

PAPER – 3 : COST ACCOUNTING AND FINANCIAL MANAGEMENT

Question No. 1 is compulsory.

Attempt any **five** questions out of the remaining **six** questions.

In case, any candidate answers extra question(s)/ sub-question(s) over and above the required number, then only the requisite number of questions first answered in the answer book shall be valued and subsequent extra question(s) answered shall be ignored.

Working notes should form part of the answer.

Question 1

Answer the following:

- (a) Omega Ltd manufactures a product, currently utilising 75% capacity with a turnover of ₹ 99,00,000 at ₹ 275 per unit. The cost data is as under:

	Amount (₹)
Direct Material per unit	96
Direct wages per unit	42
Variable overhead per unit	18
Semi-variable overheads	7,32,000
PV ratio	40%

Fixed overhead cost is ₹ 28,81,000 upto 80% level of activity, beyond this level, an additional ₹ 2,38,500 will be incurred.

Required:

- (i) Break-even point in units and activity level at Break-even point.
- (ii) Number of units to be sold to earn profit of ₹ 25 per unit.
- (b) A manufacturing company has added a new machine to its fleet of eleven existing machines. New machine is purchased for ₹ 12,70,000 with installation cost of ₹ 40,000. The machine has an estimated life of 10 years and is expected to realise ₹ 90,000 as scrap at the end of its useful life. Other relevant data are as follows:
- (i) Budgeted annual working hours are 2,400 based on 8 hours per day for 300 days. This includes 180 hours for plant maintenance and 120 hours of productive set-up time.
- (ii) Electricity used by the new machine is 12 units per hour at a cost of ₹ 6.50 per unit. No current is drawn during maintenance and setup.
- (iii) Three operators control the operations of all the twelve machines and average rate of wages per operator per day is ₹ 600 and production bonus is 10% of wages.

- (iv) Annual insurance premium for the new machine is ₹ 12,600.
- (v) Annual maintenance cost of new machine including consumable stores is ₹ 32,500.
- (vi) Rent of the factory is ₹ 24,000 per month. Area occupied by new machine 200 sq ft. and area occupied by other machines is 2800 sq ft.

Required: Compute the comprehensive machine hour rate.

- (c) The capital structure of Bright Ltd. as on 31.03.2019 is as follows:

	₹ in lakhs
Equity share capital: 7,50,000 equity shares of ₹ 100 each	750
Retained Earnings	250
13.5% Preference share capital	240
12.5% Debentures	360

The current market price per equity share is ₹ 350. The prevailing default risk free interest rate is 6% and rate of return on market portfolio is 15%. The Beta of the company is 1.289.

The corporate tax rate is 30%. The average tax rate of shareholders is 25% and brokerage cost is 2% that they have to pay while investing dividends in alternative securities.

Required: Calculate the weighted average cost of capital on the basis of book value weights.

- (d) HT Ltd. has sales of ₹ 960 lakhs. Selling price per unit is ₹ 80 and variable operating cost is 75% of selling price and average cost per unit is ₹ 70. The cost of funds is 12%. Average collection period is 75 days, bad debt losses are 4% of sales and collection expenses are ₹ 15.60 lakhs. Company is considering whether collection policies should be made strict. Due to rigorous collection procedures, sales are expected to decline to ₹ 920 lakhs. Average collection period will reduce to 60 days and bad debts will reduce to 2.5% of sales. Annual collection expenses will increase to ₹ 22.50 lakhs.

Required: Should the company carry out the proposal?

(Assume 360 days in a year and investment in debtors are calculated on total cost)

(4 x 5 = 20 Marks)

Answer

- (a) (i) **Calculation of Break-even point:**

$$= \frac{\text{Total fixed cost}}{\text{Contribution per unit}}$$

$$= \frac{\text{₹ } 32,89,000}{\text{₹ } 110} = 29,900 \text{ units}$$

$$\text{Activity level} = \frac{29,900}{48,000} \times 100 = 62.29\%$$

(ii) Number of units to be sold to earn profit of ₹ 25 per unit:

$$\begin{aligned} \text{No. of units} &= \frac{\text{Total fixed cost at 75\% level}}{\text{Contribution per unit - Desired profit per unit}} \\ &= \frac{\text{₹ } 32,89,000}{\text{₹ } 110 - \text{₹ } 25} = 38,694 \text{ units} \end{aligned}$$

This is more than 80% capacity level, hence fixed overheads would increase by ₹ 2,38,500 and so the Break-even point. Thus the actual BEP would be

$$\begin{aligned} &= \frac{\text{Total fixed cost beyond 80\% level}}{\text{Contribution per unit - Desired profit per unit}} \\ &= \frac{\text{₹ } 32,89,000 + \text{₹ } 2,38,500}{\text{₹ } 110 - \text{₹ } 25} = \frac{\text{₹ } 35,27,500}{\text{₹ } 85} = 41,500 \text{ units.} \end{aligned}$$

Working Notes:

- No. of units at 75% level = $\frac{\text{₹ } 99,00,000}{\text{₹ } 275} = 36,000 \text{ units.}$

No. of units at 100% level = $\frac{36,000}{75\%} = 48,000 \text{ units.}$

No. of units at 80% level = $\frac{36,000}{75\%} \times 80\% = 38,400 \text{ units.}$
- P/V ratio is 40% (given), thus, total variable cost per unit and contribution per unit would be:

Contribution per unit = Selling price × P/V Ratio
= ₹ 275 × 40% = ₹ 110

Variable cost per unit = Selling price per unit – Contribution per unit
= ₹ 275 – 110 = ₹ 165
- Variable cost per unit in semi variable cost:

= Total variable cost – (Direct Material + Direct wages + Variable Overheads)
= ₹ 165 – (96 + 42 + 18) = ₹ 9 per unit

4. Depreciation per annum

$$\frac{\text{₹} (12,70,000 + 40,000) - \text{₹} 90,000}{10 \text{ years}} = \text{₹} 1,22,000$$

5. Apportioned cost for factory rent:

$$\frac{\text{₹} 24,000 \times 12}{3,000 \text{ sq. ft.}} \times 200 \text{ sq. ft.} = \text{₹} 19,200$$

(c) **Calculation of Weighted Average Cost of Capital
on the basis of book value weights**

Source	Amount (₹) (lakhs)	Weights (a)	After tax Cost of Capital (%) (b)	WACC (%) (c) = (a) × (b)
Equity share Capital	750	0.46875	17.60	8.25
Retained earnings	250	0.15625	12.936	2.021
13.5% Preference share	240	0.15	13.50	2.025
12.5% Debentures	360	0.225	8.75	1.969
	1600	1.00		14.265

Working Notes:**Calculation of Cost of Capital for each source of capital:**

1. Cost of Equity share capital:

$$\begin{aligned} K_e &= R_f + \beta (R_m - R_f) \\ &= 6\% + 1.289 (15\% - 6\%) \\ &= 6\% + (1.289 \times 9\%) \\ &= 6\% + 11.60\% \\ &= \mathbf{17.60\%} \end{aligned}$$

2. Cost of Retained Earnings:
- $K_s = K_e (1 - t_p) - \text{Brokerage cost}$

$$\begin{aligned} &= .176 (1 - 0.25) (1 - .02) \\ &= .12936 = \mathbf{12.936\%} \end{aligned}$$

3. Cost of Preference share capital (
- K_p
-) = 13.5%

4. Cost of Debentures (
- K_d
-) =
- $r (1 - t)$

$$\begin{aligned} &= 12.5\% (1 - t) \\ &= \mathbf{8.75\%} \end{aligned}$$

(d) **Statement Showing Evaluation of Credit Policies**

	Particulars	Present Policy (₹ in lakhs)	Proposed Policy (₹ in lakhs)
A.	Expected Contribution		
	(a) Credit Sales	960.00	920.00
	(b) Less: Variable Cost (75%)	<u>720.00</u>	<u>690.00</u>
	(c) Contribution	240.00	230.00
	(d) Less: Bad Debts	38.40	23.00
	(e) Less: Collection expenses	15.60	22.50
	(f) Contribution after Bad debt [(c)-(d)-(e)]	<u>186.00</u>	<u>184.50</u>
B.	Opportunity Cost of investment in Receivables	21.00	16.20
C.	Net Benefits [A-B]	165	168.30
D.	Increase in Benefit		3.30

Recommendation: Proposed Policy i.e. 60 days credit period should be implemented by HT Ltd since the net benefit under this policy are higher than those under present policy.

Working Notes:

(1)

	Present Policy i.e. 75 days (₹ in lakhs)	Proposed Policy i.e. 60 days (₹ in lakhs)
Sales	960	920
Variable cost (75% of sales)	720	690
Total cost $\frac{960}{80} \times 70$	840	
Fixed Cost	120	120
Cost of Receivables	840	810

(2) **Opportunity Costs of Average Investments**

$$= \text{Cost of Recivables} \times \frac{\text{Collection Period}}{360} \times \text{Rate of Return}$$

$$\text{Present Policy} = ₹ 840 \text{ lakh} \times \frac{75}{360} \times 12\% = ₹ 21 \text{ lakh}$$

$$\text{Proposed Policy} = ₹ 810 \text{ lakh} \times \frac{60}{360} \times 12\% = ₹ 16.2 \text{ lakh}$$

Alternative Presentation

Statement Showing Evaluation of Credit Policies

	Particulars	Present Policy (₹ in lakhs)	Proposed Policy (₹ in lakhs)
	Expected Contribution		
	Credit Sales	960.00	920.00
	Less: Variable Cost (75%)	720.00	690.00
	Contribution	240.00	230.00
	Loss of Contribution (A)	--	10.00
	% of Bad Debts	4%	2.5%
	Bad Debts	38.40	23.00
	Reduction in Bad Debts (B)	--	15.40
	Collection expenses	15.60	22.50
	Incremental Collection expenses (C)	--	6.90
	Debtors at cost	175	135
	Reduction in Debtors	--	40
	Saving in Interest@12% (D)	--	4.80
	Net Incremental Benefits [B+D-A-C]	--	3.30

Recommendation: Proposed Policy i.e. 60 days credit period should be implemented by HT Ltd since the net benefit under this policy are higher than those under present policy.

Working Notes:

	Present Policy i.e. 75 days (₹ in lakhs)	Proposed Policy i.e. 60 days (₹ in lakhs)
Sales	960	920
Variable cost (75% of sales)	720	690
Total cost $\frac{960}{80} \times 70$	840	
Fixed Cost	120	120
Cost of Sales	840	810
Debtors at cost (cost of sales x collection period/360)	175	135

Question 2

- (a) ACE Ltd. produces a product EMM using a material 'REX'. To produce one unit of EMM 0.80 kg of 'REX' is required. As per the sales forecast conducted by the company it will be able to sell 45,600 units of product EMM in the coming year. There is an opening stock of 3,150 units of product EMM and company desires to maintain closing stock equal to one month's forecasted sale. Following is the information regarding material 'REX':

(i)	Purchase price per kg	₹ 25
(ii)	Cost of placing order	₹ 240 per order
(iii)	Storage cost	2% per annum
(iv)	Interest rate	10% per annum
(v)	Average lead time	8 days
(vi)	Difference between minimum and maximum lead time	6 days
(vii)	Maximum usage	150 kg
(viii)	Minimum usage	90 kg

Opening stock of material 'REX' is 2,100 kg and closing stock will be 10% more than opening stock.

Required:

- (i) Compute the EOQ and total cost as per EOQ.
 (ii) Compute the reorder level and maximum level.
 (iii) If the company places an order of 7,500 kg of REX at a time, it gets 2% discount, should the offer be accepted? **(8 Marks)**
- (b) Aar Cee Manufacturing Co. is considering a proposal to replace one of its existing machine by the CNC machine. In this connection, the following information is available:

The existing machine was bought 3 years ago for ₹ 15,40,000. It was depreciated on straight line basis and has a remaining useful life of 7 years. Its annual maintenance cost is expected to increase by ₹ 40,000 from the sixth year of its installation. Its present realisable value is ₹ 6,50,000.

The purchase price of CNC machine is ₹ 27,00,000 and installation expenses of ₹ 95,000 will be incurred. Subsidy equal to 15% of the purchase price will be received at the end of first year of its installation. It is subject to same rate of depreciation. Its realisable value after 7 years is ₹ 5,70,000. With the CNC machine, annual cash operating costs are expected to decrease by ₹ 2,16,000. In addition, CNC machine would increase productivity on account of which net cash revenue would increase by ₹ 2,76,000 per annum.

The tax rate applicable to firm is 30% and cost of capital is 11%.

Required:

Advise the firm whether to replace the existing machine with CNC machine on the basis of net present value.

The present value factor at 11% are as follows :

Year	1	2	3	4	5	6	7
PV @ 11%	0.901	0.812	0.731	0.659	0.593	0.535	0.482

(8 Marks)

Answer

(a) (i) Computation of Economic Order Quantity (EOQ):

$$\begin{aligned} \text{EOQ} &= \sqrt{\frac{2 \times \text{Annual demand of 'REX'} \times \text{Ordering cost}}{\text{Carrying cost per unit per annum}}} \\ &= \sqrt{\frac{2 \times 37,210 \text{ kgs} \times ₹ 240}{₹ 25 \times (10 + 2)\%}} \\ &= \sqrt{\frac{1,78,60,800}{₹ 3}} = 2,440 \text{ kgs} \end{aligned}$$

$$\text{No. Of orders} = \frac{37,210}{2,440} = 15.25 \text{ or } 16 \text{ Orders}$$

Total cost as per EOQ:

	Amount (₹)
Material purchase cost (₹ 25 × 37,210 kgs)	9,30,250
Add: Ordering costs (₹ 240 × 16 orders)	3,840
Add: Carrying cost $\left(\frac{2,440}{2} \times ₹ 3\right)$	3,660
Total Cost	9,37,750

OR

	Amount (₹)
Material purchase cost (₹ 25 × 37,210 kgs)	9,30,250
Add: Ordering costs (₹ 240 × 15.25 orders)	3,660

Add: Carrying cost $\left(\frac{2,440}{2} \times ₹ 3\right)$	3,660
Total Cost	9,37,570

(ii) **Computation of Re-order level & Maximum level:**

$$\begin{aligned} \text{Re-order level} &= \text{Maximum usage} \times \text{Maximum lead time} \\ &= 150 \text{ kg} \times 11 \text{ days} = \mathbf{1,650 \text{ kg}} \end{aligned}$$

$$\begin{aligned} \text{Maximum level} &= \text{Re-order level} + \text{Re-order Quantity (EOQ)} - (\text{Min. usage} \times \text{Min. lead time}) \\ &= 1,650 \text{ kg} + 2,440 \text{ kg} - (90 \text{ kg} \times 5 \text{ days}) \\ &= 4,090 - 450 = \mathbf{3,640 \text{ kg}} \end{aligned}$$

(iii) **Analysis of Offer at order level of 7,500 kgs:**

If the company places 7,500 kg REX at a time, number of order and carrying cost per unit would be:

$$\text{No. of orders} = \frac{37,210}{7,500} = 4.96 \text{ or } 5 \text{ orders}$$

$$\text{Carrying cost per unit per annum} = ₹ 25 \times 98\% \times 12\% = ₹ 2.94$$

Total cost at 7,500 order level:

	Amount (₹)
Material purchase cost $\{(\text{₹ } 25 \times 98\%) \times 37,210 \text{ kgs}\}$	9,11,645
Add: Ordering costs (₹ 240 × 5 orders)	1,200
Add: Carrying cost $\left(\frac{7,500}{2} \times ₹ 2.94\right)$	11,025
Total Cost	9,23,870

Since, ordering 7,500 kg at a time, the company saves ₹ 13,880 (₹ 9,37,750 - ₹ 9,23,870) [or, ₹ 13,700 (₹ 9,37,570 - ₹ 9,23,870)]. Hence, the company **should accept the offer** of 2% discount and 7,500 order size.

OR

	Amount (₹)
Material purchase cost $\{(\text{₹ } 25 \times 98\%) \times 37,210 \text{ kgs}\}$	9,11,645
Add: Ordering costs (₹ 240 × 4.96 orders)	1,191

Add: Carrying cost $\left(\frac{7,500}{2} \times ₹ 2.94\right)$	11,025
Total Cost	9,23,861

Since, ordering 7,500 kg. at a time, the company saves ₹ 13,709 (₹ 9,37,570 - ₹ 9,23,861) [or, ₹ 13,889 (₹ 9,37,750 - ₹ 9,23,861)]. Hence, the company **should accept the offer** of 2% discount and 7,500 order size.

Working Notes:

1. No. of production units of product EMM:

= Forecasted sales + Closing stock – Opening stock

$$= 45,600 + \frac{45,600}{12} - 3,150$$

$$= 45,600 + 3,800 - 3,150 = 46,250 \text{ units of EMM}$$

2. Quantity of REX to be purchased:

	In Kgs.
No. of units of EMM to be produced	46,250
Quantity of REX required to produce one unit of EMM	0.8 kg
Quantity of REX for 46,250 units	37,000 kg
Less: Opening stock of REX	(2,100)
Add: Closing Stock of REX	2,310
Quantity of REX to be purchased	37,210 kgs

3. Computation of Lead times

$$\text{Average Lead time} = \frac{\text{Max. lead time} + \text{Min. lead time}}{2} = 8 \text{ days}$$

Or, Max. + Min. lead time = 16 days.....(i)

And Max – Min. lead time = 6 days (given).....(ii)

Solving both the equations

Max. + Min. lead time	=	16
Max – Min. lead time	=	6
2 Min lead time	=	10

Thus,

Minimum lead time = 5 days and

Maximum lead time = 5 + 6 = **11 days**

(b) Present Value of cash outflow:

	Amount (₹)
Purchase price of CNC machine	27,00,000
Add: Installation expenses	95,000
Less: Subsidy (₹ 27,00,000 × 0.15 × 0.901)	3,64,905
Less: Sale value of old machine	6,50,000
Less: tax saving due to loss on sale of old machine (10,78,000 – 6,50,000) × 0.30	1,28,400
Total PV of cash outflows	16,51,695

Statement showing cash inflows:

	Year 1 to 2	Year 3 to 7
Increase in revenue	2,76,000	2,76,000
Saving in cash operating cost	2,16,000	2,16,000
Saving in maintenance cost	-	40,000
Less: Incremental Depreciation	1,06,000	1,06,000
Incremental profit before tax	3,86,000	4,26,000
Less: Tax @ 30%	1,15,800	1,27,800
Incremental profit after tax	2,70,200	2,98,200
Add: Incremental depreciation	1,06,000	1,06,000
Incremental cash flow after tax	3,76,200	4,04,200

Year	CFAT	P V @ 11%	PV of cash flows
1 to 2	3,76,200	1.713	6,44,431
3 to 7	4,04,200	3.000	12,12,600
7 th	5,70,000	0.482	2,74,740
Total PV of cash Inflows			21,31,771
Less PV of cash outflows			16,51,695
NPV			4,80,076

OR

Year	CFAT	P V @ 11%	PV of cash flows
1 to 7	3,76,200	4.713	17,73,031
7 th	5,70,000	0.482	2,74,740
3-7 (Saving in AMC net of taxes) (40000 x 70%)	28,000	3	84,000
Total PV of cash Inflows			21,31,771
Less PV of cash outflows			16,51,695
NPV			4,80,076

Decision: CNC machine should be purchased as NPV is positive.

Working Notes:

Computation of Depreciation:

Depreciation on existing machine	15,40,000/10 = ₹ 1,54,000
Depreciation on CNC Machine (₹ 27,00,000 + ₹ 95,000 – ₹ 4,05,000 – ₹ 5,70,000)/7	18,20,000/7 = ₹ 2,60,000
Incremental depreciation	₹ 1,06,000

Question 3

(a) Following information relates to labour of KAY PEE Ltd.:

	Skilled	Semi-skilled	Unskilled	Total
Number of workers in standard gang	12	8	5	25
Standard rate per hour (₹)	75	50	40	-
Number of workers in actual gang				25
Actual rate per hour (₹)	80	48	42	

The standard output of gang was 12 units per hour of the product M. The gang was engaged for 200 hours during the month of March 2019 out of which 20 hours were lost due to machine breakdown and 2,295 units of product M were produced. The actual number of skilled workers was 2 times the semi-skilled workers. Total labour mix variance was ₹ 10,800 (A).

You are required to calculate the following:

- Actual number of workers in each category.
- Labour rate variance.

(iii) Labour yield variance.

(iv) Labour efficiency variance

(8 Marks)

(b) Using the information given below, complete the Balance Sheet of PQR Private Limited:

(i)	Current ratio	1.6 :1
(ii)	Cash and Bank balance	15% of total current assets
(iii)	Debtors turnover ratio	12 times
(iv)	Stock turnover (cost of goods sold) ratio	16 times
(v)	Creditors turnover (cost of goods sold) ratio	10 times
(vi)	Gross Profit ratio	20%
(vii)	Capital Gearing ratio	0.6
(viii)	Depreciation rate	15% on W.D.V.
(ix)	Net Fixed Assets	20% of total assets

(Assume all purchase and sales are on credit)

Balance Sheet of PQR Private Limited as at 31.03.2019

Liabilities	₹	Assets	₹
Share Capital	25,00,000	Fixed Assets	
Reserve & surplus	?	Opening WDV	?
12% Long term debt	?	Less: Depreciation	_____?
Current Liabilities			
Creditors	?	Current Assets	
Provisions & outstanding expenses	_____?	Stock	?
	68,50,000	Debtors	?
		Cash and bank balance	_____?
Total	?	Total	?

(8 Marks)

Answer

(a) (i) **Actual Numbers of Workers in Each Category**

Assumed Semi Skilled Workers = L

Total Labour Mix Variance

$$= \text{Total Actual Time Worked (hours)} \times \{\text{Average Standard Rate per hour of Standard Gang} \text{ Less: Average Standard Rate per hour of Actual Gang}@\}$$

@on the basis of hours worked

$$10,800 \text{ (A)} = 4,500 \text{ hrs.} \times \left(₹ 60 - \frac{₹ 75 \times 180 \text{ hrs.} \times 2L + ₹ 50 \times 180 \text{ hrs.} \times L + ₹ 40 \times 180 \text{ hrs.} \times (25 - 3L)}{4,500 \text{ hrs.}} \right)$$

$$L = 7$$

$$\text{Semi-Skilled} = 7 \text{ (as above)}$$

$$\text{Skilled} = 14 \text{ (twice of 7)}$$

$$\text{Unskilled} = 4 \text{ (balance out of 25)}$$

(ii) **Labour Rate Variance** = Actual Hours Paid × (Standard Rate – Actual Rate)

$$\text{Skilled Workers} = 2,800 \text{ hrs.} \times (₹ 75 - ₹ 80)$$

$$= ₹ 14,000 \text{ (A)}$$

$$\text{Semi-Skilled} = 1,400 \text{ hrs.} \times (₹ 50 - ₹ 48)$$

$$= ₹ 2,800 \text{ (F)}$$

$$\text{Un Skilled Workers} = 800 \text{ hrs.} \times (₹ 40 - ₹ 42)$$

$$= ₹ 1,600 \text{ (A)}$$

$$\text{Total} = ₹ 14,000 \text{ (A)} + ₹ 2,800 \text{ (F)} + ₹ 1,600 \text{ (A)}$$

$$= ₹ 12,800 \text{ (A)}$$

(iii) **Labour Yield Variance**

$$= \text{Average Standard Rate per hour of Standard Gang} \times \{ \text{Total Standard Time (hours)} \text{ Less } \text{Total Actual Time Worked (hours)} \}$$

$$= \left(\frac{₹ 2,86,875}{4,781.25 \text{ hrs.}} \right) \times (4,781.25 \text{ hrs.} - 4,500 \text{ hrs.})$$

$$= ₹ 16,875 \text{ (F)}$$

Or

$$= \text{Std. Rate} \times (\text{Std. Hours} - \text{Revised Actual Hours Worked})$$

$$\text{Skilled Workers} = ₹ 75 \times (2,295 \text{ hrs.} - 2,160 \text{ hrs.})$$

$$= ₹ 10,125 \text{ (F)}$$

$$\text{Semi-Skilled} = ₹ 50 \times (1,530 \text{ hrs.} - 1,440 \text{ hrs.})$$

$$= ₹ 4,500 \text{ (F)}$$

$$\text{Un Skilled Workers} = ₹ 40 \times (956.25 \text{ hrs.} - 900 \text{ hrs.})$$

$$= ₹ 2,250 \text{ (F)}$$

$$\text{Total} = ₹ 10,125 \text{ (F)} + ₹ 4,500 \text{ (F)} + ₹ 2,250 \text{ (F)}$$

$$= ₹ 16,875 \text{ (F)}$$

(iv) Labour Efficiency Variance

	= Std. Rate × (Std. Hours – Actual Hours Worked)
Skilled Workers	= ₹ 75 × (2,295 hrs. – 2,520 hrs.)
	= ₹ 16,875 (A)
Semi- Skilled	= ₹ 50 × (1,530 hrs. – 1,260 hrs.)
	= ₹ 13,500 (F)
Un Skilled Workers	= ₹ 40 × (956.25 hrs. – 720 hrs.)
	= ₹ 9,450 (F)
Total	= ₹ 16,875 (A) + ₹ 13,500 (F) + ₹ 9,450 (F)
	= ₹ 6,075 (F)

Working Notes:

Statement Showing “Standard & Actual Cost”

Category	Standard Cost			Actual Cost			Revised Actual Hrs. (In Std. Proportion)
	Hrs.	Rate	Amt.	Hrs.	Rate	Amt.	
Skilled	2,295 <small>(12Wx200hx2,295/2,400)</small>	75	1,72,125	2,520 <small>(14Wx180)</small>	80	2,01,600	2,160 <small>(4,500 hrs.x $\frac{2,295 \text{ hrs.}}{4,781.25 \text{ hrs.}}$)</small>
Semi-Skilled	1,530 <small>(8Wx200hx2,295/2,400)</small>	50	76,500	1,260 <small>(7Wx180)</small>	48	60,480	1,440 <small>(4500hrs.x $\frac{1530 \text{ hrs.}}{4781.25 \text{ hrs.}}$)</small>
Un-Skilled	956.25 <small>(5Wx200hx2,295/2,400)</small>	40	38,250	720 <small>(4Wx180)</small>	42	30,240	900 <small>(4,500hrs.x $\frac{956.25 \text{ hrs.}}{4,781.25 \text{ hrs.}}$)</small>
Total	4,781.25	60	2,86,875	4,500		2,92,320	4,500

(b) **Balance Sheet of PQR Private Limited as at 31.03.2019**

Liabilities	₹	Assets	₹
Share Capital	25,00,000	Fixed assets	
Reserve & Surplus	17,81,250	Opening WDV	32,23,529
12% Long term debt	25,68,750	Less: Depreciation	<u>4,83,529</u>
Current Liabilities		Current Assets	
Creditors	55,89,600	Stock	34,93,500

Provisions & outstanding expenses	12,60,400	68,50,000	Debtors	58,22,500	
			Cash and bank balance	16,44,000	1,09,60,000
Total		1,37,00,000			1,37,00,000

Working Notes:**1. Computation of Current Assets and Cash & Bank Balance**

$$\text{Current Ratio} = \frac{\text{Current Assets (CA)}}{\text{Current Liabilities (CL)}} = 1.6$$

$$\text{Current Assets} = 1.6 \text{ Current Liabilities} = 1.6 \times ₹ 68,50,000 = ₹ 1,09,60,000/-$$

$$\text{So, Cash and Bank Balance} = 15\% \text{ of Current Assets} = ₹ 16,44,000/-$$

2. Computation of Total Assets, Fixed Assets and Depreciation

$$\text{Total Assets} = \text{Net Fixed Assets} + \text{Current Asset}$$

$$\text{Or Total Assets} = 20\% \text{ of Total Asset} + ₹ 1,09,60,000/-$$

$$\text{Or Total Assets} = ₹ 1,37,00,000$$

$$\text{So, Net Fixed Assets} = 20\% \text{ of Total Asset} = ₹ 27,40,000$$

$$\text{Depreciation} = \frac{27,40,000}{85\%} \times 15\% = ₹ 4,83,529$$

$$\text{Fixed Assets} = ₹ 27,40,000 + ₹ 4,83,529 = ₹ 32,23,529$$

3. Calculation of Stock, Debtors and Creditors

$$\text{Stock} + \text{Debtors} = \text{Current Assets} - \text{Cash \& Bank}$$

$$= ₹ 1,09,60,000 - 16,44,000$$

$$= ₹ 93,16,000$$

Now let Sales be x

$$\text{So, Debtors (Credit Sales)} = \frac{\text{Credit Sales}}{\text{Debtors turnover ratio}} = \frac{x}{12}$$

$$\text{Further, Stock (on Cost of Goods Sold)} = \frac{\text{Sales} - 20\% \text{ of Sales}}{16}$$

$$= \frac{x - 20\% \text{ of } x}{16}$$

$$\begin{aligned} & x - \frac{x}{5} = \frac{4x}{5} \\ & = \frac{x}{5} = \frac{4x}{16} \\ & = \frac{x}{20} \end{aligned}$$

$$\text{So, } \frac{x}{12} + \frac{x}{20} = ₹ 93,16,000$$

$$\text{Or, } \frac{10x + 6x}{120} = ₹ 93,16,000$$

$$\text{Or, } \frac{16x}{120} = ₹ 93,16,000$$

$$\text{Or } x = ₹ 6,98,70,000$$

$$\text{So, Sales} = ₹ 6,98,70,000$$

$$\text{Cash of Goods Sold (COGS)} = ₹ 5,58,96,000$$

$$\text{Stock (COGS/16)} = ₹ \mathbf{34,93,500}$$

$$\text{Debtors (Sales/12)} = ₹ \mathbf{58,22,500}$$

$$\text{Creditors (COGS/10)} = ₹ \mathbf{55,89,600}$$

4. Calculation of Provision of outstanding Expenses

$$= ₹ 68,50,000 - ₹ 55,89,600$$

$$= ₹ 12,60,400$$

5. Share Capital + Reserve & surplus + long term debt = Total Asset or total liability – Current liability

$$\text{Or, Reserve & surplus + long term debt} = ₹ 1,37,00,000 - ₹ 68,50,000 - ₹ 25,00,000$$

$$= ₹ 43,50,000$$

Calculation of long term Debt and Reserve & Surplus

$$\text{Now, Capital Earning ratio} = 0.6$$

$$\text{So, } \frac{12\% \text{ long term Debt}}{\text{Equity Share Capital + Reserve \& Surplus}} = 0.6$$

$$\text{Or, } \frac{43,50,000 - \text{Reserve \& Surplus}}{25,00,000 + \text{Reserve \& Surplus}} = .6$$

Or, Reserve & Surplus = ₹ 17,81,2501

So, 12% long term debt = ₹ 25,68,750

Question 4

(a) Following are the information given by owner of M/s Moonlight Co. running a hotel at Manali. You are requested to advise him regarding the rent to be charged from his customer per day so that he is able to earn 20% profit on cost other than interest.

- (i) Staff salaries ₹ 4,00,000.
- (ii) The Room Attendant's salary is ₹ 10 per day. The salary is paid on daily basis and the services of room attendant are needed only when the room is occupied. There is one room attendant for one room.
- (iii) Lighting, Heating and Power:
 - (a) The normal lighting expenses for a room if it is occupied for the whole month is ₹ 250.
 - (b) Power is used only in winter and normal charge per month if occupied for a room is ₹ 100.
- (iv) Repairs to Building ₹ 50,000 per annum.
- (v) Linen etc. ₹ 24,000 per annum.
- (vi) Sundries ₹ 70,770 per annum.
- (vii) Interior decoration and furnishing ₹ 50,000 per annum.
- (viii) Cost of Building ₹ 20,00,000, rate of depreciation 5%
- (ix) Other Equipment ₹ 5,00,000, rate of depreciation 10%
- (x) Interest @ 5% may be charged on its investment of ₹ 25,00,000 in the building and equipment.
- (xi) There are 200 rooms in the hotel and 90% of the rooms are normally occupied in summer and 40% of the rooms are occupied in winter. You may assume that period of summer and winter is six months each. Normal days in a month may be assumed to be 30.

(8 Marks)

(b) Vikalp Ltd. provides you the following information for the year ending 31.03.2019:

	Amount (₹)
Earnings before interest and tax	28,80,000
Less: Interest on long-term loans @12%	2,70,000
Interest on Debentures @10% (Debentures issued on 01.08.2018)	3,60,000
Earnings before tax	22,50,000
Less: Tax @ 30%	6,75,000
Earnings after tax	15,75,000
6,30,000 equity shares (of ₹ 10 each)	
Ruling market price per share	24
Undistributed reserves and surplus	60,50,000

The company needs to raise ₹ 30,00,000 for modernisation of its plants and has the following options of raising the funds:

- (i) Raise the entire funds by 13% long-term loan or
- (ii) Raise partly by issue of 75,000 equity shares @ ₹ 20 per share and the balance by 11% debentures.

The company expects the rate of return on funds employed to be improved by 3% because of modernisation and that if Debt Equity ratio [Debt / (Debt + Equity)] exceeds 45%, then price earnings ratio is to go down by 15%.

Required: If the company is to follow policy of maximising the market value of equity share, which option should it choose? **(8 Marks)**

Answer

(a) **Statement of Total cost:**

	(₹)
Staff salary	4,00,000
Room attendants' salary (₹ 10 × 46,800 room-days)	4,68,000
Lighting expenses (₹ 250 × 1,560 room-months)	3,90,000
Power expenses (₹ 100 × 480 room-months)	48,000
Repairs to building	50,000
Linen	24,000

Sundries Expenses	70,770
Interior decoration and furnishing	50,000
Depreciation on Building (₹ 20 Lakhs × 5%)	1,00,000
Depreciation on other Equipment (₹ 5 Lakhs × 10%)	50,000
Total cost excluding interest	16,50,770
Add: Profit Margin (20% on cost excluding interest)	3,30,154
Add: Interest on investments (₹ 25 Lakhs × 5%)	1,25,000
Total Rent to be charged	21,05,924

Calculation of Room Rent per day:

Total Cost / Equivalent Room days = ₹ 21,05,924 ÷ 46,800 = ₹ 44.99 or ₹ 45

Note: It is assumed that staff salary of ₹ 4,00,000 is per annum.

Working Notes:**Total Room days in a year**

Season	Occupancy (Room-days)	Equivalent occupied room-month
Summer – 90% Occupancy	200 Rooms × 90% × 6 months × 30 days in a month = 32,400 Room Days	32,400 ÷ 30 days = 1,080 room-month
Winter – 40% Occupancy	200 Rooms × 40% × 6 months × 30 days in a month = 14,400 Room Days	14,400 ÷ 30 days = 480 room-month
Total Room Days	32,400 + 14,400 = 46,800 Room Days	1,560 room-month

(b)

Particulars	Financial Options	
	Option I	Option II
	13% Long term loan of ₹ 30,00,000	75,000 equity share @ ₹ 20 i.e. 15,00,000 and 11% debenture of ₹ 15,00,000
Earnings before interest and Tax (EBIT) 17.4 % on (₹ 2,00,00,000 + ₹ 30,00,000)	40,02,000	40,02,000
Less: Interest on old debentures (₹ 2,70,000) and long term loan	<u>8,10,000</u>	<u>8,10,000</u>

(₹ 54,00,000 @10% i.e. 5,40,000)		
	<u>31,92,000</u>	<u>31,92,000</u>
Less: Interest on long term loan (new) @ 13% on ₹ 30,00,000	3,90,000	
Less: Interest on Debenture (new) @ 11% on ₹ 15,00,000		1,65,000
<i>Earnings before tax</i>	28,02,000	30,27,000
Less: Taxes @ 30%	8,40,600	9,08,100
Earnings for equity shareholders (EAT)	19,61,400	21,18,900
Number of Equity Shares	6,30,000	7,05,000
Earnings per Share (EPS)	₹ 3.113	₹ 3.005
Price/ Earnings ratio	8.16	9.6
Market Price per Share (EPS x P/E Ratio)	25.40	28.85

So, Option II is better

Working Notes:

1. Calculation of Present and future rate of Earnings

Sources	₹
Equity Share Capital (6,30,000x 10)	63,00,000
Long term Loan (2,70,000 X $\frac{100}{12}$)	22,50,000
10% Debentures (3,60,000 X $\frac{100}{10}$ X $\frac{12}{8}$)	54,00,000
Undistributed Reserves and surplus	60,50,000
Total Capital	2,00,00,000
Earnings before interest and tax (EBIT) given	28,80,000
Rate of Present Earnings $\frac{28,80,000}{2,00,00,000} \times 100$	14.4%
New rate of earnings (14.4%+3%)	17.4%

2. Calculation of Current PE Ratio

$$EPS = \frac{15,75,000}{6,30,000} = 2.5$$

$$\text{Price Earnings Ratio} = \frac{24}{2.5} = 9.6$$

3. Calculation of future PE Ratio:

Option 1	Option 2
$\frac{\text{Debt}}{\text{Debt + Equity}} \times 100$ $\frac{22,50,000 + 54,00,000 + 30,00,000}{2,30,00,000} \times 100$ $= \frac{1,06,50,000}{2,30,00,000} \times 100$ $= 46.30$ <p>Price earnings ratio go down by 15% and will be $9.6 \times 0.85 = 8.16$</p>	$\frac{\text{Debt}}{\text{Debt + Equity}} \times 100$ $\frac{22,50,000 + 54,00,000 + 15,00,000}{2,30,00,000} \times 100$ $= \frac{91,50,000}{2,30,00,000} \times 100$ $= 39.78$

Question 5

- (a) Distinguish between cost control and cost reduction.
- (b) Differentiate between job costing and batch costing. Name three such industries where these are used.
- (c) Explain the functions of a Chief Financial Officer.
- (d) Write any four differences between Cash Flow Statement and Funds Flow statement.

(4 x 4 = 16 Marks)

Answer

(a) Difference between Cost Control and Cost Reduction

Cost Control	Cost Reduction
1. Cost control aims at maintaining the costs in accordance with the established standards.	1. Cost reduction is concerned with reducing costs. It challenges all standards and endeavours to better them continuously.
2. Cost control seeks to attain lowest possible cost under existing conditions.	2. Cost reduction recognises no condition as permanent, since a change will result in lower cost.
3. In case of Cost Control, emphasis is on past and present.	3. In case of cost reduction it is on present and future.

4. Cost Control is a preventive function.	4. Cost reduction is a corrective function. It operates even when an efficient cost control system exists.
5. Cost control ends when targets are achieved.	5. Cost reduction has no visible end.

(b) Job Costing and Batch Costing

According to job costing, costs are collected and accumulated according to job. Each job or unit of production is treated as a separate entity for the purpose of costing. Job costing may be employed when jobs are executed for different customers according to their specification.

Examples: Printing press, Interior decoration, Ship building, Hardware, Heavy Machinery, Foundry, General Engineering Works, Machine Tools, Repair and similar other work.

On the other hand, batch costing is a form of job costing, a lot of similar units which comprises the batch may be used as a cost unit for ascertaining cost.

Such a method of costing is used in case of pharmaceutical industry, readymade garments, industries manufacturing parts of TV, radio sets, etc.

(c) Functions of a Chief Financial Officer: The twin aspects viz procurement and effective utilization of funds are the crucial tasks, which the CFO faces. The Chief Finance Officer is required to look into financial implications of any decision in the firm. Thus all decisions involving management of funds comes under the purview of finance manager. These are namely -

- Estimating requirement of funds
- Decision regarding capital structure
- Investment decisions
- Dividend decision
- Cash management
- Evaluating financial performance
- Financial negotiation
- Keeping touch with stock exchange quotations & behaviour of share prices.

(d) Difference between Cash Flow Statement and Funds Flow Statement

Cash Flow statement	Funds Flow statement
(i) It ascertains the changes in balance of cash in hand and bank.	(i) It ascertains the changes in financial position between two accounting periods.
(ii) It analyses the reasons for	(ii) It analyses the reasons for change in

changes in balance of cash in hand and bank.	financial position between two balance sheets.
(iii) It shows the inflows and outflows of cash.	(iii) It reveals the sources and application of funds.
(iv) It is an important tool for short term analysis.	(iv) Funds Flow Analysis helps in the analysis of short term and long term solvency of a business.
(v) The two significant areas of analysis are cash generating efficiency and free cash flow.	(v) It helps to test whether working capital has been effectively used or not.

Question 6

- (a) The net loss of Waywell Ltd. appeared at ₹ 1,18,500 as per cost records for the year ending 31.03.2019. The following information was revealed as a result of scrutiny of the figures of financial and cost records:

	Amount (₹)
Factory overheads over absorbed in cost accounts	32,500
Administrative overheads under absorbed in cost accounts	38,250
Depreciation charged in financial accounts	4,55,800
Depreciation recovered in cost accounts	4,99,700
Loss due to obsolescence charged in financial accounts	11,400
Income tax provision made in financial accounts	32,650
Interest on investments not included in cost accounts	96,000
Store adjustment (Credit) in financial accounts	12,800
Value of opening stock in Cost accounts	18,85,600
Financial accounts	19,62,500
Value of closing stock in Cost accounts	21,15,800
Financial accounts	21,98,900
Imputed rent charged in cost accounts	1,80,000
Selling and distribution expenses not charged in cost accounts	72,450
Donation to Prime Minister Relief Fund	11,000
Loss on sale of furniture	7,250
Bad debts written off	18,300

Required: Prepare a reconciliation statement and arrive at the profit or loss as per financial accounts. **(8 Marks)**

- (b) Calculate the amount of working capital required for XYZ Ltd. from the following information:

Elements of Cost	Per unit (₹)
Raw Material	80.00
Direct Labour	30.00
Overheads	60.00
Total Cost	170.00
Profit	30.00
Sales	200.00

Raw materials are held in stock on an average for one month. Work-in progress (completion stage 50 per cent), on an average half a month. Finished goods are in stock on an average for one month. Credit allowed by suppliers is one month and credit allowed to debtors is two months. Time lag in payment of wages is 1 ½ weeks. Time lag in payment of overheads is one month. One fourth of the sales are made on cash basis.

Cash in hand and at bank is expected to be ₹ 50,000.

You are required to prepare statement showing the working capital needed to finance a level of activity of 52,000 units of production. Assume that production is carried on evenly throughout the year and wages and overhead accrue similarly. For the calculation purpose 4 weeks may be taken as equivalent to a month and 52 weeks in a year.

(8 Marks)

Answer

(a) Statement of Reconciliation

Sl. No.	Particulars	Amount (₹)	Amount (₹)
	Net loss as per Cost Accounts		(1,18,500)
	Additions:		
1.	Factory O/H over recovered	32,500	
2.	Depreciation over- charged (4,99,700 – 4,55,800)	43,900	
3.	Interest on investments	96,000	
4.	Store adjustment (Credit)	12,800	
5.	Difference in Value of Closing Stock (21,98,900 – 21,15,800)	83,100	
6.	Imputed rent	1,80,000	4,48,300
	Deductions:		
1.	Administration O/H under recovered	38,250	
2.	Loss due to obsolescence	11,400	

3.	Income tax provisions	32,650	
4.	Difference in Value of Opening Stock (19,62,500 – 18,85,600)	76,900	
5.	Selling & Distribution expenses	72,450	
6.	Donation to Prime Minister Relief Fund	11,000	
7.	Loss on sale of furniture	7,250	
8.	Bad debt written off	18,300	(2,68,200)
	Net Profit as per Financial A/c		61,600

(b) Calculation of Working Capital Requirement

	(₹)	(₹)
A. Current Assets		
(i) Inventories:		
Raw material (one month i.e. 4 weeks) $\left(\frac{₹80 \times 52,000}{52 \text{ weeks}} \times 4 \text{ weeks} \right)$		3,20,000
WIP Inventory (1/2 month i.e. 2 weeks)		
- Material $\left(\frac{₹80 \times 52,000}{52 \text{ weeks}} \times 2 \text{ weeks} \right) \times 0.5$	80,000	
- Labour $\left(\frac{₹30 \times 52,000}{52 \text{ weeks}} \times 2 \text{ weeks} \right) \times 0.5$	30,000	
- Overheads $\left(\frac{₹60 \times 52,000}{52 \text{ weeks}} \times 2 \text{ weeks} \right) \times 0.5$	60,000	1,70,000
Finished goods (1 month i.e. 4 weeks) $\left(\frac{₹170 \times 52,000}{52 \text{ weeks}} \times 4 \text{ weeks} \right)$		6,80,000
(ii) Receivables (Debtors) (2 months i.e. 8 weeks) $\left(\frac{₹170 \times 52,000}{52 \text{ weeks}} \times 8 \text{ weeks} \right) \times \frac{3}{4}$		10,20,000
(iii) Cash in hand & at bank		50,000
Total Current Assets		22,40,000

B. Current Liabilities:		
(i) Payables (Creditors) for materials (1 month i.e. 4 weeks)		
$\left(\frac{₹80 \times 52,000}{52 \text{ weeks}} \times 4 \text{ weeks} \right)$		3,20,000
(ii) Outstanding wages (1.5 weeks)		
$\left(\frac{₹30 \times 52,000}{52 \text{ weeks}} \times 1.5 \text{ weeks} \right)$		45,000
(iii) Outstanding overheads (1 month i.e. 4 weeks)		
$\left(\frac{₹60 \times 52,000}{52 \text{ weeks}} \times 4 \text{ weeks} \right)$		2,40,000
Total Current Liabilities		6,05,000
Net Working Capital Needs (A – B)		16,35,000

OR

(Calculations Based on assumption 1 year= 12 months)

	(₹)	(₹)
A. Current Assets		
(i) Inventories:		
Raw material (one month) $(80 \times 52,000) \times 1/12$		3,46,667
WIP Inventory (1/2 month i.e. 2 weeks)		
- Material $(80 \times 52,000) \times \frac{1}{2} \times 1/12 \times 50\%$	86,667	
- Labour $(30 \times 52,000) \times \frac{1}{2} \times 1/12 \times 50\%$	32,500	
- Overheads $(60 \times 52,000 \times \frac{1}{2} \times 1/12 \times 50\%)$	65,000	1,84,167
Finished goods (1 month) $(170 \times 52,000 \times 1/12)$		7,36,667
(ii) Receivables (Debtors) (2 months)		
$170 \times 52,000 \times 2/12 \times 3/4$		11,05,000
(iii) Cash in hand & at bank		50,000
Total Current Assets		24,22,500
B. Current Liabilities:		
(i) Payables (Creditors) for materials (1 month)		
$80 \times 52,000 \times 1/12$		3,46,667

(ii) Outstanding wages (1.5 weeks) $\left(\frac{₹30 \times 52,000}{52 \text{ weeks}} \times 1.5 \text{ weeks} \right)$		45,000
(iii) Outstanding overheads (1 month) $60 \times 52,000 \times 1/12$		2,60,000
Total Current Liabilities		6,51,667
Net Working Capital Needs (A – B)		17,70,833

Question 7

Answer any **four** of the following:

- Describe the remedial steps to be taken to minimize the labour turnover.
- Distinguish between Financial Lease and Operating Lease.
- "Operating risk is associated with cost structure, whereas financial risk is associated with capital structure of a business concern." Critically examine this statement.
- Explain the following terms:
 - Debt Securitisation
 - Uniform costing
- What are the cases where flexible budget is found suitable? **(4 x 4 = 16 Marks)**

Answer**(a) The following steps are useful for minimizing labour turnover:**

- Exit interview:* An interview to be arranged with each outgoing employee to ascertain the reasons of his leaving the organization.
- Job analysis and evaluation:* to ascertain the requirement of each job.
- Organization should make use of a scientific system of recruitment, placement and promotion for employees.
- Organization should create healthy atmosphere, providing education, medical and housing facilities for workers.
- Committee for settling workers grievances.

(b) Difference between Financial Lease and Operating Lease

S. No.	Finance Lease	Operating Lease
1.	The risk and reward incident to ownership are passed on the lessee. The lessor only remains the legal owner of the asset.	The lessee is only provided the use of the asset for a certain time. Risk incident to ownership belongs only to the lessor.

2.	The lessee bears the risk of obsolescence.	The lessor bears the risk of obsolescence.
3.	The lease is non-cancellable by either party under it.	The lease is kept cancellable by the lessor.
4.	The lessor does not bear the cost of repairs, maintenance or operations.	Usually, the lessor bears the cost of repairs, maintenance or operations.
5.	The lease is usually full payout.	The lease is usually non-payout.

- (c) "Operating risk is associated with cost structure whereas financial risk is associated with capital structure of a business concern".

Operating risk refers to the risk associated with the firm's operations. It is represented by the variability of earnings before interest and tax (EBIT). The variability in turn is influenced by revenues and expenses, which are affected by demand of firm's products, variations in prices and proportion of fixed cost in total cost. If there is no fixed cost, there would be no operating risk. Whereas financial risk refers to the additional risk placed on firm's shareholders as a result of debt and preference shares used in the capital structure of the concern. Companies that issue more debt instruments would have higher financial risk than companies financed mostly by equity.

- (d) (i) **Debt Securitisation:** It is a method of recycling of funds. It is especially beneficial to financial intermediaries to support the lending volumes. Assets generating steady cash flows are packaged together and against this asset pool, market securities can be issued, e.g. housing finance, auto loans, and credit card receivables.
- (ii) **Uniform Costing:** When a number of firms in an industry agree among themselves to follow the same system of costing in detail, adopting common terminology for various items and processes they are said to follow a system of uniform costing.
- (e) **Flexible budgeting may be resorted to under following situations:**
- i. In the case of new business venture due to its typical nature it may be difficult to forecast the demand of a product accurately;
 - ii. Where the business is dependent upon the mercy of nature e.g., a person dealing in wool trade may have enough market if temperature goes below the freezing point;
 - iii. In the case of labour intensive industry where the production of the concern is dependent upon the availability of labour;
 - iv. Seasonal fluctuations in sales and/or production, for example in soft drinks industry;
 - v. A company which keeps on introducing new products or makes changes in the design of its products frequently;
 - vi. Industries engaged in make-to-order business like ship building;
 - vii. In industry which is influenced by changes in fashion; and
 - viii. General changes in sales.