

COSTING OF SERVICE SECTOR

1. The management of Park Hotel has prepared the budget, which shows the following room occupancy :

	<u>Average %</u>
January-March	45
April-June	60
July-September	90
October-December	55

Revenue for the year is estimated to be ` 30,00,000 and arises from three profit centers :

Accommodation	45 %
Restaurant	35 %
Bar	<u>20 %</u>
Total	<u>100%</u>

The accommodation revenue is earned from several different categories of guest, each of which pays a different rate per room. The three profit centers have the following percentage gross margins :

	<u>Accommodation</u>		<u>Restaurant</u>		<u>Bar</u>	
	%	%	%	%	%	%
Revenue		100		100		100
Wages	20		30		15	
Cost of Sales	--		40		50	
Direct costs	<u>10</u>	<u>30</u>	<u>10</u>	<u>80</u>	<u>5</u>	<u>70</u>
		<u>70</u>		<u>20</u>		<u>30</u>

Fixed costs for the year are estimated to be ` 5,65,000. Capital Employed is ` 70,00,000. To improve the Return on Capital Employed (ROCE) two suggestions have been made :

i) to offer special two-night holidays at a reduced price of ` 25 per night. It is expected that those accepting the offer would spend an amount equal to 40% of the accommodation charge in the restaurant, and 20% in the bar. The gross margin percentages for the three profit centers would remain same as above.

ii) to increase prices. Management is confident that there will be no drop in volume of sales if restaurant prices are increased by 10% and bar prices by 5%. Accommodation prices would also need to be increased.

1. calculate the budgeted return on capital employed before tax ; and

2. calculate;

i) how many two-night holidays would need to be sold each week in the three off-peak quarters to improve the return on capital employed by a further 4% above the percentage calculated in a) above.

ii) by what percentage the prices of accommodation would need to be increased to achieve the desired increase in ROCE shown in b) i) above.

2. Mr. Philips owns a gift shop, a restaurant and a lodge in Shimla. Typically he operates these only during the season period of four months in a year. For the past season the occupancy rate in the lodge was 90% and level of activity in case of gift – shop and restaurant at 80%. The relevant data for the past season were as under:

	Gift shop		Restaurant		Lodge	
	Amt.	%	Amt	%	Amt.	%
Receipts/ sales	48,000	100	64,000	100	1,80,000	100
Expenditure:						
Cost of sales	26,400	55	35,200	55	--	---
Supplies	2,400	5	6,400	10	14,400	8
Insurance & taxes	1,920	4	6,400	10	36,000	20
Depreciation	2,880	6	8,000	12 ½	39,600	22
Salaries	4,800	10	4,800	7 ½	25,200	14
Electricity charges	960	2	3,200	5	13,500	7 ½
	<u>39,360</u>	<u>82</u>	<u>64,000</u>	<u>100</u>	<u>1,28,700</u>	<u>71 ½</u>
Profit	8,640	18	---	-	51,300	28 ½

Additional information:

(a) Cost of sales and supplies vary directly with the occupancy rate in case of lodge and level of activity in case of gift shop and restaurant.

(b) Insurances and Taxes and depreciation are for the entire of twelve months.

(c) Salaries paid are for the season period except a Chowkidar for the lodge who is paid for the full year at ` 400 per month.

(d) Electricity charges include fixed charges of ` 640, ` 1,920 and ` 9,900 for gift – shop, restaurant and lodge respectively. The balance amount varies directly with occupancy rate in case of lodge and level of activity in case of gift – shop and restaurant. Fixed electric charges are for the season except in case of lodge where ` 6,900 is for the season and ` 3,000 for the entire period of twelve months.

Mr. Philips is interested in increasing his net income. The following two options are under his considerations:

(a) To continue the operations during the season period only by inserting advertisement in newspapers thereby occupancy rate to reach 100% in case of lodge and 90% level of activity in respect of gift shop and restaurant. The costs of advertisement are estimated at ` 12,000.

(b) To continue operations throughout the entire period of twelve months comprising season period of four months and off – season period of eight months. The occupancy rate is expected at 90% and 40% during season period and off – season period respectively in case of the lodge. The room rents are bound to be reduced to 50% of the original rates during off season period. The level of activity of gift-shop and restaurant is expected at 80% and 30% during season and off – season period respectively but 5% discount on the original rates will have to be offered during off – season period.

Which option is profitable? As a Chartered Accountant would you like to suggest him any other alternative based upon the above figures, which can adopted to earn more net profit? (use incremental revenue and cost approach).

3. A city health centre provides health and other related services to the citizens who are covered under insurance plan. The health centre receives a payment from the insurance company each time any patient attends the centre for consultation as under:

Consultations involving

Payment from Insurance company

No treatment	60
Minor treatment	250
Major treatment	500

In addition, the adult patients will have to make a co-payment which is equivalent to the amount of payment for the respective category of treatment made by the insurance company. However, children and senior citizens are not required to make any such copayment.

The health centre will remain open for 6 days in a week for 52 weeks in a year. Each physician treated 20 patients per day although the maximum number of patients that could have been treated by a physician on any working day is 24 patients.

The health centre received a fixed income of ` 2,25,280 per annum for promotion of health products from the manufacturers.

The annual expenditure of the health centre is estimated as under:

Materials and consumable (100% variable)	` 22,32,000
Staff salaries per annum per employee (fixed):	
Physician	` 4,50,000
Assistants	` 1,50,000
Administrative staff	` 90,000
Establishment and other operating costs (fixed)	` 16,00,000

The non-financial information is as under:

(i) Staff:	
Number of physicians employed	6
Assistants	7
Administrative staff	2
(ii) Patient Mix:	
Adults	50%
Children	40%
Senior Citizens	10%
(iii) Mix of patient appointments (%)	
Consultation requiring no treatment	70%
Minor treatment	20%
Major treatment	10%

Required:

- Calculate the Net income of the city health centre for the next year;
- Determine the percentage of maximum capacity required to be utilized next year in order to break even.