General Overheads:-

These are costs incurred on behalf of the whole of the enterprise and are not directly traceable to any specific activity or department within the enterprise.

Consequently, these costs may not be avoided by closing down a department or sub-unit

e.g. - long term lease on a premises
- Insurances
- Rates

Where different activities or profit centres are carried on within an organisation, GENERAL OVERHEADS are apportioned or assigned to the user departments on a predetermined basis*.

e.g. Rent, Rates, General Insurances } Floor Area Basis

Recruitment Costs, Payroll Admin Ex. } Employee's Basis.

* in measuring profitability of the individual departments.

Workshop Efficiency Computations: —

- a measure of the extent to which the labour hours employed by a business are charged out to customers

- the value of the hours charged out should be sufficient to recover all workshop costs and the required profit.

- Workshop costs include
  - (a) overheads specific to the workshop
  - (b) general overheads apportioned to the workshop.
  - (c) mechanics' wages.

- Required workshop sales are arrived at as follows: —

Mechanics Wages	xxx
Workshop overheads	
– specific	xxx
– apportioned	xxx
Total Workshop Costs.	xxx
Required Profit	xxx
Required Sales.	xxx

- The number of hours required to be charged out are:

  Required Sales ÷ Chargeout Rate per hour.

- The Required Workshop Efficiency is

  No. Hours To be Charged Out ÷ actual labour hours employed

  as a %.

- The actual labour hours employed is arrived at as follows:

  No. mechanics × 40 hours p.w. × No. Weeks per annum

  (note: 5 day working week).

1. F.Jones owns and operates a garage. In the year ended 31st December 1983 his analysed costs, sales and profits were:-

	Parts	Forecourt	Service (Labour Sales)	Vehicle Sales	Totals
	£	£	£	£	£
Direct Costs	18,350	66,350	15,550	157,000	257,250
Variable Overheads	2,500	1,150	7,775	5,300	16,725
Deparmental Fixed overheads	3,350	4,600	1,800	9,000	18,750
General Fixed Overheads	1,720	6,650	1,620	11,325	21,315
Total costs	25,920	78,750	26,745	182,625	314,040
Sales	27,750	97,500	30,000	173,700	328,950
Profit (Loss)	1,830	18,750	3,255	(8,925)	14,910

(1) Explain carefully the terms "fixed overhead" and "variable overhead." Give TWO examples of each.

(6 marks)

(2) In the view of the net loss in the vehicle sales department, Jones is wondering whether to close down this department. On what costing principles would you advise Jones whether this is sound?

(4 Marks)

(3) Assuming that, in the short term, the departmental fixed overheads would still have to be met then, if the vehicles sales department had been cut out for the whole of the year what would the net profit have been for the business as a whole? (Show all workings)

(9 Marks)

(4) Briefly discuss THREE steps Jones could take to improve the profitability of the vehicle sales department in the next year.

(6 Marks)

(IMI 1984)

39/10

2. The projected annual income and expenditure for a garage workshop is as follows: -

1.	Productive hours for sale 15,000 at a cost of	£48,000
2.	Indirect labour costs	£23,000
3.	Direct expenses	£25,000
4.	Apportionment of general overheads	£20,000
5.	An annual return of 35% is expected on the capital of £80,000 invested in the workshops.	

The labour efficiency is estimated at 80%.

(a) Determine the hourly retail labour charge out rate. (12 Marks)

(b) If the actual labour efficiency is 72% and the total costs at the end of the year are £119,500, what will be the actual profit? (7 Marks)

(c) Give two examples of :-

(i) Indirect labour costs.

(ii) Direct expenses.

(iii) How overheads should be apportioned. (6 Marks)

(IMI 1986)

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3. Efficient Motors Limited comprises of four operational departments, namely Part Sales, Car Sales, Forecourt Sales and Motor Services. These departments can be demographically broken down as follows:

	% floor area occupied	% Employees engaged
Part Sales	5%	15%
Car Sales	40%	20%
Forecourt Sales	15%	15%
Motor Services	40%	50%

Costs applicable to the organisation as a whole for the next year are:

Light & Heat	£18,750
Rent & Rates	37,500
Fire Insurance	5,750
Employee Liability Insurance	800
Payroll Department	3,200

These costs are to be apportioned to the operational departments on a suitable basis.

Costs specific to the Motor Service Dept (i.e. the Workshop) are:

Mechanics Wages	36,000
Foreman's Salary	20,000
Other Specific Costs	3,000

The Company requires a profit margin from the workshop of 20% of all costs. The workshop engages four mechanics who work a 40 hour week except for 4 weeks holidays and 5 bank holidays each year.

(a) If the chargeout rate is £22 per hour, compute the required worshop efficiency.

(12 Marks)

(b) If the Company laid off 1 machanic (saving £9,000 in wages), compute the revised workshop efficiency.

(6 Marks)

(Dip M.I. Mgt 1988)

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1. The workshop of Vista Motors Limited occupies 50% of total floor area and engages 60% of all employees.

The following costs have been estimated for 1987:

Mechanics' Wages	£32,000
Supervisor's Wages	9,000
Depreciation	1,500
Stationery and Printing	500
Materials and Parts	9,000

General Overheads applicabe to the whole organisation:

Light & Heat	4,800
Rent	10,000
Rates	2,000

Payroll Clerk 6,000

The management require a 20% mark-up on all costs, both specific and assigned. There are four mechanics employed in the workshop who each work 40 hours per week. They are allowed two weeks holidays and 8 bank holidays each year.

(a) Compute the required minimum sales of the workshop (i.e. the amount to be recovered)

(10 Marks)

(b) How many chargeable labour hours are required if the chargeout rate is £16 per labour hour.

(4 Marks)

(c) Compute the required workshop efficiency. (4 Marks)

(Total 18 Marks)
(Dip M.I. Mgt 1989)

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Solutions: Q1 F. Jones

(1) Fixed Overhead
Variable Overhead

(2)

Existing Total Costs	314040
Cost Savings from closing Vehicle Sales	
- Direct Costs	157,000 - ~~257,250~~
- Variable OH	- 5300
- Fixed OH	- 9000
	142,740
Sales from other departments	155,250
Revised Profit	12,510

Consider
- Impact on sales in other departments
- Avoidability of fixed overheads in short run (e.g. long term lease commitment)
- Sub-letting of vehicle sales dept. to maintain sales in ~~the~~ other departments.
- equitable basis of apportioning fixed overheads.

(3)

Sales foregone	173 700
Avoidable Costs	- 157 000
	- 5300
Profit/Contribution foregone	11400

Total Profit	14910
Profit foregone	- 11400
Revised Profit	3510

(4)
- Review basis of apportioning fixed overheads
- improve marketing of the dept. (advertising etc)

Q2 (IMI 1986)

(a)

		£
Costs:	Labour.	48,000
	Indirect Labour	23,000
	Direct Expenses	25,000.
	% General overheads	20,000
	Total Costs.	116,000
	Required Profit (35% of 80K)	28,000
	Required Sales.	144,000.

No. of expected chargeable Labour hours

15000 × .80 = 12000 hours

Required Chargeout Rate $\frac{144000}{12000}$ = £ 12.00 p.hr.

(b) Sales: 1500 × .72 = 10,800 hours @ £12 = 129,600

Total Costs. 119,500

Profit 10,100

(c)(i) - Storekeeper
- General Helpers
- Supervisers

(ii) Materials
Labour Costs

(iii) Rate per labour hour;
% of labour cost.

(8 of 10)

Q3 Efficient Motors:-

(a) • Assigned General Overheads:-

- Light & Heat	18,750	x	40%	= 7,500	
- Rent & Rates	37,500	x	40%	= 15,000	
- Fire Insurance	5750	x	40%	= 2,300	
- Employee Liability Ins.	800	x	50%	= 400	
- Payroll Dept.	3,200	x	50%	= 1,600	26,800

• Workshop Specific Costs:-

- Mechanics' Wages	36,000	
- Foreman's Salary	20,000	
- Other	3,000	59,000

• TOTAL WORKSHOP COSTS	85,800
• REQUIRED PROFIT (20% of 85800)	17,160
• REQUIRED WORKSHOP SALES	102,960

• No. of hours to sell at £22 p.hr $= \frac{102960}{22} =$ 4680 hours

• No. of hours available $4 \times 40\text{hrs} \times (52-4-1)$ 7520 hours.

• REQUIRED EFFICIENCY $= \frac{\text{NO. HOURS TO SELL}}{\text{NO. HOURS AVAILABLE}}\% = \frac{4680}{7520} \times 100 = 62.2\%$.

(b) - Revised Total Costs (85800 - 9000) = 76,800
- Profit 20% 15,360
- Sales 92,160
- Hours to Sell $\frac{92160}{22} = 4189$
- Hours Available $(3 \times 40 \times 47)$ 5640
- Revised Efficiency $\frac{4189}{5640} \times 100 = 74.3\%$.

9 & 10

Q4 VISTA MOTORS LTD:-

(a) • Assigned General Overheads:-

- Light & Heat	4,800	× 50%	=	2,400	
- Rent	10,000	× 50%	=	5,000	
- Rates	2,000	× 50%	=	1,000	
- Payroll Clerk	6,000	× 60%	=	3,600	12,000

• Workshop Specific Costs.

- Mechanics Wages	32,000	
- Supervisors Wages	9,000	
- Depreciation	1,500	
- Stationery & Printing	500	
- Materials & Parts.	9,000	52,000

• TOTAL WORKSHOP COSTS	64,000
• REQUIRED PROFIT (20% of 64000)	12,800
• REQUIRED WORKSHOP SALES	76,800

(b) • No. of hours to sell at £16 p.hr $= \frac{76800}{16} =$ 4.800 hours.

(c) • No. of hours available $4 \times 40\text{hrs} \times (52 - 2 - 1\frac{3}{5}) =$

$4 \times 40 \times 48.^{4} = 7744$ hours.

• REQUIRED EFFICIENCY $= \frac{\text{No. HOURS TO SELL}}{\text{No. HOURS AVAILABLE}}\% = \frac{4800}{7744} \times 100 = 62\%$

10/10

QUESTION

Coffey Motors Limited is a company engaged in the motor industry. It runs a workshop operation as well as vehicle sales and parts divisions. You are required to compute the minimum workshop efficiency having regard to the following information:

a) The Workshop occupies 40% of the total floor space of the enterprise and engages 60% of all employees.
b) General Overheads to be apportioned to user departments on an appropriate basis are as follows:

Rent	€60,000
Rates	12,000
Insurances	6,000
General Administration	8,000

c) There are four mechanics engaged in the workshop who are paid €28,000 per annum basic wage. They receive 4 weeks holidays per year and are entitled to 10 bank holidays. The working week is 39 hours.
d) Aside from Mechanics' Wages, the only overheads specific to the workshop are:

Superviser's Salary	€40,000
Equipment Leasing	22,000
Materials and Parts	10,000

The required profit form the Workshop is 20% of all workshop costs and mechanics' time is charged out at €50.00 per hour.

REQUIRED:
Compute the required minimum workshop efficiency.
(Show all workings to the nearest EURO.)
(20 marks)

What do you understand by the term "General Overheads"? (5 marks)
****

Sales	264000
To Sell	5280
Available	7176
Efficiency	73.5%

QUESTION

Staple Motors Limited is a company engaged in the motor industry.
They require you to compute the minimum efficiency to be derived from the workshop having regard to the following information:

a. There are four mechanics engaged in the workshop who are paid EUR 28,000 per annum basic wage. They receive 4 weeks holidays per year and 10 bank holidays. The working week is 39 hours.

b. The Workshop occupies 40% of the total floor space of the enterprise and engages 50% of all employees. General Overheads to be apportioned to user departments on an appropriate basis are as follows:

Rent	18,000
Rates	9,600
Light & Heat	12,000
Administration	56,000

c. Aside from Mechanics' Wages, the only overheads specific to the workshop are:

Superviser's Salary	36,000
Depreciation of Equipment	2,800.

The required profit form the Workshop is 22% of all workshop costs. Mechanics' time is charged out at EUR 40.50 per hour.

REQUIRED:
Compute the required minimum workshop efficiency.
(Show all workings to the nearest EUR 1.)
****

Sales	237460
	5863
	7176
	81.7%