATION) EXAMINATION – JULY 2017**

**Date :-** 17<sup>th</sup> July 2017

**Time :-** 1.00 p.m. – 4.00 p.m.

**SECTION A**

**PAPER I**

Answer **all five** questions.

Answer **each** question in a separate book.

1.
  - 1.1. What is a “Project” and what are the attributes of a project?  
Discuss about project stakeholders, triple constraints of a project. (20 marks)
  - 1.2. Briefly discuss about the project management tools. (10 marks)
2.
  - 2.1. Define the term “Operations Management”. (05 marks)
  - 2.2. Discuss the eight (08) key issues of Operations Management in the current context. (25 marks)
3.
  - 3.1. What do you mean by “Job Analysis”? (05 marks)
  - 3.2. What are the methods for collecting job analysis information? (10 marks)
  - 3.3. Describe the importance of job description and job specification in managing health care institutions. (15 marks)

4.
  - 4.1. What do you understand by “Health Planning” (05 marks)
  - 4.2. Briefly describe the steps in developing a district health plan. (10 marks)
  - 4.3. Describe three (03) tools you may use for situation analysis. (15 marks)
  
5.
  - 5.1. List four (04) properties of a “Normal Curve”. (04 marks)
  - 5.2. The heights of a large population of men follow a normal distribution with a mean of 172 cm and a standard deviation of 6.5 cm. In this population, what height is exceeded by 2.3%? (16 marks)
  - 5.3. Indicate the scale of measurement for the following variables; Weight, Race, Time, Age, Height. (10 marks)

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**SECTION A**

**PAPER II**

Answer **all fifteen (15)** questions.

Answer **each** question in a separate book.

1. Briefly describe the sources of demographic data. (10 marks)
2. Write short notes on
  - 2.1. Opportunity cost (05 marks)
  - 2.2. National Health Accounts (05 marks)
3.
  - 3.1. List the information submitted by the Master of ship to the Port Health Medical Officer. (05 marks)
  - 3.2. List the focal points functioning at a sea port for detecting zoonotic, food borne, chemical and radio-nuclear hazards. (05 marks)
4. Briefly explain the concept of “Emotional Intelligence”. (10 marks)
5. Write short notes on –
  - 5.1. Abraham Maslow’s hierarchy of needs theory. (05 marks)
  - 5.2. Herzberg’s theory of motivation. (05 marks)

6. Explain briefly qualitative data collection techniques (10 marks)
7. What do you mean by validity and reliability of health system research? (10 marks)
8. List the steps in constraint analysis. (10 marks)
9.
  - 9.1. List the types of policies based on the scope and level of policies. (05 marks)
  - 9.2. What are the policy instruments? (05 marks)
10. What are the key dimensions in health research ethics? (10 marks)
11. Write short notes on Situational Leadership. (10 marks)
12. Explain briefly sensitivity and specificity of a screening test. (10 marks)
13. Describe the "Epidemiological triad". (10 marks)
14. Different characteristics of formal and informal organizations. (10 marks)
15. List and briefly explain the types of cost centres in step down cost accounting. (10 marks)

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**SECTION B**

**PAPER I**

Answer **all five** questions.

Answer **each** question in a separate book.

1. Consider the following information

<b>Programme</b>	<b>Cost of programme(Rs)</b>	<b>Life years gained</b>	<b>Benefit from life years gained (Rs)</b>
Programme A	200,000	250	400,000
Programme B	300,000	300	400,000
Programme C	300,000	400	450,000
Programme D	250,000	200	200,000

- 1.1. Calculate the average cost effectiveness ratio for each programme and choose the best programme. (08 marks)
- 1.2. Calculate the incremental cost effectiveness ratio for the best two programmes chosen using the above criteria. (08 marks)
- 1.3. What other information would you need to make a decision on whether to implement one of these programmes? (07 marks)
- 1.4. Using Cost Benefit analysis, choose the best programme. (07 marks)

2. As a Regional Director of Health Services of a District which has a developing industrial zone, you are requested to plan a comprehensive project to address lifestyle issues to prevent chronic non communicable diseases.
  - 2.1. Outline the components of the project proposal to be submitted to the Provincial Director of Health Services. (10 marks)
  - 2.2. Describe how you would monitor the implementation of the proposed project. (20 marks)
  
3. Age of admission to paediatric wards in government hospitals had been extended to 14 years according to the policy decision taken by the Ministry of Health. Assuming you are the Medical Superintendent of a District General Hospital:
  - 3.1. List the challenges you may encounter in implementing this decision. (10 marks)
  - 3.2. Discuss how will you overcome those challenges? (20 marks)
  
4.
  - 4.1. Briefly explain the different models of managerial decision making. (15 marks)
  - 4.2. Under what circumstances could a hospital administrator use these models to make effective decisions? (15 marks)
  
5. As the medical administrator of a District General Hospital you have observed sudden increase of suspected dengue patients during last two weeks.
  - 5.1. Discuss how you will ensure that laboratory reports are made available promptly to OPD patients. (15 marks)
  - 5.2. Describe the actions you would take to face the problem of sudden increase of inward patients with dengue? (10 marks)
  - 5.3. List the measures you will take as a hospital administrator in prevention of transmission of dengue within the hospital? (05 marks)

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**SECTION B**

**PAPER II**

Answer **all fifteen (15)** questions.

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1. Assuming you are the medical superintendent of a base hospital and you decide to initiate a Quality Assurance Programme in your hospital.  
Outline the steps you would take to monitor this programme. (10 marks)
2. You are the director of the District General Hospital and you intend to make this hospital “a health promoting hospital”.  
Outline the steps you would take to establish this programme with the support of relevant stake holders. (10 marks)
3. Ministry of Health requires performing test checks on pharmaceuticals at all hospitals, outline the steps you would take to undertake this activity in medical wards with the assistance of your chief pharmacist. (10 marks)
4. Healthy lifestyle centres (HLC) were established 5 years ago to screen people for selected NCDs. But it is observed that they are not fully functional.  
Outline as the Regional Director of Health Services how would you make these HLC functional. (10 marks)
5. It was observed service quality offered by the nursing staff is not satisfactory at District General Hospital X.  
Outline the steps you would take to do training needs assessment. (10 marks)
6. The ministry of health has provided Rs 6.0 million allocation to construct a new incinerator in a District General Hospital in the beginning of the year. This hospital has 600 beds and land area of 30 acres and a team of MO/ Public health and one Infection control nurse. At present, all the infectious wastes are burnt in open environment.  
Assuming that you are the director of this hospital outline the activities you would take to implement this activity. (10 marks)

7. You find that several health care assistants in your hospital were under the influence of alcohol while on duty. As a medical administrator what actions would you take in this situation? (10 marks)
8. Briefly discuss what measures you would take as a Regional Director of Health Services to prevent incidence of rabies in your district. (10 marks)
9. Several cases of infection and some maternal deaths were reported from your labour room. As a medical superintendent of this hospital outline the steps you would take to rectify this situation. (10 marks)
10. As the Director of a Teaching Hospital you found that several categories of medical equipment were not functional in surgical and medical intensive care units. List five (05) possible causes and outline the measures you would take to rectify this situation. (10 marks)
11. Fifty employees in a garment factory were brought to the hospital after an episode of food poisoning at 5.00 p.m. Outline how would you handle this situation. (10 marks)
12. As a medical superintendent of a Base Hospital you noticed that there are conflicting situation between midwives and nurses in your hospital. The midwives demanded that they should have a separate attendance register to sign. But your matron emphasized that they should work under her supervision and this procedure is not acceptable. What course of action would you take to solve this conflict? (10 marks)
13. You found that 30% of your patients coming to the OPD Clinic are over 60 senior citizens. There were several complaints regarding delay in providing OPD care. What aspects would you consider in rectifying this situation? (10 marks)
14. You are going to establish electronic health record system in the OPD of your hospital as directed by the Ministry of Health. What steps would you take to overcome any barriers in this situation using concepts of change management? (10 marks)
15. It is found that obesity of among school children is high in your RDHS area and there are processed food and beverages freely available in the market. Briefly outline the actions you will take to formulate a nutritional intervention programme to overcome this situation. (10 marks)