

# MANAGEMENT ACCOUNTING UNIT-2 CHP 2

SEMESTER V - T.Y.B.COM (H) – NEP

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4 Faculty of Commerce, The Maharaja Sayajirao University of Baroda

Management Accounting

## Unit-II Chapter -2 Service Costing in Hotel and Healthcare

*Note: The study material is not exhaustive. These are only guidelines; students are requested to refer the reference books.*

### INTRODUCTION

Within just five decades of independence, India's service sector has emerged as a major driver of economic growth, contributing around 60% to the nation's GDP. In this rapidly evolving, service-oriented economy, the scope of cost accounting has expanded significantly—extending well beyond its traditional focus on manufacturing. A key area within this evolution is Service Costing, also known as Operating Costing, which is particularly relevant to industries that provide intangible services rather than tangible goods.

Service costing involves calculating the total operational cost incurred per unit of service rendered. These services may be internal—supporting manufacturing processes—or external, delivered directly to customers as the core offering of service-based organizations. Examples of such service-based organizations include banks, insurance companies, healthcare institutions, educational institutions, consulting firms, hotels, and transportation providers.

To compute service costs, one must first determine the unit for which the cost will be calculated. This can be challenging because a single, realistic cost unit may not be suitable. Therefore, a composite cost unit is often used, which is a better measure of the service provided. For example, hotels use "occupied room days" as a unit to determine and control costs. Similarly, transport services may use 'passenger-km,' hospitals use 'patient per day,' and educational institutes use 'cost per student' as cost units.

However, the application of service costing in the transport sector was covered in Semester IV. This chapter focuses on its application in the hotel and healthcare sectors, highlighting their distinct cost structures and cost control strategies.

### HOTEL SECTOR

Service costing serves as a vital tool for the hotel industry, which operates on a commercial basis. Accurate cost computation is essential not only for determining appropriate pricing of the various services offered but also for assessing the profitability of operations over a given period.

In the context of hotels, costs are classified based on the range of services provided, and a cost per unit is calculated accordingly. Commonly used cost units in this sector include Guest-Day or Room-Day. To determine the cost per guest-day or room-day, estimated occupancy rates—which vary by season (such as peak and lean periods)—are factored into the costing process. This approach ensures realistic cost estimation and helps in effective pricing and profitability analysis.



The proforma Operating Cost Sheet of a Hotel Firm is given below:

Hotel Operating Cost Sheet for the Month .....

No. of Room Days: xxx

Particulars of Expenditure	Amount (₹)
<b>Costs:</b>	
Staff salaries	xxx
Attendant wages	xxx
Repairs and renovation	xxx
Lighting and Heating	xxx
Power	xxx
Linen	xxx
Interior decoration	xxx
Sundries	xxx
<b>Depreciation:</b>	
- Buildings	xxx
- Furniture and fixtures	xxx
- Air-conditioners	xxx
Interest on Investment	xxx
Premises rent	xxx
Other administration expenses	xxx
<b>Total Operating Cost</b>	<b>xxx</b>
Add: Margin of Profit	xxx
<b>Total Sales / Revenue Required/ Takings</b>	<b>xxx</b>

### Example 1

A hotel has a capacity of 100 single rooms and 20 double rooms. The average occupancy of both single and double rooms is expected to be 80% throughout the year of 365 days. The rent for double room has been fixed at 125% of the rent of a single room. The costs are as under:

Variable costs Single rooms ₹ 220 each per day Double rooms ₹ 350 each per day

Fixed costs Single rooms ₹ 120 each per day Double rooms ₹ 250 each per day

Calculate the rent chargeable for single and double rooms per day in such a way that the hotel earns a margin of safety of 20% on hire of rooms.

### Example 2

XYZ Ltd runs a holiday home. For this purpose, it has hired a building at a rent of ₹ 10,000 per month along with 5% of total taking. It has three types of suites for its customers, viz., single room, double rooms and triple rooms.

Following information is available:

Type of Suite	Number	Percentage of Occupancy
Single Room	100	100%
Double Rooms	50	80%
Triple Rooms	30	60%



The rent of double rooms suite is to be fixed at 2.5 times of the single room suite and that of triple rooms suite as twice of the double rooms suite.

Particulars	₹
Staff salaries	14,25,000
Room attendants' wages	4,50,000
Lighting, heating and power	2,15,000
Repairs and renovation	1,23,500
Laundry charges	80,500
Interior decoration	74,000
Sundries	1,53,000

Provide profit @ 20% on total taking and assume 360 days in a year.

Calculate the rent to be charged for each type of suite.

### Example 3

A lodging home is being run in a small hill station with 50 single rooms. The home offers concessional rates during six off- season months in a year. During this period, half of the full room rent is charged. The management's profit margin is targeted at 20% of the room rent. The following are the cost estimates and other details for the year ending on 31st March 2022. [Assume a month to be of 30 days].

- Occupancy during the season is 80% while in the off- season it is 40% only.
- Expenses:
  - Staff salary [Excluding room attendants] Rs. 2,75,000
  - Repairs to building Rs. 1,30,500
  - Laundry and linen: Rs. 40,000
  - Interior and tapestry: Rs. 87,500
  - Sundry expenses: Rs. 95,400
- Annual depreciation is to be provided for buildings @ 5% and on furniture and equipments @ 15% on straight-line basis.
- Room attendants are paid Rs.5 per room day on the basis of occupancy of the rooms in a month.
- Monthly lighting charges are Rs.120 per room, except in four months in winter when it is Rs.30 per room and this cost is on the basis of full occupancy for a month.
- Total investment in the home is Rs.100 lakhs of which Rs.80 lakhs relate to buildings and balance for furniture and equipments.

You are required to work out the room rent chargeable per day both during the season and the off-season months on the basis of the foregoing information.



## HOSPITALS

Hospitals offer a wide range of medical and support services to patients, and hospital costing is applied to determine the cost associated with delivering these services. Since hospitals operate through various specialized departments, each with different functions and resources, costing must be done department-wise to ensure accuracy and effective cost control.

### Key Departments and Services

Some of the typical departments and services in a hospital include:

- Outpatient Services
- Inpatient Services (Admitted Patients)
- Medical Diagnostic Services – e.g., X-rays, CT scans, MRIs
- General Support Services – e.g., Catering, Laundry, Power Supply
- Miscellaneous Services – e.g., Patient Transport, Pharmacy

### Units of Cost

Cost units vary depending on the nature of the service provided. Common examples include:

- Outpatient Services – *Per Outpatient*
- Inpatient Services – *Per Room Day* or *Per Bed Day*
- Diagnostic Services (e.g., Scanning) – *Per Case*
- Laundry Services – *Per 100 Items Laundered*

### Segregation of Costs

Hospital costs can be broadly classified into two categories:

- Fixed Costs – These remain constant over time and do not vary with the volume of services rendered. Examples include staff salaries, building and equipment depreciation, and administrative overheads.
- Variable Costs – These fluctuate with the level of services provided. Examples include laundry expenses, cost of food for patients, and utility charges (power, water, etc.).

Understanding and applying service costing in hospitals is essential for effective resource allocation, pricing of services, budgeting, and performance evaluation across departments.

The proforma Operating Cost Sheet of a Hospital Firm is given below:

Hospital Operating Cost Statement for the month .....

No. of Patient days: xxx

Particulars of Expenditure	Amount (₹)
<b>Fixed Costs:</b>	
Salaries to staff	xxx
Premises rent	xxx
Repairs and maintenance	xxx
General administration expenses	xxx
Cost of oxygen, x-ray etc.	xxx
Depreciation	xxx
(a)	xxx



Particulars of Expenditure	Amount (₹)
<b>Variable Costs:</b>	
Doctor's fees	xxx
Food	xxx
Medicines	xxx
Diagnostic services	xxx
Laundry	xxx
Hire charges for extra beds	xxx
	(b) xxx
<b>(i) Total Operating Cost</b>	(a) + (b) XXX
<b>Add: Desired Profit Margin</b>	XXX
<b>Revenue Required / Fees to be Charged</b>	XXX

#### Example 4

Zenith Hospital runs a Critical Care Unit (CCU) in a hired building. CCU consists of 35 beds and 5 more beds can be added, if required.

Rent per month: Rs.75,000

Supervisors - 2 persons @ Rs.25,000 per month each

Nurses - 4 persons @ Rs.20,000 per month each

Ward Boys - 4 persons @ Rs.5,000 per month each

Doctors were paid Rs.2,50,000 per month on the basis of number of patients attended and the time spent by them.

**Other expenses for the year are as follows:**

- Repairs (fixed) – Rs.81,000
- Food to patients (variable) – Rs.8,80,000
- Other services to patients (variable) – Rs.3,00,000
- Laundry charges (variable) – Rs.6,00,000
- Medicines (variable) – Rs.7,50,000
- Other fixed expenses – Rs.10,80,000
- Administration expenses allocated – Rs.10,00,000

It was estimated that for 150 days in a year, 35 beds are occupied and 25 beds are occupied for 80 days only.

The hospital hired 750 beds at a charge of Rs.100 per bed per day to accommodate the flow of patients. However, this does not exceed more than 5 extra beds over and above the normal capacity of 35 beds on any day.

**You are required to –**

- Calculate profit per Patient day, if the hospital recovers on an average Rs.2,000 per day from each patient.
- Find out Break-even point for the hospital.



### Example 5

Public Health Centre runs an Intensive medical care unit. For this purpose, it has hired a building at a rent of ₹ 5,000 per month with the understanding that it would bear the repairs and maintenance charges also. The unit consists of 25 beds and 5 more beds can be comfortably accommodated when the occasion demands. The permanent staff attached to the unit is as follows:

2 supervisors, each at a salary of ₹ 500 per month; 2 nurses, each at a salary of ₹ 300 per month and 2 ward boys, each at a salary of ₹ 150 per month.

Though the unit was open for the patients all the 365 days in a year, scrutiny of accounts in 2016 revealed that only for 120 days in the year, the unit had the full capacity of 25 patients per day and for another 80 days, it had on an average 20 beds only occupied per day. But there were occasions when the beds were full, extra beds were hired at a charge of ₹ 5 per bed per day and this did not come to more than 5 beds extra above the normal capacity on any one day. The total hire charges for the extra beds incurred for the whole year amount to ₹ 2,000. The unit engaged expert doctors from outside to attend on the patients and the fees were paid on the basis of the number of patients attended and time spent by them and on an average worked out to ₹ 10,000 per month in 2016. The other expenses for the year were as under:

Particulars	(₹)
Repairs and maintenance	3,600
Food supplied to patients	44,000
Janitor and other services for them	12,500
Laundry charges for their bed linen	28,000
Medicines supplied	35,000
Cost of oxygen, x-ray etc., other than directly borne for treatment of patients	54,000
General administration charges allocated to the unit	49,550

Required:

- If the unit recovered an overall amount of ₹ 100 per day on an average from each patient, what is the profit per patient day made by the unit in 2016.
- The unit wants to work on a budget for 2017, but the number of patients requiring intensive medical care is a very uncertain factor. Assuming that same revenue and expenses prevail in 2016, in the first instance, workout the number of patient days required by the unit to break even.