

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 Define the following concepts:

- (a) Opportunity cost**
- (b) Production Isoquants**
- (c) Engle curve**
- (d) Income elasticity of demand**
- (e) Incremental cost-effectiveness ratio**

Q. 2 Write short notes on the following:

- (a) Cost allocation techniques**
- (b) Supplier-induced demand**

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

Indicators	NHA India 2004-05	NHA India 2013-14
Total health expenditure as a % of GDP		
Total government health expenditure as a % of total health expenditure		
Out-of-pocket health expenditure as a % of total health expenditure		

Q. 4 Display the following economic concepts through graphs:

- (a) Consumer Surplus and Producer Surplus**
- (b) Effects of health insurance on demand**

Q. 5 Provide a comparison of the following concepts:

- (a) Cost-Outcome Description vs. Efficacy/Effectiveness Evaluation**
- (b) Cost-effectiveness Analysis (CEA) vs. Cost-benefit Analysis (CBA)**

Q. 6 Why health care markets “fail”? Illustrate with suitable examples.

Q. 7 Discuss the check-list for assessing economic evaluation.

Q. 8 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 venograpgy 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. 9 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

Q. 10 Calculate the average fixed costs, average variable costs, average total costs and marginal costs on the basis of the following data:

IUD insertion
Assume doctor is paid 350 dollar per day
Assume IUD costs 15 dollar
Assume related materials and supplies cost 10 dollar
Assume overhead of 130 dollar per day
Data on IUD insertion per day for 5 days: 9, 10, 11, 12, 13