

## Problem Statement

### Part 1: Case Scenario

Suppose a hospital is in need of funds to build a new physical infrastructure for a department that will be functional within six months. The hospital's management team has decided to apply for a loan from a commercial bank. One of the banks is willing to provide a loan at an interest rate of 12% for a fixed period of 2 years and would require a collateral of up to ₹6 lakh. Another bank is willing to provide a short-term loan for 7 months at an interest rate of 15% without any collateral.

You are required to prepare an estimate of the hospital's working capital requirement from the following information, as requested by the banks.

The hospital would like to maintain a contingency balance of 15% of the operating working capital.

The projected annual billing of the hospital is 10,000 patients at an average billing of ₹1,500 per patient. The net profit margin on revenue is 5%. The cost of sales is 70% of the total expenses. The hospital is required to maintain a cash balance of ₹4,00,000. The hospital allows the customers/patients an average credit period of 25 days to settle all the pending payments. The hospital's management has negotiated an average credit period of 27 days with its suppliers.

The average inventory holding period in terms of revenue requirement is 90 days.

### Question 1

Calculate the working capital cycle of the hospital. (02 marks)

### Question 2

Calculate the total working capital required by the hospital. The answer should clearly specify what is given and what is derived and by using which formula. The decimal value can be ignored for ease of calculation. (10 marks)

### Question 3

Which source of funding should be chosen by the hospital? Provide reasons to support your answer. (02 marks)

### Question 4

If the hospital decides to look for other sources of funding and the management has adopted a hedge approach, which type of funds will meet the capital requirements of the hospital? (02 marks)

Question 5

What can be inferred about the working capital management of the hospital? Highlight at least two areas of concern and the reasons for the concern. (04 marks)

Part II: Case Scenario

Suppose you are a manager at Hospital XYZ. The hospital is considering setting up a small hospital in a city and has two proposals for the same. Given the capital constraints, the hospital can go ahead with only one of the proposals. The details of the proposals are given below.

Proposal	Proposal Details	Required Initial Investment / Cash Outflow (in ₹)	Cost of Capital
Proposal 1	The hospital acquires an existing (operational) hospital	1,00,00,000	9%
Proposal 2	The hospital sets up a new facility on its own	1,50,00,000	9%

The expected cash inflows from the hospitals are as follows.

Year	Expected Cash Inflow for Proposal 1 (in ₹)	Expected Cash Inflow for Proposal 2 (in ₹)
Year 1	10,00,000	5,00,000
Year 2	12,00,000	9,00,000
Year 3	14,00,000	13,00,000
Year 4	16,00,000	17,50,000
Year 5	18,00,000	23,50,000
Year 6	19,00,000	29,75,000
Year 7	20,00,000	36,25,000
Year 8	21,00,000	43,25,000
Year 9	22,00,000	48,25,000
Year 10	23,00,000	52,75,000

On the basis of the above-mentioned information, answer the following questions:

## Question 6

Calculate the net present value (NPV) for proposal 1 and proposal 2. The answer should clearly specify what is given and what is derived and by using which formula. (12 marks)

## Question 7

Using the net present value technique, which of the proposals will you choose from the given options? Justify your answer. (08 marks)

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