

EXPERT

Service Costing

CA INTERMEDIATE – COST AND MANAGEMENT ACCOUNTING

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SERVICE COSTING

Service sector, being a fastest growing sector and having a significant contribution towards the GDP in India, is a very important sector where the role of the cost and management accounting is inevitable. Providers of services like transportation, hotels, financial services & banking, insurance, electricity generation, transmission and distribution etc. are very much cost conscious and thrive to provide services in a cost effective manner. Irrespective of regulatory requirements to maintain cost records and get the records audited, service costing becomes integral and inseparable part of each service entity.

Service costing also known as operating costing is used in service sectors like Transportation, Toll roads, Electricity generation, transmission and distribution, Hospitals, Canteen & Restaurants, Hotels & Lodges, Educational institutes, Financial institutions, Insurance, Information Technology (IT) & Information Technology Enabled Services (ITES), etc

Application of Service Costing :

- 1. Internal :** The service costing is required for in-house services provided by a service cost centre to other responsibility centres as support services.
- 2. External :** When services are offered to outside customers as a profit centre in consonance with organisational objectives as an output.

Service Costing versus Product Costing:

Service costing differs from product costing (such as job or process costing) in the following ways due to some basic and peculiar nature.

- i. Unlike products, services are intangible and cannot be stored, hence, there is no inventory for the services
- ii. Use of Composite cost units for cost measurement and to express the volume of outputs.
- iii. Unlike a product manufacturing, employee (labour) cost constitutes a major cost element than material cost.
- iv. Indirect costs like administration overheads, generally have a significant proportion in total cost of a service. Unlike manufacturing sector, service sector heavily depends on support services and traceability of costs to a service may not be economically feasible.



A major problem that arises in operating costing is determining suitable cost unit to be used for cost ascertainment. The following are the cost units used in different enterprises –

ENTERPRISE	COST UNIT
Hospitals	Patient days, per bed /day
Boiler House	Quantity (Kg) of steam produced
Canteen	Meals served, cups of tea sold
Road maintenance	Mile of road maintained
Motor Transport	Tonne-mile, miles travelled
Bus Transport	Passenger mile, seat mile
Electricity Board	Kilowatt hours
Machine Hiring	Machine hours
Hotels	Room days

Methods of ascertaining Service Cost Unit : Composite Cost unit

Composite units like Tonne-Kilometres, Quintal-Kilometers etc. may be computed in two ways.

- a. Weighted Average or Absolute Tonne-Kilometres:** This is the sum total of tonnes-kilometres, arrived at by multiplying various distances by respective load quantities carried.
- b. Simple Average or Commercial Tonnes-Kilometres:** It is derived by multiplying total distance (i.e. Kilometres) , by average load quantity (Tonnes).

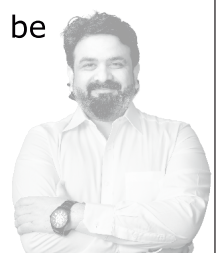
Statement of Costs for Service Sector :

Operating costing is similar to output costing. All costs are suitably classified under fixed and variable. These costs are then collected, analyzed and expressed in terms of appropriate cost unit. The classification of cost into fixed and variable is very important as it draws management's attention to the fixed costs to which they are committed regardless of the units of services ultimately given. It also indicates the change in the cost structure due to change in the operating level. e.g. Transport Costing.

The costs may be subdivided as under:

1. Fixed Costs or Standing Charges
2. Variable Costs or Operating Expenses
3. Semi-variable Costs or Maintenance Expenses

Note : In the absence of information about semi-variable costs, the costs would be shown under fixed and variable heads only



Treatment of Depreciation :

If related to effluxion of time or calculated on time basis, will be treated as fixed. However, if the depreciation is calculated on the basis of activity level or usage, it will be treated as variable cost.

Treatment of Interest :

Interest and finance charges shall be presented in the cost statement as a separate item of cost of sales. In general, interest is treated as fixed cost, unless otherwise given.

Costing of Transport Services

Transport organizations can be divided into two categories viz. Goods transport and Passenger transport.

The cost unit for Goods transport organization is Ton– Kilometer – that means cost of carrying one Ton of goods over a distance of one kilometer.

Cost unit for Passenger transport organization is Passenger– Kilometer – that means cost of carrying one Passenger over a distance of one kilometer.

The costs are shown under the following heads:

A. Fixed or Standing Cost	B. Variable Cost	C. Semi-Variable Cost
1. Insurance	1. Fuel	1. Repairs & Maintenance
2. License Fees	2. Oil	2. Tyres
3. Depreciation	3. Lubricants	3. Spares, etc
4. R.T.O taxes		
5. General Charges		
6. Driver's/ Cleaner's Salary, if on monthly basis		



Costing of Hotels and Lodges

Service costing is an effective tool in respect of hotel industry. Hotels are run on commercial basis. Hence it is necessary to compute the cost - to fix the price of various services provided by the hotel and to find out the profit or loss at the end of a particular period.

In this case, the costs associated with different services offered should be identified and cost per unit should be worked out. The cost unit may be Guest-day or Room day. For calculation of cost per Guest day or Room day, estimated occupancy rate at different point of time, for example - Peak season or lean season, are taken into account.

Costing for Hospitals

A Hospital is providing various types of medical services to the patients. Hospital costing is applied to decide the cost of these services.

A hospital may have different departments catering to varied services to the patients - such as

- Out Patient
- In Patient
- Medical services like X-Ray, Scanning, etc.
- General services like Catering, Laundry, Power house, etc.
- Miscellaneous services like Transport, Dispensary, etc

Common unit of costs of various departments are as follows:

- Out Patient - Per Out-patient
- In Patient - Per Room Day
- Scanning - Per Case
- Laundry - Per 100 items laundered

Costing for IT & ITES :

Information Technology (IT) and Information Technology Enabled Services (ITES) organizations provide their customers with services or intangible products. These organizations are highly labour intensive.



services to outside customers or provision of services internally (captive consumption)

In this sector employee (labour) cost constitutes a significant portion of the total operating costs. In addition to employee cost, significant overhead costs for offering the services are incurred and are classified as service overhead

Project : In general – IT & ITES industries, the jobs undertaken are considered as Project. Each project is unique in nature and varies in size, functionality requirements, duration and staffing requirements.

Effort involved :

Direct Manpower

In a typical software implementation project, three to four levels of man-power would be directly engaged, as mentioned below: -

- Software Engineers / Functional Consultants / Business Analysts
- Project Leaders
- Project Manager

Program Manager, etc

The costs incurred on the above listed man-power are traceable with a project and hence forming part of direct costs of the project.

Support Man-power

In addition to the above persons, who are directly engaged in project, there could be support persons or indirect manpower, who are indirectly involved in the project.

If their time can be identified with a project, they will be treated as direct manpower. Accordingly, the cost incurred on them will be treated as direct cost. However, if their time is not traceable with a single project, then it may either be allocated or apportioned to various projects on some suitable basis.

Parameters in computation of Total Cost :

A. Hardware and Software Costs

- If they are identifiable with a project, then they are directly allocated to the project
- If they are not directly identifiable with a project or not fully allocable to a project, then they are treated as service overhead.

B. Travel and Training Costs

- If they are incurred for a project, then they are directly allocated to the project
- If they are not directly identifiable with a project or allocable over a number of projects,



then they are treated as service overhead. For example, Java (software language) training provided to the software engineers, may be useful in multiple Java based projects. Hence treated as overhead costs

C. Effort Costs

- Effort costs are basically identified with a project. They can be classified as direct cost, unless otherwise specified.

- Effort costs are not just the salaries of the software engineers or programmers who are involved in the project. Organisations compute effort costs in terms of overhead costs where they take the total cost of running the organisation and divide this by the number of productive staff. Therefore, the following costs are all part of the total effort cost:

1. Costs of providing, heating and lighting office space

2. Costs of support staff such as accountants, administrators, system managers, cleaners and technicians

3. Costs of networking and communications

4. Costs of central facilities such as a library or recreational facilities

5. Costs of Social Security & employee benefits such as pensions and health insurance, etc.

In short, effort cost includes salary of the staff concerned and part of common overhead.

Costing for Toll Roads :

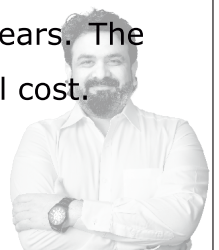
The Construction of roads brings about a variety of benefits that are enjoyed practically by all sectors of the economy. Highway economic analysis is a technique whereby the cost and benefit from a scheme are quantified over a selected time horizon and evaluated by a common yardstick.

The economic analysis involves comparison of project costs and benefits under the "with" and "without" project conditions.

The project is further subjected to sensitivity analysis by assessing the effects of adverse changes in the key variables. In addition, the combined effect of these changes is also assessed. This helps to gauge the economic strength of the project to withstand future risks and uncertainties.

Costs Involved :

1. Capital Costs : The capital cost consists of cost incurred during the construction period. Generally, this sort of road construction projects run across multiple financial years. The total expenditure to be incurred during the construction period is termed as capital cost.



The total cost includes the cost of construction of road and other structures & consultancy charges. In addition to this cost, it also includes the cost of construction of tollbooths.

Construction expenses can be broadly classified as follows:

- Preliminary and pre-operative expenses
- Land Acquisition
- Materials
- Labour
- Overheads incurred in the course of actual construction
- Contingency allowance
- Interest during construction period

2. Operating and Maintenance Costs : Routine maintenance cost would be incurred once the Toll road is operational. Routine maintenance involves Patching of potholes, sealing of cracks, Edge Repair, Surface Renewal, Periodic maintenance for new highways would be met with in accordance with the analysis of the life cycle model carried out for the project.

Annual operating cost includes the cost of operating tollbooths, administrative expenses, emergency services, communications and security services and other costs of operation.

Maintenance cost includes the cost of annual maintenance (routine) and periodic maintenance.

- Annual maintenance cost includes primary maintenance of wearing surface, railings, roadside furniture, etc.
- Periodic maintenance cost includes the cost of overlays (wearing coats), painting of railings, etc.
- Operating and Maintenance expenses can be broadly classified as follows:
- Toll collection expenses
- Administrative expenses for day-to-day operation.
- Maintenance expenses, which include routing and periodic maintenance.
- Interest expenses incurred for servicing term loans.

BUILD-OPERATE-TRANSFER (BOT) Approach: In recent years a growing trend emerged among Governments in many countries to solicit investments for public projects from the private sector under BOT scheme. BOT is an option for the Government to outsource public projects to the private sector.

With BOT, the private sector designs, finances, constructs and operate the facility and



eventually, after specified concession period, the ownership is transferred to the Government. Therefore, BOT can be seen as a developing technique for infrastructure projects by making them amenable to private sector participation.

The fundamental principle in determining user levy is, 'if the price for a transport facility is set at a level that reflects the benefit, each user gains from improvements in the facility, it will result in traffic flow levels that equate social costs with user benefits.

Toll Rate

In general, the toll rate should have a direct relation with the benefits that the road users would gain from its improvements. The benefits to road users are likely to be in terms of fuel savings, improvement in travel time and Good riding quality.

To compute the toll rate following formula with rounding off to nearest multiple of five has been adopted:

$$\text{User Fee} = \text{Total Distance} \times \text{Toll Rate per km}$$

Costing for Educational Institutions :

Educational institutions like schools, colleges, technical institutes for education and training, are run to impart education and training to students. The objective of running these institutions may be 'Not-for profit' or 'For profit'. Like other business entities, cost and management accounting is also inevitable for this sector

Income of Educational Institutions :

1. One-time fees: These are the fees which are collected once in a course period or for a definite period like Admission fee, Development fee, Annual fee etc.
2. Recurring fees: Tuition fee, laboratory, computer and internet fee, library fee, training fee, amenities fee, sports fee, extracurricular activities fee etc. The Government and other aided institutes may not be permitted to collect various fees like capitation fee and development fees etc. Further, unlike the trading and manufacturing organizations, these are not free to determine fees beyond a prescribed limit.
3. Other incomes: The indirect income like transport, hostel, mess and canteen for the students and staff are provided by the educational institutions normally on no profit no loss basis.

Expenditure of Educational Institutions :



(i) Operational Cost: Computer maintenance and internet charges, Building maintenance, Repairs and maintenance of equipment, Administrative expenses, Finance charges etc.

(ii) Research and Development Cost : Educational institutions undertake academic research on various fields of specialisations. The costs of such research including personal costs, books etc. are to be collected through a cost centre approach. All costs incurred in that cost centre are collected and set off against the revenue generated from such research projects.

If any balance is left out as undistributed, then such balance costs can be collectively distributed to all other course cost centre as a separate cost element namely "Research costs".

(iii) Cost of Publication of research and other materials : In an educational institution, there will be a separate department for conducting research publication related exercise. The cost incurred would be directly allocated to that department.

Costing for Insurance Companies :

Insurance or assurance industry operates in providing social security to the persons who subscribe for the policy. The Insurance companies are broadly classified as Life insurer and Non-Life Insurer (General Insurance providers). Life insurers provide assurance to the policy holders' life for the insured value. The Non-life insurers are providing insurance to the policy holder for actual loss upto insured value for the policy. The insurance companies are required to analyse its various insurance product for profitability. The product offered by insurance companies may include:

- (i) Life Insurance policies- with or without maturity benefits
- (ii) General insurance- Health, Fire, Property, Travel Insurance etc.
- (iii) Others services- Re-insurance, Fund management- Pension, Gratuity and other etc.

Income of Insurance companies

Income of insurance companies may include

- (i) Premium on policy (periodic or one time)
- (ii) Commission on re-insurance
- (iii) Fund administration fee and return on investment of funds, etc.

Expenditure of Insurance companies:

The Expenditure of an insurance company can be classified as direct and indirect to a policy or product.



Direct- Commission paid to agents, claim settlement, cost of valuation, premium for re-insurance, legal and other costs etc.

Indirect Cost-Actuarial fees, market and product development costs, administration cost, asset management cost etc.

Method of Costing in an Insurance Company

The cost object in an insurance company may be a product, a policy, a department or region, an agent etc.

Activity Based Costing in Insurance Companies

Activity based costing (ABC) is used for analysis of cost-benefit of a product (Direct Product Profitability), policy profitability (Customer Profitability Analysis) etc.

Costs that occur in insurance companies are to be identified with appropriate activities that have caused its occurrence. Then costs must be reassigned from activities to cost objects (insurance contracts and policies, customers, delivery channels) based on identified cost drivers.

Identification of activities and assignment of costs are the most critical for the implementation of activity based costing. The activities can be divided into two part i.e. (i) Pre-product development activities and (ii) Post product development activities.

(i) Pre-product development activities : These are the activities which are carried out before a product is made. It includes market research, product development like specification of coverage, conditions, amount of premium, insurance contract, policy forms and provision for sales channel etc

(ii) Post product development activities : This activity is further divided into parts i.e. (a) Selling of policy and (b) Processing of claims. (a) Selling of policy refers to appointment of distribution of sales channel (direct selling or through agencies), soliciting for policy, processing of applications etc. (b) Processing of claim includes claim inception, claim estimation, claim settlement and legal actions.

The activity costs are assigned to the products on the basis of appropriate cost drivers. The cost drivers may include no. of hours spent on processing of an application and claim processing, no. of application, no. of policy, no. of claim etc.

Costing for Financial Institutions :

In the past two decade financial institutions have undergone major changes – in terms of increased regulations, competition from new entrants from both locally and globally,



innovation of new products and services, technological advancement and increased expectations of new generation customers, etc. Over and above the challenges posed by the prevailing environment as described above, financial institutions underwent considerable changes in terms of its high quality, sensitive staffing requirements and its productivity.

Manpower cost, other than interest cost and finance charges, is one of the largest single cost components in financial institutions. Hence, it is needless to say, that financial institutions are more interested in understanding and discovering the ways to more accurately allocate such costs to various product ranges offered by them and its customers. If the financial institution has to survive under the present challenging economic conditions, it will have to add value to its products and services. It is imperative to note that the financial institution needs to know the contribution of its products, services and customers to value creation.

Cost measurement in financial institutions

The objectives of cost measurement includes –

- Understand the profitability by products offered and by customers
- Establishing a mechanism for pricing the products, by identifying the product level and activity level unit costs
- Understanding productivity issues & their relationship with strategic goals of the organization

In nutshell, financial institutions need to understand their position in various product lines and to find out how they can stay in competing edge or becomes a leader.



Activity Based Costing in Financial Institutions

Activity based costing can be a useful tool in allocating the cost elements to various products offered and the customers being served. Activity based costing can help financial institutions to –

- Identify and analyze the profitability by product
- Analyze the profitability by customer
- Identify the activity level unit costs and build up product level costs, which in turn forms basis for product level pricing / customer level pricing
- Financial institutions can improve their profitability by –
 - Concentrating on products that are more profitable
 - Focus on high margin customers

Costs that occur in financial institutions are to be identified with appropriate activities that have caused its occurrence. Then costs must be reassigned from activities to cost objects (various loan products offered by the organization, customers, etc.) based on identified cost drivers.

The concepts on activity based costing as discussed under Costing of Insurance Companies also applicable to financial institutions.

Other Services-Costing for Power Houses :

Power houses are engaged either in electricity generation or steam generation. It uses the concepts of service costing i.e. 'Power House Costing.' Service cost statement can be prepared by identifying the costs associated with the power generation or steam generation.

Cost unit is different for electricity generation and steam generation.

The cost unit for electricity generation organization is cost per kilowatt-hour (kWh) – that means cost of generating one kilowatt of power per hour. Please note that kWh is commonly known as a "Unit".

Service Costing

- Service costing is a method of costing & Not a technique of costing.
- service costing is used in service sector organisations like : Hotels, Lodging, Transportation, Hospitals, coaching centres, schools etc



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- service costing is also known as operating costing

Question 1.

A lorry starts with a load of 20 MT of goods from Station 'A'. It unloads 8 MT in Station 'B' and balance goods in Station 'C'. On return trip, it reaches Station 'A' with a load of 16 MT, loaded at Station 'C'. The distance between A to B, B to C and C to A are 80 Kms, 120 Kms and 160 Kms, respectively. COMPUTE "Absolute MT-Kilometer" and "Commercial MT – Kilometer".

(MT = Metric Ton or Ton).



Question 2.

AXA Passenger Transport Company is running 5 buses between two towns, which are 40 kms apart. Seating capacity of each bus is 40 passengers. Following details are available from their books, for the month of April:

Particulars	Amount (₹)
Salary of Drivers, Cleaners and Conductors	24,000
Salary to Supervisor	10,000
Diesel and other Oil	40,000
Repairs and Maintenance	8,000
Tax and Insurance	16,000
Depreciation	26,000
Interest	20,000
	1,44,000

Actual passengers carried were 75% of the seating capacity. All the five buses run on all days for the month. Each bus made one round trip per day. CALCULATE cost per passenger – Kilometer.



Question 4.

SMC is a public school having five buses each plying in different directions for the transport of its school students. In view of a larger number of students availing of the bus service the buses work two shifts daily both in the morning and in the afternoon. The buses are garaged in the school. The work-load of the students has been so arranged that in the morning the first trip picks up senior students and the second trip plying an hour later picks up the junior students. Similarly, in the afternoon the first trip takes the junior students and an hour later the second trip takes the senior students' home.

The distance travelled by each bus one way is 8 km. The school works 25 days in a month and remains closed for vacation in May, June and December. Bus fee, however, is payable by the students for all 12 months in a year.

The details of expenses for a year are as under:

Driver's salary	₹ 4,500 per month per driver
Cleaner's salary	₹ 3,500 per month
(Salary payable for all 12 months)	
(One cleaner employed for all the five buses)	
License fee, taxes, etc.	₹ 8,600 per bus per annum
Insurance	₹ 10,000 per bus per annum
Repairs & maintenance	₹ 35,000 per bus per annum
Purchase price of the bus	₹ 15,00,000 each
Life of each bus	12 years
Scrap value of buses at the end of life	₹ 3,00,000
Diesel cost	₹ 45.00 per litre

Each bus gives an average mileage of 4 km. per litre of diesel.

Seating capacity of each bus is 50 students.

The seating capacity is fully occupied during the whole year.

Students picked up and dropped within a range up to 4 km. of distance from the school are charged half fare and fifty per cent of the students travelling in each trip are in this category. Ignore interest. Since the charges are to be based on average cost you are required to:

- (i) PREPARE a statement showing the expenses of operating a single bus and the fleet of five buses for a year.
- (ii) WORK OUT the average cost per student per month in respect of –
 - (A) students coming from a distance of upto 4 km. from the school and
 - (B) students coming from a distance beyond 4 km. from the school.



Question 5.

GTC has a lorry of 6-tonne carrying capacity. It operates lorry service from city A to city B for a particular vendor. It charges ₹2,400 per tonne from city 'A' to city 'B' and ₹2,200 per tonne for the return journey from city 'B' to city 'A'. Goods are also delivered to an intermediate city 'C' but no extra charges are billed for unloading goods in-between destination city and no concession in rates is given for reduced load after unloading at intermediate city. Distance between the city 'A' to 'B' is 300 km and distance from city 'A' to 'C' is 140 km.

In the month of January, the truck made 12 journeys between city 'A' and city 'B'. The details of journeys are as follows:

Outward journey	No. of journeys	Load (in tonne)
'A' to 'B'	10	6
'A' to 'C'	2	6
'C' to 'B'	2	4
Return journey	No. of journeys	Load (in tonne)
'B' to 'A'	5	8
'B' to 'A'	6	6
'B' to 'C'	1	6
'C' to 'A'	1	0

Annual fixed costs and maintenance charges are ₹6,00,000 and ₹1,20,000 respectively. Running charges spent during the month of January are ₹2,94,400 (includes ₹12,400 paid as penalty for overloading).

You are required to:

- (i) CALCULATE the cost as per (a) Commercial tonne-kilometer. (b) Absolute tonne-kilometer.
- (ii) CALCULATE Net Profit/ loss for the month of January.



Question 8.

ABC 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 - ₹ 75,000

Supervisors – 2 persons – ₹ 25,000 Per month – each

Nurses – 4 persons – ₹ 20,000 per month – each

Ward Boys – 4 persons – ₹ 5,000 per month – each

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

Other expenses for the year are as follows:

Repairs (Fixed) – ₹ 81,000

Food to Patients (Variable) – ₹ 8,80,000

Other services to patients (Variable) – ₹ 3,00,000

Laundry charges (Variable) – ₹ 6,00,000

Medicines (Variable) – ₹ 7,50,000

Other fixed expenses – ₹ 10,80,000

Administration expenses allocated – ₹ 10,00,000

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

The hospital hired 750 beds at a charge of ₹ 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 –

- (a) CALCULATE profit per Patient day, if the hospital recovers on an average ₹ 2,000 per day from each patient
- (b) FIND OUT Breakeven point for the hospital.



Question 10.

BHG Toll Plaza Ltd built a 60 km. long highway and now operates a toll plaza to collect tolls from passing vehicles using the highway. The company has estimated that a total of 12 crore vehicles (only single type of vehicle) will be using the highway during the 10 years toll collection tenure.

Toll Operating and Maintenance cost for the month of April are as follows:

(i) Salary to –

- Collection Personnel (3 Shifts and 4 persons per shift) - ₹ 550 per day per person
- Supervisor (2 Shifts and 1 person per shift) - ₹ 750 per day per person
- Security Personnel (3 Shifts and 6 persons per shift) - ₹ 450 per day per person
- Toll Booth Manager (2 Shifts and 1 person per shift) - ₹ 900 per day per person

(ii) Electricity – ₹ 8,00,000

(iii) Telephone – ₹ 1,40,000

(iv) Maintenance cost – ₹ 30 Lakh

Monthly depreciation and amortisation expenses will be ₹ 1.50 crore. Further, the company needs 25% profit over total cost to cover interest and other costs.

Required:

- (i) CALCULATE cost per kilometer per month.
- (ii) CALCULATE the toll rate per vehicle.



Question 11.

Sanziet Lifecare Ltd. operates in life insurance business. Last year it launched a new term insurance policy for practicing professionals 'Professionals Protection Plus'. The company has incurred the following expenditures during the last year for the policy:

	₹
Policy development cost	11,25,000
Cost of marketing of the policy	45,20,000
Sales support expenses	11,45,000
Policy issuance cost	10,05,900
Policy servicing cost	35,20,700
Claims management cost	1,25,600
IT cost	74,32,000
Postage and logistics	10,25,000
Facilities cost	15,24,000
Employees cost	5,60,000
Office administration cost	16,20,400

Number of policies sold- 528

Total insured value of policies- ₹ 1,320 crore

Required:

- (i) *CALCULATE total cost for Professionals Protection Plus policy segregating the costs into four main activities namely (a) Marketing and Sales support, (b) Operations, (c) IT and (d) Support functions.*
- (ii) *CALCULATE cost per policy.*
- (iii) *CALCULATE cost per rupee of insured value.*



Question 12.

The loan department of a bank performs several functions in addition to home loan application processing task. It is estimated that 25% of the overhead costs of loan department are applicable to the processing of home-loan application. The following information is given concerning the processing of a loan application:

Direct professional labor:

	(₹)
Loan processor monthly salary:	<u>2,40,000</u>
(4 employees @ ₹60,000 each)	
Loan department overhead costs (monthly)	
Chief loan officer's salary	75,000
Telephone expenses	7,500
Depreciation Building	28,000
Legal advice	24,000
Advertising	40,000
Miscellaneous	6,500
Total overhead costs	1,81,000

You are required to COMPUTE the cost of processing home loan application on the assumption that five hundred home loan applications are processed each month.



Question 13.

PREPARE the cost statement of Ignus Thermal Power Station showing the cost of electricity generated per kWh, from the data provided below pertaining to the year 2022-23.

Total units generated 20,00,000 kWh

	Amount (₹)
Operating labour	30,00,000
Repairs & maintenance	10,00,000
Lubricants, spares and stores	8,00,000
Plant supervision	6,00,000
Administration overheads	40,00,000

5 kWh. of electricity generated per kg of coal consumed @ ₹4.25 per kg. Depreciation charges @ 5% on capital cost of ₹5,00,00,000.



Question 14.

Solar Power Ltd. has a power generation capacity of 1000 Megawatt per day. On an average it operates at 85% of its installed capacity. The cost structure of the plant is as under:

	Cost particulars	Amount (₹ in Lakh)
1.	Employee cost per year	2500
2.	Solar panel maintenance cost per year	250
3.	Site maintenance cost per year	150
4.	Depreciation per year	5940

CALCULATE cost of generating 1kW of power.

[1 Megawatt = 1,000 kW]



Multiple Choice Questions (MCQs)

1. Composite cost unit for a hospital is:
 - (a) Per patient
 - (b) Per patient-day
 - (c) Per day
 - (d) Per bed
2. Cost of diesel and lubricant is an example of:
 - (a) Operating cost
 - (b) Fixed charges
 - (c) Semi-variable cost
 - (d) None of the above
3. Cost units used in power sector is:
 - (a) Kilo meter (K.M)
 - (b) Kilowatt-hour (kWh)
 - (c) Number of electric points
 - (d) Number of hours
4. Absolute Tonne-km. is an example of:
 - (a) Composite units in power sector
 - (b) Composite unit of transport sector
 - (c) Composite unit for bus operation
 - (d) Composite unit for oil and natural gas
5. Depreciation is treated as fixed cost if it is related to:
 - (a) Activity level
 - (b) Related with machine hours
 - (c) Efflux of time
 - (d) None of the above
6. Jobs undertaken by IT & ITES organizations are considered as:
 - (a) Project
 - (b) Batch work
 - (c) Contract
 - (d) All the above



7. In Toll Road costing, the repetitive costs include:
- (a) Maintenance cost
 - (b) Annual operating costs
 - (c) None of the above
 - (d) Both (a) and (b)
8. BOT approach means:
- (a) Build, Operate and Transfer
 - (b) Buy, Operate and Transfer
 - (c) Build, Operate and Trash
 - (d) Build, Own and Trash
9. Pre-product development activities in insurance companies, include:
- (a) Processing of Claim
 - (b) Selling of policy
 - (c) Provision of conditions
 - (d) Policy application processing
10. Which of the following costing method is not appropriate for costing of educational institutes:
- (a) Batch Costing
 - (b) Activity Based Costing
 - (c) Absorption Costing
 - (d) Process Costing



You get what
you focus on

So focus on what
you want