# CA - IPCC
# November 2012

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**Ans.1(a)** **X Ltd.**

**Calculation of Degree of operating leverage**

| Particulars | 25,000 units | 30,000 units |
|---|---|---|
| Sales | 35,0000 | 42,0000 |
| – V.C. | 22,5000 | 27,0000 |
| Contribution | 1,25,000 | 1,50,000 |
| – F.C. (W.N.) | 1,00,000 | 1,00,000 |
| EBIT | 25,000 | 50,000 |
| $D.O.L = \frac{Con't}{EBIT}$ | $= \frac{1,25,000}{25,000}$ | $= \frac{1,50,000}{50,000}$ |
| | = 5 times | = 3 times |

Working Note :- We know that at BEP ; C = FC

$\therefore$ F. C. = 20,000 × 5 = ₹ 1,00,000

**Ans.1(b)**

$$\text{Labour Turnover (under Replacement Method)} = \frac{\text{No.of workers replaced}}{\text{Average no.of workers}} \times 100$$

$$8 = \frac{36}{\text{Average no.of workers}}$$

$$\text{Average no.of workers} = \frac{36}{8} \times 100 = 450$$

$$\text{Labour Turnover (Under Separation method)} = \frac{\text{No.of workers separated}}{\text{Average no.of workers}} \times 100$$

$$6 = \frac{\text{No.of workers separated}}{450} \times 100$$

$$\text{No.of workers separated} = 450 \times 6 = 27$$

$$\text{Labour Turnover (Under Flux Method)} = \frac{\text{No.of Accession} + \text{No.of separation}}{\text{Average no.of workers}}$$

$$14 = \frac{\text{No.of Accession} + 27}{450} \times 100$$

$$\text{No. of Accession} = 63 - 27 = 36$$

$\Rightarrow$ No. of Workers Recruited & Joined = 36

$\Rightarrow$) No. of Workers Left & discharged = 27

**Ans.1(c)** (i) Annual Compunding

$F.V. = P(1+r)^n$

$F.V. = 2,40,000\ (1.10)^3 = 3,19,440$

(ii) Semi-Annual Compunding

$$F.V = P\left(1+\frac{r}{m}\right)^{n\times m}$$

$$\therefore F.V. = 2,40,000\left(1+\frac{.10}{2}\right)^{3\times 2} = 2,40,000\ (1.05)^6 = 3,21,623$$

**Ans.1(d)** Annual Demand of Product = 8,000 x 4 = 32,000 unit

Annual Demand of Raw Material = 32,000 unit x 3 = 96,000 unit

A = 96,000 unit

O = ₹ 1,000 C

C = 20 x 15% = ₹ 3

(i) $EOQ = \sqrt{\frac{2AO}{C}} = \sqrt{\frac{2 \times 96{,}000 \times 1{,}000}{3}}$ = 8,000 unit

(iii) Purchase in Quarterly installment means 96,000 / 4 = 24,000

| Particulars | 8,000 Units | 24,000 Units |
|---|---|---|
| Purchase Cost = A × C | 96,000 =19,20,000 | 96,000 =18,81,600 |
| Ordering Cost = No. of Order x O | $\frac{96{,}000}{8{,}000}$ × =1,000 = 12,000 | $\frac{96{,}000}{24{,}000}$ ×1,000 = 4,000 |
| Carrying Cost = ½ Order Size x C | ½×8,000 × 3 =12,000 | ½×24,000 × 2.94 =35,280 |
| Total Cost | 19,44,000 | 19,20,880 |

⇒ Discount Offer of 2% should be accepted

**Ans.2(a)**

| Items | Basis | X | Y | Z | A | B |
|---|---|---|---|---|---|---|
| Indirect Material | Given | 20,000 | 30,000 | 45,000 | 25,000 | 5,000 |
| Indirect Labour | Given | 45,000 | 50,000 | 70,000 | 60,000 | 35,000 |
| Superintendant Salary | Given | -- | -- | 96,000 | -- | -- |
| Fuel & Heat | Radiator Sections | 1,500 | 3,000 | 4,500 | 3,750 | 2,250 |
| Power | KWH | 52,500 | 60,000 | 45,000 | 22,500 | -- |
| Rent & Rates | Area | 44,000 | 40,000 | 30,000 | 24,000 | 12,000 |
| Insurance | Value of Assets | 4,000 | 6,000 | 5,000 | 1,000 | 2,000 |
| Meal | No. of Employees | 12,000 | 14,000 | 24,000 | 6,000 | 4,000 |
| Depreciation | Value of Asset | 60,000 | 90,000 | 75,000 | 15,000 | 30,000 |
| | | 2,39,000 | 2,93,000 | 3,94,500 | 1,57,250 | 90,250 |

Let total overhead of Dept. A be x and Dept B be y

x =1,57,250 + 10% of y

y = 90,250 + 20% of x

or x =1,57,250 + 0.1 y

or x – 0.1y =1,57,250 -------- (i)

y = 90,250 + 0.2x

y – 0.2x = 90,250

0.1y – 0.02x = 9,025 -------- (ii) (Multiplying both side by 0.1)

Solving the above Equation (i) & (ii), we get:

x – 0.1y =1,57,250

– 0.02x + 0.1y = 9,025

0.98x = 1,66,275

$x = \frac{1{,}66{,}275}{0.98}$ = 1,69,668

Now Putting the value of x in Eq (i)

1,69,668 – 0.1y =1,57,250 ⇒ 0.1y =1,69,668 – 1,57,250 ⇒ 0.1y = 12,418 ⇒ $y \frac{12{,}418}{0.1}$ = 1,24,180

Distribution of Service Department Overhead to Production Department

| Particulars | x | Y | Z |
|---|---|---|---|
| Overhead | 2,39,000 | 2,93,000 | 3,94,500 |
| Distribution of Overhead of A | 50,900 | 50,900 | 33,934 |
| Distribution of Overhead of B | 31,045 | 49,672 | 31,045 |
| Total | 3,20,945 | 3,93,572 | 4,59,479 |

**Ans.2(b)** Calculation of ratios of M ltd.

**Working Notes**

Sales ₹ 30,00,000

Let credit sales be x

Cash sales = .25 x

Total Sales = Cash Sales + Credit Sales

$\therefore$ x + .25 x = ₹ 30,00,000

$\therefore$ Cash Sales = ₹ 60,000

& Credit sales = ₹ 2,40,000

Gross profit Ratio = 25 %

$\therefore$ G.P. = ₹ 7,50,000

& COGS = ₹ 22,50,000

(i) $\text{Inventory Turnover Ratio} = \frac{\text{COGS}}{\text{Average Stock}}$

$\therefore$ Average stock = $\frac{22,50,000}{6}$

$\therefore$ Average Stock = 3,75,000

(ii) Purchase = COGS + Closing Stock – Opening Stock

Closing Stock is ₹ 80,000 more than Opening Stock

$\therefore$ Purchase = 22,50,000 + 80,000

= 23,30,000

(iii) $\text{Debtors Turnover Ratio} = \frac{\text{Net Credit Sales}}{\text{Average Debtors}}$

$\therefore$ Average Debtors = $\frac{24,00,000}{8}$ = ₹ 3,00,000

(iv) $\text{Creditors Turnover Ratio} = \frac{\text{Net Credit Purchase}}{\text{Average Creditors}}$

$\therefore$ Average Creditors = $\frac{21,00,000}{10}$ = ₹ 2,10,000

Note : Credit purchase = Total Purchase – Cash Purchase = 23,30,000 – 2,30,000 = 21,00,000

(v) $\text{Average Payment Period} = \frac{360}{\text{Creditors Turnover Ratio}}$

$= \frac{360}{10} = 36$ Days

(vi) $\text{Average Collection Period} = \frac{360}{\text{Dedtors Turnover Ratio}}$

$= \frac{360}{8} = 45$ days

(vii) Current Assets are 2.4 times of C.L.

$\therefore$ C.A. = ₹ 4,80,000

(viii) $\text{Current labilities} = \frac{\text{W.C.}}{\text{C.R.} - 1} = \frac{2,80,000}{2.4 - 1} = 2,00,000$

**Ans.3(a)** **JKM Ltd**

**(A) Schedule of changes in working capital**

| Particulars | Prev. year | Currt. year |
|---|---|---|
| **Current Assets** | | |
| Stock | 8,60,000 | 12,70,000 |
| Debtors | 10,20,000 | 13,00,000 |
| Bills Receivables | 1,00,000 | 70,000 |
| Cash & Bank | 7,20,000 | 8,90,000 |
| Total C.A. | 27,00,000 | 35,30,000 |
| **Current Liab** | | |
| Bills payable | 2,00,000 | 1,80,000 |
| Creditors | 3,50,000 | 4,60,000 |
| Total C.L. | 5,50,000 | 6,40,000 |
| Net Working Capital | 21,50,000 | 28,90,000 |
| Increase in WC | 7,40,000 | |

**(B) Fund Flows Statment as on 31.3.2012**

| Sources | Amount | Application | Amount |
|---|---|---|---|
| Fund from Operation | 26,15,000 | Increase in WC | 7,40,000 |
| Sale of Machine | 15,000 | Purchase of Machine | 13,70,000 |
| Sale of Land & Build | 4,00,000 | Purchase of Investment | 1,65,000 |
| Dividend Received | 40,000 | Tax paid | 3,80,000 |
| Equity Shres issued | 5,00,000 | Interim Dividend Paid | 2,50,000 |
| | | Dividend Paid | 8,00,000 |
| | | | |
| | **37,05,000** | | **37,05,000** |

**Fund from operations**

| P & L Adjustment A/c | | | |
|---|---|---|---|
| To Loss on sale of Machine | 20,000 | By Balance b/d | 5,30,000 |
| To Dep. on Machine | 3,00,000 | By Dividend | 25,000 |
| To Dep. on L & B | 50,000 | By FFO (B/F) | 26,15,000 |
| To Interim Dividend | 2,50,000 | | |
| To Prov. for Tax | 4,80,000 | | |
| To Proposed Dividend | 11,00,000 | | |
| To Goodwill W/O | 80,000 | | |
| To Share issue Exp | 20,000 | | |
| To Tr to G.R. | 2,00,000 | | |
| To Balance c/d | 6,70,000 | | |
| | 31,70,000 | | 31,70,000 |

| Plant & Machinery A/c | | | | Income Tax A/c | | | |
|---|---|---|---|---|---|---|---|
| To Bal. | 2200000 | By Bank | 150000 | To Bank | 380000 | By Bank | 400000 |
| To Bank | 1370000 | By P & L | 20000 | | | By P & L | 480000 |
| | | By P & L | 300000 | To Bal. | 500000 | | |
| | | By Bal. | 3100000 | | 880000 | | 880000 |
| | 3570000 | | 3570000 | | | | |

| Land & Building A/c | | | | Investment A/c | | | |
|---|---|---|---|---|---|---|---|
| To Bal. | 2000000 | By P & L | 50000 | To Bal. | 200000 | By Bank | 15000 |
| To Bank | 250000 | By Bank | 400000 | | | By P & L | 350000 |
| | | By Bal | 1800000 | To Bank | 165000 | | |
| | **2250000** | | **2250000** | | **365000** | | **365000** |

**Ans.3(b)**

Computation of Estimated Profit

| Particulars | Amount |
|---|---|
| Contract Price | 15,30,000 |
| Less: Cost till date | 8,50,000 |
| Less: Further Estimated Cost | 1,70,000 |
| | 5,10,000 |

Computation of Notional Profit

| Particulars | Amount |
|---|---|
| Work Certified | 10,00,000 |
| Work Uncertified | 85,000 |
| Less: Cost up to date | 8,50,000 |
| | 2,35,000 |

**Stage of Completion:**

$$= \frac{\text{Work Certified}}{\text{Contract Price}} \times 100 = \frac{10,00,000}{15,30,000} \times 100 = 65.36\%$$

**Profit transferred to Profit & Loss A/c**

$$= \text{Notional Profit} \times \frac{2}{3} \times \frac{\text{Cash Received}}{\text{Work Certified}} = 2,35,000 \times \frac{2}{3} \times \frac{8,16,000}{10,00,000} = 1,27,840$$

**Fours Methods of Transferring Profit to Profit & Loss A/c Based on Estimated Profit:**

1. $$\text{Estimated Profit} \times \frac{\text{Work Certified}}{\text{Contract Price}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 5,10,000 \times \frac{10,00,000}{15,30,000} \times \frac{8,16,000}{10,00,000} = 2,72,000$$

2. $$\text{Estimated Profit} \times \frac{\text{Cost till date}}{\text{Total Estimated Cost}}$$

$$= 5,10,000 \times \frac{8,50,000}{10,20,000} = 4,25,000$$

3. $$\text{Estimated Profit} \times \frac{\text{Work Certified}}{\text{Contract Price}}$$

$$= 5,10,000 \times \frac{10,00,000}{15,30,000} = 3,33,333$$

4. $$\text{Estimated Profit} \times \frac{\text{Cost till date}}{\text{Total Estimated Cost}} \times \frac{\text{Cash Received}}{\text{Work Certified}}$$

$$= 5,10,000 \times \frac{8,50,000}{10,20,000} \times \frac{8,16,000}{10,00,000} = 3,46,800$$

**Ans. 4(a). Data for labour variance**

| Budget (2000 unit) | | | | Standard (1800 unit) | | | Actual (1800 unit) | | |
|---|---|---|---|---|---|---|---|---|---|
| Hour | | Rate | Amount | Hour | Rate | Amount | Hour | Rate | Amount |
| Skilled | 2,600 | 45 | 1,17,000 | 2,340 | 45 | 1,05,300 | 1900 | 50 | 95,000 |
| | | | | | | | 100 | 50 | 5,000 |
| S. Skilled | 800 | 30 | 24,000 | 720 | 30 | 21,600 | 1140 | 35 | 39,900 |
| | | | | | | | 60 | 35 | 2,100 |
| U. Skilled | 600 | 15 | 9,000 | 540 | 15 | 8,100 | 760 | 10 | 7,600 |
| | | | | | | | 40 | 10 | 400 |
| | | | | | | 1,35,000 | | | 1,50,000 |

**Calculate of labour Variance**

| Particulars | Skilled | S. Skilled | U. Skilled | Total |
|---|---|---|---|---|
| (i) LCV = (SC – AC) | 1,05,300 –1,00,000 = 5,300(F) | 21,600 – 42,000 = 20,400 (A) | 8,100 – 8,000 = 100 (F) | 15,000 (A) |
| (ii) LEV =(Std hour -Actual Working hour) SR | (2,340 –1,900) 45 = 19,800 (F) | (720 –1140) 30 =12,600 (A) | (540 – 760) 15 = 3,300 (A) | 3,900 (F) |
| (iii) ITV = Idle time × SR | 100 × 45 = 4,500 (A) | 60 × 30 = 1,800(A) | 40 ×15 = 600(A) | 6,900 (A) |

**Ans.4(b)** Evaluation of alternatives

| | | MACHINES | |
|---|---|---|---|
| **Particulars** | | **NM – A1** | **NM – A2** |
| Cost of Machine | Rs. | 2000000 | 2500000 |
| **PBDT** | | | |
| Estimated saving in Direct wages | Rs. | 700000 | 900000 |
| Estimated saving in Scrap | Rs. | 60000 | 100000 |
| **Cost of** | | | |
| Indirect Mat | Rs. | (30000) | (90000) |
| Indirect Labour | Rs. | (40000) | (50000) |
| Repair & M | Rs. | (45000) | (85000) |
| PBDT | | 645000 | 775000 |
| – Depreciation | | 400000 | 500000 |
| PBT | | 245000 | 275000 |
| – Lax @ | | 73500 | 82500 |
| PAT | | 171500 | 192500 |
| + Depreciation | | 400000 | 500000 |
| CFAT | | **571500** | **692500** |

(i) Pay Back period = $\frac{\text{Initial Cost}}{\text{CFAT}}$

NM – A1 = $\frac{2000000}{571500}$ = 3.50 yrs

NM – A2 = $\frac{2500000}{692500}$ = 3.61 yrs

(ii) Accounting / Average Rate of Return

$$ARR = \frac{\text{Avrg. Annual Profit After Tax}}{\text{Avrg. Investment}} \times 100$$

**NM-A1** $= \frac{171500}{1000000} \times 100 = 17.15\%$

Average Investment $= \frac{2000000 + 0}{2} = 1000000$

**NM-A2** $= \frac{192500}{1250000} \times 100 = 15.40\%$

Average Investment $= \frac{25000000 + 0}{2} = 1250000$

(iii) Profitability index $= \frac{PVIF}{PVOF}$

**NM - A1**

PVIF = CFAT × SPVf @ 12%

= 571500 × 3.605 = 2060258

$\therefore$ PI $= \frac{2060258}{2000000} = 1.03$

**NM - A2** PVIF = 692500 × 3.605 = 2496463

$\therefore$ PI $= \frac{2496463}{2500000} = 0.99$

**Conclusion** : Machine NM - A1 should be preferred as it is better in all the methods calculated above.

**Ans.5(a)** A good Costing System will consist of the following characteristics:

(i) The Costing system adopted in a particular organization must suit its nature and size of business and its information needs.

(ii) The Costing System must be economical to the organization and the benefits derived from the system should be more than its cost of installation and operation.

(iii) The system should be more flexible enough to take care of changing business situations and information needs of the organization.

(iv) The system should be simple to understand and easy to operate. The users of costing data should be convinced of the Costing System from which the data is derived.

(v) The Costing System should ensure proper accounting for materials, labour and overheads and proper classification of transactions should be done at the level of recording.

(vi) Adoption of Activity Based Costing System will increase the accuracy in allocation, apportionment and absorption of overheads, which leads to correct ascertainment of cost per unit of product or service.

(vii) Integration of Financial Accounting and Cost Accounting Systems will avoid duplication of work. The financial and cost accounts should be interlocked together and should be reconciled periodically.

(viii) The Costing System should clearly mention the details of records to be maintained and the degree of accuracy of data required.

(ix) Before devising a Costing System, the need and objectives of the system should be identified.

**Ans.5(b). Inter Process Profits**

The output of one process is transferred to the next process not at cost but at market value or cost plus a percentage of profit. The difference between cost and the transfer price is known as inter-process profits.

**Advantages:**

- It helps in the computation of costs at shorter intervals, which is usually a week, a fortnight or a month.
- It ensures a closer control over production and costs.
- Controls can be exercised through standard costing technique and it is possible to evaluate the performance of every process.

**Disadvantages:**

- When costs are recorded at the end of the period, it is not possible to exercise control over costs.
- It is difficult to apportion total cost among joint products and bye-products.
- There is also the difficulty of ascertaining the value of closing stock where output of one process is transferred to another process at market price.

**Ans.5(c). Operating Costing**

Operating costing is also known as Service costing is used for establishing costs of services rendered or services offered for sale and no items are produced. Operating costing is used in services organization like transport companies, hotels, hospitals, power generation, college, boiler houses etc. The method of costing is similar to output costing.

**Operating Cost Unit**

All the costs incurred during a period are collected and analyzed and then expressed in terms of a cost per unit of service.The cost unit to be applied needs to be defined carefully and it is frequently a composite figure such as tonne-kilometer, kilowatt-hour, patient day etc.

composite cost units contains more than one variable.

**Ans.5(d)** While choosing a suitable financing pattern, certain fundamental principles should be kept in mind, which are discussed below:

**(a) Cost Principle:** According to this principle, an ideal pattern or capital structure is one that minimises cost of capital structure and maximises earnings per share (EPS). For e.g. Debt capital is cheaper than equity capital from the point of its cost and interest being deductible for income tax purpose, whereas no such deduction is allowed for dividends.

**(b) Risk Principle:** According to this principle, reliance is placed more on common equity for financing capital requirements than excessive use of debt. Use of more and more debt means higher commitment in form of interest payout. This would lead to erosion of shareholders value in unfavourable business situation. There are two risks associated with this principle: Business Risk and Financial Risk.

**(c) Control Principle:** While designing a capital structure, the finance manager may also keep in mind that existing management control and ownership remains undisturbed. Issue of new equity will dilute existing control pattern and also it involves higher cost. Issue of more debt causes no dilution in control, but causes a higher degree of financial risk.

**(d) Flexibility Principle:** By flexibility it means that the management chooses such a combination of sources of financing which it finds easier to adjust according to changes in need of funds in future too. While debt could be interchanged (If the company is loaded with a debt of 18% and funds are available at 15%, it can return old debt with new debt, at a lesser interest rate), but the same option may not be available in case of equity investment.

**(e) Other Considerations:** Besides above principles, other factors such as nature of industry, timing of issue and competition in the industry should also be considered. Industries facing severe competition also resort to more equity than debt. Thus a finance manager in designing a suitable pattern of capital structure must bring about satisfactory compromise between the above principles. The compromise can be reached by assigning weights to these principles in terms of various characteristics of the company.

**Ans.6(a).**

(a) Sales = 24000 unit @ ₹ 200
= ₹ 48,00,000

BEP = 50% × Sales = 50% × ₹ 48,00,000 = ₹ 24,00,000

(i) BEP $= \frac{FC}{PV\ Ratio}$

24,00,000 $= \frac{FC}{25\%}$

FC = 6,00,000

(ii) M/S Sale = Sales – BE Sale
= 48,00,000 – 24,00,000
= ₹ 24,00,000

Profit = M/S Sale × PV Ratio = ₹ 24,00,000 × 25% = ₹ 6,00,000

(iii) Profit = M/S Sale × PV Ratio

11,00,000 = M/S Sale × 25%

M/S Sale = 44,00,000

Total Sale = BE Sale + M/S Sale

= 24,00,000 + 44,00,000 = 68,00,000

$$\text{Sale unit} = \frac{68,00,000}{200} = 34,0000$$

(iv) Let the Sale unit be x

Sale – VC – FC = Profit

200x – 150x – 6,00,000 = .25 (150x + 6,00,000)

50x – 6,00,000 = 37.5x + 1,50,000

50x – 37.5x = 7,50,000

12.5x = 7,50,000

x = 60,000

(v) New BEP = 12000 unit – 4000 unit = 8,000 unit

$$\text{BEP} = \frac{\text{FC}}{\text{Cantribution p.u.}}$$

$$8000 = \frac{6,00,000}{\text{Cantribution p.u.}}$$

Contribution p.u. = 75

SP = VC p.u. + Cost. p.u. = 150 + 75 = ₹ 225

**Ans.6(b)**

| Reconciliation Statement | Amount (₹) | Amount (₹) |
|---|---|---|
| Profit as per Cost Books | | (35,400) |
| Add: Over recovery of factory Overhead | 1,35,000 | |
| Dividend Received | 20,000 | |
| Bank Interest | 13,600 | |
| Overvaluation of opening stock in Cost Book | 20,000 | |
| Undervaluation of closing Stock in Cost Book | 6,500 | |
| Notional Rent charged in Cost A/c | 60,000 | 2,55,100 |
| Less: Under recovery of Administrative Overhead | 25,500 | |
| Depreciation undercharged in Cost Accounts | 26,000 | |
| Loss due to obsolescence charged in financial Accounts | 16,800 | |
| Income Tax Paid | 43,600 | |
| Goodwill written off | 25,000 | |
| Provision for Doubtful Debt | 15,000 | (1,51,900) |
| Net Profit as per Financial Books | | 67,800 |

**Ans.7(a)** Conflicts in Profit versus Value Maximisation Principle

In any company, the management is the decision taking authority. As a normal tendency the management may pursue its own personal goals (profit maximization). But in an organization where there is a significant outside participation (shareholding, lenders etc.), the management may not be able to exclusively pursue its personal goals due to the constant supervision of the various stakeholders of the company-employees, creditors, customers, government, etc. Every entity associated with the company will evaluate the performance of the management from the fulfillment of its own objective. The survival of the management will be threatened if the objective of any of the entities remains unfulfilled.

The wealth maximization objective is generally in accord with the interests of the various groups such as owners, employees, creditors and society, and thus, it may be consistent with the management objective of survival. Owing to limitation (timing, social consideration etc.) in profit maximization, in today's real world situations which is uncertain and multi-period in nature, wealth maximization is a better objective. Where the time period is short and degree of uncertainty is not great, wealth maximization and profit maximization amount to essentially the same.

The table below highlights some of the advantages and disadvantages of both profit maximization and wealth maximization goals:-

| Goal | Objective | Advantages | Disadvantages |
|---|---|---|---|
| Profit Maximization | Large amount of profits | (i) Easy to calculate profits<br>(ii) Easy to determine the link between financial decisions and profits. | (i) Emphasizes the short term gains<br>(ii) Ignores risk or uncertainty<br>(iii) Ignores the timing of returns<br>(iv) Requires immediate resources. |
| Shareholders Wealth Maximisation | Highest market value of shares. | (i) Emphasizes the long term gains<br>(ii) Recognises risk or uncertainty<br>(iii) Recognises the timing of returns<br>(iv) Considers shareholders' return. | (i) Offers no clear relationship between financial decisions and share price.<br>(ii) Can lead to management anxiety and frustration. |

**Q.7(b)** Capital expenditure budget

The capital expenditure budget represents the planned outlay on fixed assets like land, building, plant and machinery, etc. during the budget period. This budget is subject to strict management control because it entails large amount of expenditure. The budget is prepared to cover a long period of years and it projects the capital costs over the period in which the expenditure is to be incurred and the expected earnings.

The preparation of this budget is based on the following considerations :

1. Overhead on production facilities of certain departments as indicated by the plant utilisation budget.
2. Future development plans to increase output by expansion of plant facilities.
3. Replacement requests from the concerned departments
4. Factors like sales potential to absorb the increased output, possibility of price reductions, increased costs of advertising and sales promotion to absorb increased output, etc.

**Q.7(c)** Business Risk and Financial Risk

**Business Risk:-** It refers to the risk associated with the firm's operations. It is the uncertainty about the future operating income (EBIT), i.e. how well can the operating income be predicted? Business risk can be measured by the standard deviation of the Basic Earning Power ratio.

This risk is because of the environment in which the firm has to operate and it is represented by the variability of earnings before interest and tax (EBIT). The variability in turn is influenced by revenues and expenses. Revenues and expenses are affected by demand of firm products, variations in prices and proportion of fixed cost in total cost.

**Financial Risk:-** It refers to the additional risk placed on the firm's shareholders as a result of debt use i.e. the additional risk a shareholder bears when a company uses debt in addition to equity financing. Companies that issue more debt instruments would have higher financial risk than companies financed mostly or entirely by equity. Leverage refers to the ability of a firm in employing long term funds having a fixed cost, to enhance returns to the owners. In other words, leverage is the amount of debt that a firm uses to finance its assets. A firm with a lot of debt in its capital structure is said to be highly levered.

A firm with no debt is said to be unlevered.

**Q.7(d)** Some of the credit facilities provided by banks are:-

(i) Short Term Loans : In a loan account, the entire advance is disbursed at one time either in cash or by transfer to the current account of the borrower. It is a single advance and given against securities like shares, government securities, life insurance policies and fixed deposit receipts, etc. Except by way of interest and other charges no further adjustments are made in this account. Repayment under the loan account may be the full amounts or by way of schedule of repayments agreed upon as in case of term loans.

(ii) Overdraft : Under this facility, customers are allowed to withdraw in excess of credit balance standing in their Current Account. A fixed limit is therefore granted to the borrower within which the borrower is allowed to overdraw his account. Though overdrafts are repayable on demand, they generally continue for long periods by annual renewals of the limits. This is a convenient arrangement for the borrower as he is in a position to avail of the limit sanctioned, according to his requirements. Interest is charged on daily balances. Since these accounts are operative like cash credit and current accounts, cheque books are provided.

(iii) Cash Credits : Cash Credit is an arrangement under which a customer is allowed an advance up to certain limit against credit granted by bank. Under this arrangement, a customer need not borrow the entire amount of advance at one time; he can only draw to the extent of his requirements and deposit his surplus funds in his account. Interest is not charged on the full amount of the advance but on the amount actually availed of by him. Generally cash credit limits are sanctioned against the security of tradable goods by way of pledge or hypothecation. Though these accounts are repayable on demand, banks usually do not recall such advances, unless they are compelled to do so by adverse factors. Hypothecation is an equitable charge on movable goods for an amount of debt where neither possession nor ownership is passed on to the creditor. In case of pledge, the borrower delivers the goods to the creditor as security for repayment of debt. Since the banker, as creditor, is in possession of the goods, he is fully secured and in case of emergency he can fall back on the goods for realisation of his advance under proper notice to the borrower.

(iv) Advances against goods : Advances against goods occupy an important place in total bank credit. Goods are security have certain distinct advantages. They provide a reliable source of repayment. Advances against them are safe and liquid. Also, there is a quick turnover in goods, as they are in constant demand. So a banker accepts them as security. Generally goods are charged to the bank either by way of pledge or by way of hypothecation. The term 'goods' includes all forms of movables which are offered to the bank as security. They may be agricultural commodities or industrial raw materials or partly finished goods.

(v) Bills Purchased/Discounted : These advances are allowed against the security of bills which may be clean or documentary. Bills are sometimes purchased from approved customers in whose favour limits are sanctioned. Before granting a limit the banker satisfies himself as to the credit worthiness of the drawer. Although the term 'bills purchased' gives the impression that the bank becomes the owner or purchaser of such bills, in actual practice the bank holds the bills only as security for the advance. The bank, in addition to the rights against the parties liable on the bills, can also exercise a pledge's rights over the goods covered by the documents.

**Q.7(e)** Financing a business through borrowing is cheaper than using equity. This is because:

* Lenders require a lower rate of return than ordinary shareholders. Debt financial securities present a lower risk than shares for the finance providers because they have prior claims on annual income and liquidation.
* A profitable business effectively pays less for debt capital than equity for another reason: the debt interest can be offset against pre-tax profits before the calculation of the corporate tax, thus reducing the tax paid.
* Issuing and transaction costs associated with raising and servicing debt are generally less than for ordinary shares.

These are some benefits from financing a firm with debt. Still firms tend to avoid very high gearing levels.

One reason is financial distress risk. This could be induced by the requirement to pay interest regardless of the cash flow of the business. If the firm goes through a rough period in its business activities it may have trouble paying its bondholders, bankers and other creditors their entitlement.