	Answer	_MTP_	<u>Inter</u>	_Syllabus 20	)12_	Dec 2017_	_Set 1	
Pa	per 8 – C	Cost A	Accou	unting & Fir	nan	cial Man	agement	

### Paper 8 - Cost Accounting & Financial Management

Time Allowed: 3 Hours Full Marks: 100

# Section-A: Answer Question No 1 which is compulsory carries 25 Marks

#### 1. Answer the following questions:

### (A) Each Question carries 2 Marks

[5x 2 = 10]

- (i) The actual machine hours worked in June' 2015, is for 35,000 units and the predetermined overhead recovery is @ ₹ 3 per unit, when actual overhead is ₹ 1,57,500, then what will be the outcome?
- (ii) Write two objectives of CAS-4.
- (iii) Write the two assumptions of MM approach.
- (iv) How should packing costs be treated in Cost Accounts?
- (v) MN Ltd. has earnings before interest and taxes of ₹ 36 crores. The company has 7% debentures of ₹ 72 crores. Cost of equity is 12.5%. Ignore taxes. Estimate the overall cost of Capital?

### (B) State whether the following statements are True or False:

 $[5 \times 1 = 5]$ 

- (i) CAS-7 stands for "Employee Cost".
- (ii) Standards are arrived at on the basis of past performance.
- (iii) Material return note is a document which records the return of unused material.
- (iv) Capital budgeting is an important tool for the management in respect of investment of funds.
- (v) An ideal current ratio is 2.

(C) Fill in the Blanks [5x 1 = 5]

(i)	Goods received Note is prepared by the	
(ii)	Prime cost plus overhead .	
(iii)	WIP ledger contains the accounts of all the which are under e	execution
(iv)	stands for manipulation of books of account.	
(v)	Working capital means the available for the day to activity.	

### (D) Match the Following

[5x 1 = 5]

Column I	Column II
1. Creditor of the Company	A. Fund Flow Statement
2. CAS	B. Variance Analysis
3. Labour turnover	C. Separation method
4. Difference between Standard and actual.	D. Overhead
5. Sources and Application of Fund	E. Debenture holder

### Answer:1.(A)

(i) 35,000 × 3 = ₹1,05,000 Actual Overhead – Pre-determined overhead = under absorbed overhead

(ii) The two objectives of CAS-4 are as follows:

So, ₹1,57,500 - ₹1,05,000 = ₹52,500

- > The purpose of this standard is to bring uniformity in the principles and methods used for
- ➤ determining the cost of production of excisable goods used for captive consumption. The cost statement prepared based on standard will be used for determination of assessable value of excisable goods used for captive consumption.
- (iii) The two assumptions of MM approach are:
  - > The dividend payout ratio is 100%, which means there are no retained earnings,
  - > There are no corporate taxes. This assumption has been removed later
- (iv) Treatment of packing cost in Cost Accounts:

Primary packing material, which is essential to put the product in a saleable condition is charged as production overhead. (e.g., ink in a bottle, jam in a jar, etc.).

Primary packing material that is made decorative for attracting customers should be partly charged as manufacturing overhead and partly as a selling overhead (e.g., fancy bottles and covers for cosmetics/perfumes).

Secondary packing material which is used for easier transportation – like crates for cold drink bottles, etc. should be charged as a selling and distribution overhead.

(v) Market value of Equity = [EBIT -I]/Ke

```
= [ 36 -5.04] Cr. /0.125
= 30.96 /0.125
= ₹ 247.68 Cr.
```

Total value of firm (v) = 247.68 + 72.00 = 319.68 cr. So, K0= EBIT/V =  $[36/319.68] \times 100$  = 11.26%

### Answer:1.(B)

- (i) True
- (ii) False
- (iii) True
- (iv) True
- (v) True

#### Answer:1.(C)

- (i) Receiving Department
- (ii) Total cost
- (iii) Jobs
- (iv) Window Dressing
- (v) Funds

### Answer:1.(D)

- (i) E
- (ii) D
- (iii) C
- (iv) B
- (v) A

#### **Section-B**

### Answer any three Questions from Q. No 2, 3, 4 and 5. Each Question carries 15 Marks

- **2(A)** From the following information, calculate the machine hour rate for recovery of overhead for a drilling machine installed in a machine shop. [8]
- (i) The machine operates for 8 hours a day and 300 days a year.
- (ii) 400 hours of machine time in a year is used for repairs and maintenance.
- (iii) Setting up time of the machine is 200 hours per annum and is to be treated as production time.
- (iv) Annual cost of repairs and maintenance of the machine is ₹ 40,000.
- (v) Power used is 10 units per hour at a cost of ₹8 per unit. No power is consumed during repair and setting up time.
- (vi) A coolant is used to operate the machine at ₹ 12,000 per annum.
- (vii) An operator, whose monthly wages is ₹ 8,000, devotes 75% of his time exclusively to operate the machine.
- (viii) Depreciation is ₹ 2,40,000 per annum and insurance is ₹ 25,000 per annum.
- (ix) Other indirect expenses chargeable to the machine are ₹12,000 per month.
- **(B)** PC Company purchases a specialized item and the quantity to be purchased is 2,500 pieces at a price of ₹ 200 per piece. Ordering cost per order is ₹ 200 and carrying cost is 2% per year of the inventory cost. Normal lead time is 20 days and safety stock is nil. Assume yearly working days as 250.
- (i) Calculate the Economic Ordering Quantity.
- (ii) Re-order Inventory Level.
- (iii) If a 2% discount on price is given for order quantity 1,250 pieces or more in a lot, should the company accept the offer of discount? [7]

### Answer:2.A.

Operating hours for the machine =  $8 \times 300 = 2,400$ .

Less: Repairs and maintenance = 400

Normal Production Time = 2,000 hours.

Set up time = 200 hours, considered as production time. Hence no adjustment.

Item of expense	Total amount p.a.	₹/ machine hour =
	(₹)	total amount/2,000
		hours
Repairs and Maintenance	40,000 or	20
Power 10 units/ hour x ₹ 8 / unit x 1,800 hours	1,44,000 or	72
Coolant	12,000 or	6
Share of operator's wages ₹ 8,000 per month x 12	72,000 or	36
months/ year x 75 %		
Depreciation and Insurance	2,40,000 or	120
	25,000 or	12.5
Other indirect expenses ₹12,000 p.m. x 12	1,44,000 or	72

Total 6,77,000 3
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The student may work out the machine hour rate at the end instead of dividing each item by 2000. Hence the figures in bold font either in the second or the fourth are sufficient. However, for the last figure, the 338.5 is required, since machine hour rate is required.

#### Answer:2.B.

(i) 
$$EOQ = \frac{\sqrt{2 \times 2500 \times 200}}{\sqrt{2\% \times 200}}$$
$$= \frac{\sqrt{1,000,000}}{\sqrt{4}}$$

(ii) Reorder level = Normal lead time x normal usage = 
$$20 \times \frac{2500}{250}$$
 = 200

(iii) Evaluation of offer for quantity discount Since EOQ is 500 units, the minimum quantity to get a discount is 1,250 is used for evaluation. Moreover, in this analysis, if the ordering cost is reduced to one order of 2,500 units, carrying cost will be much more and hence evaluation of this order size is not useful.

	Based on EOQ	Discount offer
Annual Demand = d	2,500	2,500
Order size ( q units)	500	1,250
No. of orders	5	2
Ordering cost at 200 ₹/order	1,000	400
Purchase price ₹/unit = p	200	196
Purchase cost = d x p	5,00,000	4,90,000
Carrying Cost = $2\% \times \frac{q \times p}{2}$	1,000	2,450
Total cost = Purchase cost + ordering cost	5,02,000	4,92,850
+carrying costs		

The discount offer is more profitable.

**3(A)** Illustrate scrap. How do you treat scrap in Cost Accounts?

[7]

**3(B)** A company uses an old method of machining a part manufactured for sale. The estimates of operating details for the year 2013-14 are as under:

No. of parts to be manufactured and sold 30,000 Raw materials required per part: 10 kg. @ ₹2 kg. Average wage rate per worker: ₹ 40 per day of 8 hrs.

Average labour efficiency 60%.

Standard time required to manufacture one part: 2 hrs.

Overhead rate ₹ 10 per clock hour.

Material handling expenses - 2% of the value of raw materials.

The company has a suggestion box scheme and an award equivalent to three months' saving in labour cost is passed on to the employee whose suggestion is accepted. In response to this scheme, a suggestion has been received from an employee to use a special Jig in the manufacture of the aforesaid part. The cost of the Jig which has life of one year is ₹ 3,000 and the use of the Jig will reduce the standard time by 12 minutes.

#### Required:

- (i) Compute the amount of award payable to the employee who has given the suggestion
- (ii) Prepare a statement showing the annual cost of production before and after the implementation of the suggestion to use the Jig and indicate the annual savings.
- (iii) State the assumptions on which your calculations are based.

[8]

#### Answer:3.A.

This is also in the form of incidental material residue coming out of certain types of manufacturing processes but it is usually in small amounts and has low measurable utility or market value, recoverable without further processing.

Numerous examples of scrap may be given; scrap may arise in the form of turnings, borings, trimmings, fillings, shavings etc., from metals on which machine operations are carried out; saw dust and trimmings in the timber industry; dead heads and bottom ends in foundries; and cuttings, pieces, and split in leather industries. Scrap should always be physically available unlike waste which may or may not be present in the form of a residue

The treatment of scrap in cost accounts is normally as per the following details.

- ➤ If the value of scrap is negligible, the good units should bear the cost of scrap and any income collected will be treated as other income.
- ➤ If the value of scrap is considerable and identifiable with the process or job, the cost of job will be transferred to scrap account and any realization from sale of such scrap will be credited to the job or process account and any unrecovered balance in the scrap account will be transferred to the Costing Profit and Loss Account.
- > If scrap value is quite substantial and it is not identifiable with a particular job or process, the amount will be transferred to factory overhead account after deducting the selling cost. This will reduce the cost of production to the extent of the scrap value.

#### Answer:3.B.

(i) Amount of Award payable to the employee

Wage rate per hour (₹ 40 ÷ 8)	=₹5 per hour
Standard time for one part	= 2 hours
Standard time for 30,000 parts	= 60,000 hrs.

Average labour efficiency	= 60%
Actual time	= 60,000 ÷ 60% = 1,00,000 hrs
Actual labour cost (1,00,000 hrs. × ₹ 5)	= ₹ 5,00,000
Standard time for one part	= 2 hours
Less: Saving in standard time	= 12 minutes
Revised standard time	= 1 hrs. 48 minutes or 1.8 hrs.
Adjusted to 60% efficiency	= 1.8 hrs. ÷ 60% = 3 hrs.
Revised actual time for 30,000 parts	= 3 hrs. × 30,000 = 90,000 hrs.
Revised wages = 90,000 hrs. × ₹ 5	=₹4,50,000
Annual saving in wage (₹ 5,00,000 - 4,50,000)	=₹50,000
Award to the employee (₹50,000 × 3/12)	=₹ 12,500

(ii) Statement showing the cost of production for 30,000 parts before and after implementation of the suggestion

Raw Materials cost @ ₹ 20	₹ 6,00,000	₹ 6,00,000
Wages	₹ 5,00,000	₹ 4,50,000
Prime Cost	11,00,000	10,50,000
Overheads @ ₹ 10 per hr. (actual)	10,00,000	9,00,000
Award to employee	-	12,500
Material handling expenses	12,000	12,000
Cost of Jig	-	3,000
Total	21,12,000	19,77,500
Annual savings		₹ 1,34,500

**4(A)** State the term Just-in-Time (JIT) and list out its advantages.

[4]

**4(B) (i)** Classify the following overhead items according to function: (i) Drawing office salaries, (ii) Rent of warehouse, (iii) Remuneration of legal advice, (iv) Depreciation of delivery van, (v) Salary of Production Manager, (vi) Uniforms of sanitary workers, (vii) Secondary packing with the name of the company, (viii) Establishment expenses, (ix) Depreciation of patterns and dies, (x) Wages of normal idle time.

**4(B) (ii)** An engineering company produces a standard metallic product. There are three processes - Foundry, Machining and Assembly. 130 tonnes of raw material at ₹ 500 per tonne were issued to Foundry. The yield at the Foundry is 90% (both standard and actual). The normal and actual yield at the Machining Process is 95%. There is no loss in the Assembly Process. You may consider the losses as occurring at the end of the respective processes. The other details are as follows: [7]

Process	Direct Labour	Overhead
Foundry	200 hours at ₹ 100 per hour	₹ 150 per labour hour

Machining	100 hours at ₹50 per hour	₹ 200 per labour hour
Assembly	100 hours at ₹150 per hour	₹ 100 per labour hour

Prepare a Cost Sheet showing the element wise cost of output and cost per tonne of output.

#### Answer:4.A

Just in time (JIT) is a production strategy that strives to improve a business return on investment by reducing in-process inventory and associated carrying costs. Inventory is seen as incurring costs, or waste, instead of adding and storing value, contrary to traditional accounting. In short, the Just-in-Time inventory system focuses on "the right material, at the right time, at the right place, and in the exact amount" without the safety net of inventory.

The advantages of Just-in-Time system are as follows:-

- (a) Increased emphasis on supplier relationships. A company without inventory does not want a supply system problem that creates a part shortage. This makes supplier relationships extremely important.
- b) Supplies come in at regular intervals throughout the production day. Supply is synchronized with production demand and the optimal amount of inventory is on hand at anytime. When parts move directly from the truck to the point of assembly, the need for storage facilities reduced.
- (c) Reduces the working capital requirements, as very little inventory is maintained.
- (d) Minimizes storage space.
- (e) Reduces the chance of inventory obsolescence or damage.

### Answer:4.B.(i).

(i) Office and administration overhead (ii) Selling & Distribution overhead (iii) Office and administration overhead, (iv) Selling & Distribution overhead, (v) Factory overhead, (vii) Selling & distribution overhead (viii) Office and administration overhead (ix) Factory overhead, (x) Factory overhead.

### Answer:4.B.(ii) .

Material input	130	117	111.15
Loss	13	5.85	0
Output	117	111.15	111.15

#### Material Cost 500/tonne of input to foundry

Elements of Cost	Cost of total output	Cost/tone of output
Raw Material 130 x 500	65,000	584.80
Labour Foundry: 200 hrs x 100	20,000	179.94
₹/hr		
M/cng: 100 hrs @ 50/hr	5,000	44.98

Assembly: 100 hrs @ 150/hr	15,000	134.95
Subtotal – Labour	40,000	359.87
Overheads: Foundry 200 hrs @	30,000	269.91
150/hr		
M/ cng: 100 hrs @ 200/hr	20,000	179.94
Assembly: 100 hrs @100/hr	10,000	89.97
Subtotal – Overheads	60,000	539.81
Total Cost	1,65,000	1,484.48

**5.(A)(i)** State the treatment of the following items in Cost Accounts:

[6]

- (i) Market Research
- (ii) Obsolete inventory
- (iii) Royalty on production of goods.
- **5.(A)(ii)** State the cost units applicable to the following industries: Cement, Goods Transport, Education, BPO. [2]
- **5.(B)** The standard capacity usage and the actual capacity utilization in respect of a machine for a particular month are 90% of total available hours and 80% of standard capacity usage respectively. The total available working time in the month is 200 hours. The following data is obtained from the idle time card:

Time in waiting for material (normal) =	10 hours
Time in waiting for tools (normal) =	6 hours
Sudden break down =	10 hours

The hourly fixed cost of the machine is ₹ 43 and the operator is paid at ₹ 70 per hour. You are required to report the idle time cost to the management. [7]

Answer:5.(A) (i) Treatment of Market Research expenses in Cost Records: Many times organizations appoint professional bodies or conduct by themselves a study of potential market for their products. This study is aimed at finding the customer's needs, their habits, changing market for the products, technological changes in the product, competition etc., Such expenses are to be treated as a part of Sales and Distributive Costs.

- (ii) Treatment of Obsolete Inventory in Cost Records: Obsolete Inventory may consist of raw materials or stores of finished goods. In either case, a write-off is made direct to Profit and Loss a/c and no charge is made to the cost of production.
- (iii) Treatment of Royalties in Cost Records: 'Royalties are prices paid to acquire the right to manufacture and / or sell some goods generally belonging to the Government like Mines, Sand mining etc, When the Royalty is paid to acquire the right to manufacture or to produce the cost of the Royalty should be charged as a production cost and included in Production Overhead.

### Answer:5.(A) (ii)

### Cost units for the following industries:

Industry	Cost Unit	
Cement	Tonnes	Any unit of weight is acceptable (like quintals, kg, etc)
Goods Transport	Tonne -	Any unit that is a product of weight and length(distance) (like
	kilometer	ton-miles, quintal-miles, etc)
Education	Student years	Any unit that is a product of no. of students and the duration -
		days/months or years.
ВРО	Accounts	Any unit in terms of number of transactions, or a product of
	handled	number and value of transactions

### Answer:5.(B)

Total available hours = 200

Standard capacity usage =  $90\% = 200 \times 90\% = 180$  hours.

Unavoidable idle time = 20 hours Actual capacity utilization = 80% of standard =  $0.80 \times 180 = 144$  hours. Avoidable idle time = 180 - 144 = 36.

Hourly idle time cost = 43 + 70 = 113

### Idle Time Report to Management

Unavoidable idle time	20 hours	Cost = 20 x 113 = ₹ 2,260	Merged in the standing order number or production order of the worker, i.e., treated direct labour cost
Avoidable Idle time			ilearea aireer laboor eest
Normal idle time:			
Waiting time for materials	10 hours	10 x 113 = ₹ 1,130	Booked under factory overheads
Waiting time for tools	6 hours	6 x 113 = ₹ 678	Booked under factory overheads
Abnormal idle time:			
Sudden break-down	10 hours	10 x 113 = ₹1,130	Adjusted through the costing P & L A/c; Not charged to production
Concealed idle time	10 hours	10 x 113 = ₹1,130	Treated as overhead costs
Total Avoidable idle time		₹4,068	

#### **Section-C**

### Answer any Two Questions from Q.No. 6,7, and 8. Each Question carries 15 Marks

6.(A)(i) Write short note on Global Depository Receipts.

[5]

**6.(A)(ii)** A chemical company has a net sales of  $\mathfrak{T}$  50 crores, cash expenses (including taxes) of  $\mathfrak{T}$  35 crores, and depreciation of  $\mathfrak{T}$  5 crores. If debtors decrease over the period by  $\mathfrak{T}$  6 crores, what will be the cash from operations?

6.(B) Information on two projects is given below:

Project	Α	В

Cash Inflows (₹ '000) year-end		
1	50	282
2	300	250
3	360	180
4	208	Nil

Evaluate which project is better under each of the following criteria taking discount rate as 10% p.a.

- (i) NPV
- (ii) Discounted Pay Back period
- (iii) Profitability Index

[7]

### Answer:6(A)(i)

A GDR is a negotiable instrument, basically a bearer instrument which is traded freely in the international market either through the stock exchange or over the counter or among qualified international buyers.

It is denominated in US dollars and represents shares issued in local currency.

#### Characteristics:

- (i) The shares underlying the GDR do not carry voting rights.
- (ii) The instruments are freely traded in the international market
- (iii) Investors can earn fixed income by way of dividend.
- (iv) GDRs can be converted into underlying shares, depository / custodian banks reducing the issue.

### Answer:6(A)(ii)

Cash from operation = operating profit + noncash charges + decrease in debtors = ₹ [(50-35-5) + 5 + 6] crores = ₹ 21 crores.

### Answer:6(B)

	Project A				Projec	ct B		
Cash								
Flow								
End of		Inflows ₹ '000	)		Inflows ₹	£ '000	ı	
year								
0	Absolut	Discounted	Cumulati	Absolut	Discounted	Cumulati	Discou	Decisio
	е		ve	е		ve	nt	n
							factor	
1	50	45.45	45.45	282	256.34	256.34	.909	
2	300	247.80	293.25	250	206.50	462.84	.826	
3	360	270.36	563.61	180	135.18	598.02	.751	
4	208	142.06	705.67	Nil		598.02	.683	
Total		705.67			598.02			
Discounte								
d inflows								
₹ '000								

Total		535			540				
Discounte									
d inflows									
₹ '000									
NPV		170.67			58.02			Α	is
								bett	er
Fraction	241.7	75 X 12 =	10.73		77.162	X 12 =	6.85		
of 3rd									
year									
	270.36				135.18				
Pay back	2 yec	2 years and 10.73 months			2 years	and 6.85 m	onths	В	is
							bett	er	
Profitabilit	705.674	=1.32		598.018	=1.11			Α	is
y index								bett	er
	535			540					

7.(A)(i) Classify the following independent items of cash flows under AS-3

[4]

- 1. Cash receipts from future contracts held for trading purpose.
- 2. Cash receipts from repayment of advances to third parties other than a financial enterprise.
- 3. Cash interest received from by a financial enterprise.
- 4. Cash received from disposal of fixed assets.
- 5. Cash receipts from interests in joint venture.
- 6. Dividends paid by a non-financial enterprise.
- 7. Cash payments on account of acquisition of a subsidiary.
- 8. Cash flows arising from taxes on income, not specifically identifiable.

### 7.(A)(ii) Write a short note on Foreign Currency Convertible Bonds (FCCBs).

[4]

**7(B)** XYZ Ltd. sells its products on a gross profit of 20% of sales. The following information is extracted from its annual accounts for the year ending 31st March, 2014. [7]

	₹
Sales (at 3 months credit)	40,00,000
Raw materials	12,00,000
Wages (15 days in arrears)	9,60,000
Manufacturing expenses and general expenses (One month in arrears)	12,00,000
Administration expenses (one month in arrears)	4,80,000
Sales promotion expenses (payable half yearly in advance)	2,00,000

The company enjoys one month credit from the suppliers and maintains 2 months stock of raw materials and 1½ months stock of finished goods. Cash balance is maintained at ₹1,00,000 as a precautionary balance. Assuming a 10% margin, find out the working capital requirement of XYZ Ltd.

### Answer:.7.(A).(i)

Classification of the following independent items of cash flows under AS – 3:

- 1. Cash receipts from future contracts held for trading purpose Operating Activities
- 2. Cash receipts from repayment of advances to third parties other than a financial enterprise **Investing Activities**
- 3. Cash interest received from by a financial enterprise Operating Activities
- 4. Cash received from disposal of fixed assets Investing Activities
- 5. Cash receipts from interests in joint venture **Investing Activities**
- 6. Dividends paid by a non-financial enterprise Financing Activities
- 7. Cash payments on account of acquisition of a subsidiary Investing Activities
- 8. Cash flows arising from taxes on income, not specifically identifiable Operating Activities

### Answer:.7.(A).(ii)

### Foreign Currency Convertible Bonds (FCCBs)

The FCCB means bonds issued in accordance with the relevant scheme and subscribed by a non-resident in foreign currency and convertible into ordinary shares of the issuing company in any manner, either in whole or in part, on the basis of any equity related warrants attached to debt instruments. The FCCBs are unsecured; carry a fixed rate of interest and an option for conversion into a fixed number of equity, shares of the issuer company. Interest and redemption price (if conversion option is not exercised) is payable in dollars. Interest rates are very low by Indian domestic standards. FCCBs are denominated in any freely convertible foreign currency.

FCCBs have been popular with issuers. Local debt markets can be restrictive in nature with comparatively I short maturities and high interest rates. On the other hand, straight equity-issue may cause a dilution in earnings, and certainly a dilution in control, which many shareholders, especially major family shareholders, would find unacceptable. Thus, the low coupon security which defers shareholders dilution for several years can be alternative to an issuer. Foreign investors also prefer FCCBs because of the Dollar denominated servicing, the conversion option and the arbitrage opportunities presented by conversion of the FCCBs into equity at a discount on prevailing India market price.

### Answer:.7.(B)

Particulars	₹	₹
Current Assets:		
Debtors (40,00,000 × 3/12 × 80%) (@ CGS)		8,00,000
Raw material stock (12,00,000 × 2/12)		2,00,000
Finished goods stock (1½ months of cost Production – cost of		4,00,000
production is 80% on 40,00,000)		
Advance payment of sales promotion		1,00,000
Cash		1,00,000
Total		16,00,000
(-) Current Liabilities:		
Sundry creditors (1/2 of 12,00,000)	1,00,000	
Wages (arrear for 15 days ) (1/24 of 9,60,000)	40,000	
Manufacturing and general expense	1,00,000	
(Arrears for 1 month) (1/12 of 12,00,000)		
Administrative expenses (Arrears for 1 month) (1/12 of 4,80,000)	40,000	2,80,000
		13,20,000

(+) 10% Margin	1,32,000
Net working capital requirement	14,52,000

### **8.(A)** The Balance – Sheet of XYZ Ltd. for the year ended 31.03.2013 is given below:

Liabilities	₹	Assets	₹
Equity Share Capital	5,00,000	Land & Building	1,00,000
Preference Share Capital	2,00,000	Machinery	4,00,000
General Reserve	1,00,000	Furniture	50,000
Secured Loans	3,00,000	Inventory	3,00,000
Sundry Creditors	1,00,000	Sundry Debtors	3,00,000
		Cash/Bank Balances	50,000
	12,00,000		12,00,000

Calculate the following ratios from the given Balance Sheet

- (i) Current Ratio
- (ii) Proprietory Ratio
- (iii) Debt-Equity Ratio
- (iv) Capital Gearing Ratio

[8]

### 8.(B) From the following information, work out the average amount of working capital requirement:

	Average period of credit (in	Estimate for the year (52 weeks)
	weeks)	(in ₹)
Purchase of material	6	26,00,000
Wages	1 ½	20,80,000
Rent	26	1,00,000
Other overheads	8	10,40,000
Salaries	4	13,00,000
Credit sales	8	52,00,000

Average amount of holding of stocks and WIP is ₹ 4,00,000 and there should be cash balance of ₹50,000. Assume that all expenses and income are made evenly throughout the year. [7]

### Answer:8.(A).

- (i) Current Ratio = Current Liabilities /Current Assets = 6,50,000/1,00,000=6.5:1 or simply 6.5
- (ii) Propriety ratio=Shareholders' funds/Total Tangible Assets=8,00,000/ 12,00,000=2:3
- (iii) Debt Equity ratio=Total Long Term Debt/Shareholders' funds= 3,00,000/8,00,000=3:8
- (iv) Capital gearing ratio=Long termDebt(incl.Pref.capital)/ Equity Shareholders' funds =5,00,000/6,00,000=5:6

(For Capital gearing, it may consider an alternative solution also)

### Answer:8.(B).

,				
	Estimate p.	Estimate p.	Avg. Credit	Working
	а	week	period	capital
				requirement
			Weeks	
Purchase of material	26,00,000	50,000	6	30,00,00
Wages	20,80,000	40,000	1.5	60,000
Rent	1,00,000	1,923.08	26	50,000
Other overheads	10,40,000	20,000	8	1,60,000

Salaries	13,00,000	25,000	4	1,00,000
Total Current Liabilities				6,70,000
Current Assets				
Credit Sales (Debtors)	52,00,000	1,00,000	8	8,00,000
Inventory including WIP				4,00,000
Cash balance				50,000
Total Current Assets				12,50,000
Net Working Capital Requirement (Average) = Current Assets - Current Liabilities =				5,80,000