

International Institute of Health Management Research, Delhi

Subject: Essentials of Health Economics

Class: First Year

Session: March 2017

Total Marks: 70

Time: 3Hrs

Please attempt any 7 questions out of 10. Each question carries 10 marks.

Q. 1 Write short notes on the following:

- (a) Key problems in the context of health and medical care**
- (b) Key choices in the context of health and medical care**

Q. 2 Write short notes on the following:

- (a) Graphical illustration of Total Product, Average Product and Marginal Product in the context of health production function**
- (b) Rate of technical substitution vs. Return to Scale**

Q. 3 Fill-in the blanks for the following:

- (a) Medical care is an input in producing health subject to _____**
- (b) Health yields utility to consumers subject to _____**
- (c) Total health expenditure as a % of GDP in India (2013-14) is _____**
- (d) Total government health expenditure as a % of GDP in India (2013-14) is _____**
- (e) Per Capital health expenditure in India (2013-14) is _____**

Q. 4 Provide brief answers to the following questions:

- (a) What is economic evaluation?**
- (b) When is economic evaluation of health interventions effective?**

(c) What are the basic tasks/processes in conducting an economic evaluation?

(d) What are the various uses of economic evaluation?

Q. 5 Graphically illustrate the following concepts:

(a) Health Economics ‘map’

(b) Supplier-induced demand

Q. 6 Provide a comparison of the following concepts:

(a) Outcome Description vs. Cost Analysis

(b) Cost-effectiveness Analysis (CEA) vs. Cost-utility Analysis (CUA)

Q. 7 How can we make choices regarding alternative public health interventions? Illustrate through Economic Quadrants.

Q. 8 Why health care markets “fail”? Illustrate with suitable examples.

Q. 9 The following table provides data on Costs, Outcomes and Ratio of Costs to Outcomes for alternative diagnostic strategies for 516 patients with clinically suspected deep-vein thrombosis.

| Programme | Costs (\$ US) | Outcomes (No. of correct diagnoses) | Ratio of costs to outcome (\$ per correct diagnosis) |
|--|---------------|-------------------------------------|--|
| 1. IPG alone | 321488 | 142 | 2264 |
| 2, IPG plus out-patient venography if IPG negative | 603552 | 201 | 3003 |

(a) Calculate the ICER of Programme 2 over Programme 1

(b) Depict graphically the Average and Incremental Cost-effectiveness ratios.

Q. 10 Conduct a break-even analysis and illustrate your results graphically, on the basis of the following data on Wine Bottler

| |
|---|
| Sales price per bottle: US \$ 12.50 |
| Variable costs per bottle: Wine bought at US \$ 600 per barrel; each barrel yields 150 bottles (4 \$ per bottle) Bottle and label: US \$ 1.20 Cork: US \$ 0.30 |
| Fixed cost per month: Labour: US \$ 2500 Rent equipment and facilities: US \$ 1000 |