

Note: Question No.1 is compulsory. Candidates are required to answer any five questions from the remaining six questions.

Question 1

a.

Workings:

$$(3) \text{ Budgeted Hours} = 30000/1 = \underline{30,000 \text{ hours}}$$

(2) Standard Fixed Overhead rate per hour (Standard Rate):

$$\frac{\text{Budgeted fixed overheads}}{\text{Budgeted Hours}} = \frac{\text{₹ } 30,000}{30,000 \text{ hours}} = \text{₹ } 1.00$$

$$(3) \text{ Standard Hour per unit of output} = \frac{30,000 \text{ hours}}{20,000 \text{ units}} = 1.5 \text{ hours}$$

$$(4) \text{ Standard hours for Actual Output} = 22,000 \text{ units} \times 1.5 \text{ hours} = 33,000 \text{ Hours}$$

$$(5) \text{ Budgeted Overhead per day for budgeted days} = \frac{\text{₹ } 30,000}{5 \text{ days}} = \text{₹ } 1,200$$

$$(6) \text{ Budgeted Overhead for actual days worked} = \text{₹ } 1,200 \times 27 \text{ days} = \text{₹ } 32,400$$

$$(7) \text{ Budgeted Hours for Actual days worked} = \frac{30,000 \text{ hours}}{5 \text{ days}} \times 27 \text{ days} = 32,400 \text{ hours}$$

Computation of Variances in relation to Fixed Overheads:

(i) Efficiency Variance (1 mark)

$$= \text{Standard Rate} \times (\text{Standard hours for actual output} - \text{Actual hours worked})$$

$$= \text{₹ } 1.00 (33,000 \text{ hours} - 31,500 \text{ hours}) = \text{₹ } 1,500 \text{ (Favourable)}$$

(ii) Capacity Variance(1 mark)

$$= \text{Standard Rate} \times (\text{Actual Hours} - \text{Budgeted Hours for actual days worked})$$

$$= \text{₹ } 1.00 (31,500 \text{ hours} - 32,400 \text{ hours}) = \text{₹ } 900 \text{ (Adverse)}$$

(iii) Calendar Variance(1 mark)

$$= \text{Standard Fixed Overhead Rate per day} \times (\text{Actual Working days} - \text{Budgeted working days})$$

$$= \text{₹ } 1,200 (27 \text{ days} - 25 \text{ days}) = \text{₹ } 2,400 \text{ (Favourable)}$$

(iv) Volume Variance(1 mark)

$$= \text{Standard Rate} \times (\text{Standard hours} - \text{Budgeted hours})$$

$$= \text{₹ } 1.00 (33,000 \text{ hours} - 30,000 \text{ hours}) = \text{₹ } 3,000 \text{ (Favourable)}$$

(v) Expenditure Variance(1 mark)

$$= \text{Budgeted Overheads} - \text{Actual Overheads}$$

$$= \text{₹} 30,000 - \text{₹} 31,000 = \text{₹} 1,000 \text{ (Adverse)}$$

Note: Overhead Variances may also be calculated based on output.

b. Calculation of Degree of Operating leverage and Degree of Combined leverage (1 mark each)

Firm	Degree of Operating Leverage (DOL)	Degree of Combined Leverage (DCL)
	= $\frac{\% \text{ change in Operating Income}}{\% \text{ change in Revenue}}$	= $\frac{\% \text{ change in EPS}}{\% \text{ change in Revenue}}$
M	$\frac{26\%}{28\%} = 0.929$	$\frac{32\%}{28\%} = 1.143$
N	$\frac{34\%}{27\%} = 1.259$	$\frac{26\%}{27\%} = 0.963$
P	$\frac{38\%}{25\%} = 1.520$	$\frac{23\%}{25\%} = 0.920$
Q	$\frac{43\%}{23\%} = 1.870$	$\frac{27\%}{23\%} = 1.174$
R	$\frac{40\%}{25\%} = 1.60$	$\frac{28\%}{25\%} = 1.120$

c. Working Notes:

Particulars	2015 (₹)	2016 (₹)
Fixed Cost	72,00,000 (₹ 60 × 1,20,000 units)	79,20,000 (110% of ₹ 72,00,000)
Variable Cost	180	225 (125% of ₹ 180)

Calculation of Break-even Point (in units):

Since, shelf life of the product is one year only, hence, opening stock is to be sold first.

	(₹)
Total Contribution required to recover total fixed cost in 2016 and to reach break-even volume.	79,20,000
Less: Contribution from opening stock {20,000 units × (₹ 300 – ₹ 180)}	24,00,000
Balance Contribution to be recovered	55,20,000

Units to be produced to get balance contribution

$$= \frac{\text{₹} 55,20,000}{\text{₹} 300 - \text{₹} 225} = 73,600 \text{ packets. (3 marks)}$$

Break-even volume in units for 2016(2 marks)

	Packets
From 2016 production	73,600
Add: Opening stock from 2015	20,000
	93,600

d.

Calculation of Cost of Debt after Tax:

$$\text{Cost of Debt } (K_d) = \frac{I(1-t) + \left[\frac{RV - NP}{n} \right]}{\frac{RV + NP}{2}}$$

Where, I = Interest payment i.e. 14% of ₹ 1,000 = ₹ 140

t = Tax rate applicable to the company i.e. 35%

RV = Redeemable value of debentures i.e. ₹ 1,000

NP = Net proceeds per debentures

$$= ₹ 1,000 \times \{1 - (0.05 + 0.02)\}$$

$$= ₹ 1,000 \times 0.93 = ₹ 930$$

n = Redemption period of debentures i.e 5 years

$$\text{Therefore, } K_d = \frac{₹ 140(1-0.35) + \left[\frac{₹ 1,000 - ₹ 930}{5 \text{ years}} \right]}{\left[\frac{₹ 1,000 + ₹ 930}{2} \right]} \times 100$$

3 marks

$$= \frac{₹ 91 + ₹ 14}{₹ 965} \times 100 = 10.88 \%$$

The Cost of Debt can also be calculated using the formula, where first Cost of Debt before tax is calculated and then tax adjustment is made. Accordingly:

$$\text{Cost of Debt } (K_d) = \frac{I + \left[\frac{RV - NP}{n} \right]}{\frac{RV + NP}{2}} \times (1-t) \times 100 = \frac{₹ 140 + 14}{₹ 965} (1-0.35) \times 100 = 10.37\%$$

2 marks

Question 2

a.

(a) Overhead Distribution Statement (2 marks)

	Production Departments		Service Departments	
	Machine Shops	Packing	General Plant	Stores
Allocated Overheads:	()	()	()	()
Indirect labour	80,000	60,000	40,000	1,10,000
Maintenance Material	34,000	16,000	21,000	28,000
Misc. supplies	15,000	29,000	9,000	6,000
Supervisor's salary	--	--	1,60,000	--
Cost & payroll salary	--	--	8,00,000	--
Total allocated overheads	1,29,000	1,05,000	10,30,000	1,44,000
Add: Apportioned Overheads (As per Schedule below)	18,43,500	7,01,250	2,27,750	7,31,500
	19,72,500	8,06,250	12,57,750	8,75,500

Schedule of Apportionment of Overheads (2 marks)

Item of Cost	Basis	Production Departments		Service Departments	
		Machine Shops ()	Packing ()	General Plant ()	Stores ()
Power	HP hours (7 : 1 : - : 2)	5,46,000	78,000	--	1,56,000
Rent	Floor space (5 : 2 : 1 : 4)	3,00,000	1,20,000	60,000	2,40,000
Fuel & Heat	Radiator sec. (3 : 6 : 2 : 4)	1,20,000	2,40,000	80,000	1,60,000
Insurance	Investment (10 : 3 : 1 : 2)	75,000	22,500	7,500	15,000
Taxes	Investment (10 : 3 : 1 : 2)	52,500	15,750	5,250	10,500
Depreciation	Investment (10 : 3 : 1 : 2)	7,50,000	2,25,000	75,000	1,50,000
		18,43,500	7,01,250	2,27,750	7,31,500

(b) Re-distribution of Overheads of Service Departments to Production Departments: (4 marks)

Let, the total overheads of General Plant = 'a' and the total overheads of Stores = 'b' a =
12,57,750 + 0.3b(i)

b = 8,75,500 + 0.2a.....(ii)

Putting the value of 'b' in equation no. (i)

$$a = 12,57,750 + 0.3 (8,75,500 + 0.2a)$$

$$\text{Or } a = 12,57,750 + 2,62,650 + 0.06a$$

$$\text{Or } 0.94a = 15,20,400 \quad \text{Or } a = 16,17,447 \text{ (appx.)}$$

Putting the value of a = 16,17,447 in equation no. (ii) to get the value of 'b'

$$b = 8,75,500 + 0.2 \times 16,17,447 = 11,98,989 \text{ (appx.)}$$

Particulars	Total (₹)	Machine Shops (₹)	Packing (₹)
Allocated and Apportioned overheads as per Primary distribution	27,78,750	19,72,500.00	8,06,250.00

+ - General Plant	16,17,447	8,08,723.50 (16,17,447 × $\frac{5}{10}$)	4,85,234.10 (16,17,447 × $\frac{3}{10}$)
- Stores	11,98,989	5,99,494.50 (11,98,989 × 50%)	2,39,797.80 (11,98,989 × 20%)
		33,80,718	15,31,281.9

- b. (a) In case of customer A, there is no increase in sales even if the credit is given. Hence comparative statement for B & C is given below: (5 marks)

Particulars	Customer B				Customer C			
	0	30	60	90	0	30	60	90
1. Credit period (days)	0	30	60	90	0	30	60	90
2. Sales Units	1,000	1,500	2,000	2,500	-	-	1,000	1,500
	in lakhs				in lakhs			
3. Sales Value	90	135	180	225	-	-	90	135

4. Contribution at 20% (A)	18	27	36	45	-	-	18	27
5. Receivables:- $\frac{\text{Credit Period} \times \text{Sales}}{360}$	-	11.25	30	56.25	-	-	15	33.75
6. Debtors at cost i.e. 80% of 11.25	-	9	24	45	-	-	12	27
7. Cost of carrying debtors at 20% (B)	-	1.8	4.8	9	-	-	2.4	5.4
8. Excess of contributions over cost of carrying debtors (A – B)	18	25.2	31.2	36	-	-	15.6	21.6

The excess of contribution over cost of carrying Debtors is highest in case of credit period of 90 days in respect of both the customers B and C. Hence, credit period of 90 days should be allowed to B and C.

(b) Problem;- (1 ½ marks each)

- (i) Customer A is taking 1000 TV sets whether credit is given or not. Customer C is taking 1000 TV sets at credit for 60 days. Hence A also may demand credit for 60 days compulsorily.
- (ii) B will take 2500 TV sets at credit for 90 days whereas C would lift 1500 sets only. In such case B will demand further relaxation in credit period i.e. B may ask for 120 days credit.

Question 3

a.

$$\text{Debt Equity Ratio} = 2 : 1; \quad \frac{\text{Debt}}{\text{Equity}} = \frac{2}{1}$$

$$\text{Equity} = \frac{\text{₹ } 50,00,000}{2} = \text{₹ } 25,00,000 \quad (1 \text{ mark})$$

$$\text{Return on Equity} = \frac{\text{Net Profit after tax (PAT)}}{\text{Equity}} = 50\%$$

$$\text{Or, Net Profit after tax (PAT)} = \text{₹ } 25,00,000 \times 50\% = \text{₹ } 12,50,000$$

$$\text{Net Profit before tax} = \text{₹ } 12,50,000 \times \frac{100}{65} = \text{₹ } 19,23,077$$

$$\text{Tax} = \text{₹ } 19,23,077 - \text{₹ } 12,50,000 = \text{₹ } 6,73,077$$

$$\text{Capital Turnover Ratio} = \frac{\text{Sales}}{\text{Capital}} = 1.2 \text{ Or, } \frac{\text{Sales}}{(\text{₹ } 25,00,000 + \text{₹ } 50,00,000)} = 1.2$$

$$\text{So, Sales} = \text{₹ } 75,00,000 \times 1.2 = \text{₹ } 90,00,000 \quad (1 \text{ mark})$$

$$\text{Closing Stock} = \text{₹ } 90,00,000 \times 8\% = \text{₹ } 7,20,000 \quad (1 \text{ mark})$$

$$\text{Gross Profit} = \text{₹ } 90,00,000 \times 30\% = \text{₹ } 27,00,000 \quad (1 \text{ mark})$$

Trading A/c for the year ending 31st March, 2015 (2 marks)

Dr.	Amount (₹)	Cr.	Amount (₹)
To Opening Stock	4,50,000	By Sales	90,00,000
To Purchases (Balancing figure)	65,70,000	By Closing Stock	7,20,000
To Gross Profit c/f to P&L A/c	27,00,000		
	97,20,000		97,20,000

Profit & Loss A/c for the year ending 31st March, 2015 (2 marks)

Dr.	Amount (₹)	Cr.	Amount (₹)
To Interest on long term debt @14%	7,00,000	By Gross Profit b/f from Trading A/c	27,00,000
To Miscellaneous Exp. (balancing figure)	76,923		
To Income Tax	6,73,077		
To Net Profit	12,50,000		
	27,00,000		27,00,000

b.

(a) **Production Budget (in units) (2 marks)**

	Product- K (units)	Product- H (units)
Expected sales	8,000	4,200
Add: Closing stock	1,000	2,100
Less: Opening stock	(800)	(1,600)
Units to be produced	8,200	4,700

(b) **Material Purchase Budget (3 marks)**

	Material-X (kg.)	Material-Y (kg.)	Material-Z (ltr.)
Materials required:			
- Product-K	98,400 (8,200 units × 12 kg.)	1,23,000 (8,200 units × 15 kg.)	65,600 (8,200 units × 8 ltr.)
- Product- H	70,500 (4,700 units × 15 kg.)	28,200 (4,700 units × 6 kg.)	65,800 (4,700 units × 14ltr.)
Total	1,68,900	1,51,200	1,31,400

Add: Closing stock	30,000	18,000	7,500
Less: Opening stock	(25,000)	(30,000)	(14,000)
Quantity to be purchased	1,73,900	1,39,200	1,24,900
Rate	₹15 per kg.	₹16 per kg.	₹5 per ltr.
Purchase cost	₹ 26,08,500	₹ 22,27,200	₹ 6,24,500

(c) **Direct Labour Budget (3 marks)**

	Unskilled (hours)	Skilled (hours)
For Product K	98,400 (8,200 units × 12 hours)	65,600 (8,200 units × 8 hours)
For Product H	47,000 (4,700 units × 10 hours)	23,500 (4,700 units × 5 hours)
Labour hours required	1,45,400	89,100
Rate	₹ 40 per hour	₹ 75 per hour
Wages to be paid	₹ 58,16,000	₹ 66,82,500

Question 4

a.

Stores Ledger Control Account (1 mark)

Dr.	(₹)		Cr.	(₹)
To Balance b/d	12,60,000	By Work-in-progress control A/c		67,20,000
To General ledger adjustment A/c	67,20,000	By Overhead control A/c		8,40,000
To Work-in progress Control A/c	33,60,000	By Overhead control A/c (Shortage)		2,52,000
		By Balance c/d		35,28,000
	1,13,40,000			1,13,40,000

W.I.P Control A/c (1 marks)

Dr.	(₹)		Cr.	(₹)
To Balance b/d	25,20,000	By Stores ledger control A/c		33,60,000
To Stores ledger control A/c	67,20,000	By Costing P&L A/c (Cost of Sales) (Balancing figure)		1,58,88,000
To Direct wages Control A/c	25,20,000			
To Overhead control A/c	90,08,000	By Balance c/d		15,20,000
	2,07,68,000			2,07,68,000

Costing Profit and Loss A/c (1 mark)

Dr.		Cr.	
	()		()
To W.I.P Control A/c	1,58,88,000	By General Ledger Adj. A/c	
To General ledger Adj. A/c (Profit)	19,06,560	Cost of sales	1,58,88,000
	0	Add 12% Profit	0
			19,06,560
	1,77,94,560		1,77,94,560

Financial Profit and Loss A/c(2 marks)

Dr.		Cr.	
	()	()	()
To Opening stock : Stores	12,60,000	By Sales	1,77,94,560
W.I.P	<u>25,20,000</u>	By Income from investment	4,00,000
To Purchases		By Closing stock:	
To Wages	29,40,000	Stores	35,28,000
To Overhead	95,50,000	W.I.P	<u>15,20,000</u>
To Loss on sale of fixed assets	8,40,000	By loss	5,87,440
	2,38,30,000		2,38,30,000

Reconciliation Statement(2 marks)

Dr.	()	Cr.	()
Profit as per Cost Accounts			19,06,560
Add: Income from investments			4,00,000
			23,06,560
Less : Loss on sale of fixed assets	8,40,000		
Under absorption of overheads (Refer to Working Note)	20,54,000		28,94,000
Loss as per Financial Accounts			5,87,440

Working Notes:

Overhead Control Account (1 mark)

Dr.		Cr.	
	()		()
To General Ledger Adj. A/c	95,50,000	By W.I.P control A/c	90,08,000
To Stores Ledger Control A/c	2,52,000	By Balance c/d (under absorption of overheads)	20,54,000

To Stores ledger control A/c	8,40,000		
To Wages control A/c Indirect wages (` 29,40,000- ` 25,20,000)	4,20,000		
	1,10,62,000		1,10,62,000

(b) Computation of Discounted Payback Period, Net Present Value (NPV) and Internal Rate of Return (IRR) for Two Machines

Calculation of Cash Inflows (1 mark)

	Machine – I (`)	Machine – II (`)
Annual Income before Tax and Depreciation	3,45,000	4,55,000
Less : Depreciation		
Machine – I: 10,00,000 / 5	2,00,000	-
Machine – II: 15,00,000 / 6	-	2,50,000
Income before Tax	1,45,000	2,05,000
Less: Tax @ 30 %	43,500	61,500
Income after Tax	1,01,500	1,43,500
Add: Depreciation	2,00,000	2,50,000
Annual Cash Inflows	3,01,500	3,93,500

Year	P.V. of Re.1 @12%	Machine – I			Machine – II		
		Cash flow	P.V.	Cumulative P.V.	Cash flow	P.V.	Cumulative P.V.
1	0.893	3,01,500	2,69,240	2,69,240	3,93,500	3,51,396	3,51,396
2	0.797	3,01,500	2,40,296	5,09,536	3,93,500	3,13,620	6,65,016
3	0.712	3,01,500	2,14,668	7,24,204	3,93,500	2,80,172	9,45,188
4	0.636	3,01,500	1,91,754	9,15,958	3,93,500	2,50,266	11,95,454
5	0.567	3,01,500	1,70,951	10,86,909	3,93,500	2,23,115	14,18,569
6	0.507	-	-	-	3,93,500	1,99,505	16,18,074

Discounted Payback Period for: (2 marks)

Machine - I

$$\begin{aligned}\text{Discounted Payback Period} &= 4 + \frac{(10,00,000 - 9,15,958)}{1,70,951} \\ &= 4 + \frac{84,042}{1,70,951} \\ &= 4 + 0.4916 \\ &= 4.49 \text{ years or 4 years and 5.9 months}\end{aligned}$$

Machine - II

$$\begin{aligned}\text{Discounted Payback Period} &= 5 + \frac{(15,00,000 - 14,18,969)}{1,99,505} \\ &= 5 + \frac{81,431}{1,99,505} \\ &= 5 + 0.4082 \\ &= 5.41 \text{ years or 5 years and 4.9 months}\end{aligned}$$

Net Present Value for: (1 mark)

Machine - I

$$\text{NPV} = ₹ 10,86,909 - 10,00,000 = ₹ 86,909$$

Machine - II

$$\text{NPV} = ₹ 16,18,074 - 15,00,000 = ₹ 1,18,074$$

Internal Rate of Return (IRR) for: (2 marks)

Machine - I

$$\text{P.V. Factor} = \frac{\text{Initial Investment}}{\text{Annual Cash Inflow}} = \frac{10,00,000}{3,01,500} = 3.3167$$

PV factor falls between 15% and 16%

Present Value of Cash inflow at 15% and 16% will be:

$$\text{Present Value at 15\%} = 3.353 \times 3,01,500 = 10,10,930$$

$$\text{Present Value at 16\%} = 3.274 \times 3,01,500 = 9,87,111$$

$$\begin{aligned}\text{IRR} &= 15 + \frac{10,10,930 - 10,00,000}{10,10,930 - 9,87,111} \times (16 - 15) \\ &= 15 + \frac{10,930}{23,819} \times 1 = 15.4588\% = 15.46\%\end{aligned}$$

Machine - II

$$\text{P.V. Factor} = \frac{15,00,000}{3,93,500} = 3.8119$$

Present Value of Cash inflow at 14% and 15% will be:

$$\text{Present Value at 14\%} = 3.888 \times 3,93,500 = 15,29,928$$

$$\text{Present Value at 15\%} = 3.785 \times 3,93,500 = 14,89,398$$

$$\begin{aligned} \text{IRR} &= 14 + \frac{15,29,928 - 15,00,000}{15,29,928 - 14,89,398} \times (15 - 14) \\ &= 14 + \frac{29,928}{40,530} \times 1 = 14.7384\% = 14.74\% \end{aligned}$$

(ii) Advise to the Management (2 marks)

Ranking of Machines in terms of the Three Methods

	Machine - I	Machine - II
Discounted Payback Period	I	II
Net Present Value	II	I
Internal Rate of Return	I	II

Advise: Since Machine - I has better ranking than Machine - II, therefore, Machine - I should be selected

Question 5

a. Idle capacity costs are treated in the following ways in Cost Accounts:

If the idle capacity cost is due to unavoidable reasons: A supplementary overhead rate may be used to recover the idle capacity cost. In this case, the costs are charged to the production capacity utilised.

If the idle capacity cost is due to avoidable reasons: Such as faulty planning, etc. the cost should be charged to Costing Profit and Loss Account.

If the idle capacity cost is due to trade depression, etc.,: Being abnormal in nature the cost should also be charged to the Costing Profit and Loss Account.)

If the idle capacity cost is due to seasonal factors, then the cost should be charged to cost of production by inflating overhead rate. (1 mark for each point)

b. Meaning of Venture Capital: The venture capital financing refers to financing and funding of the small scale enterprises, high technology and risky ventures.

Methods of Venture Capital financing: Some common methods of venture capital financing are as follows:

- c. (i) *Equity financing:* The venture capital undertakings generally requires funds for a longer period but may not be able to provide returns to the investors during the initial stages. Therefore, the venture capital finance is generally provided by way of equity share capital..
- d. (ii) *Conditional Loan:* A conditional loan is repayable in the form of a royalty after the venture is able to generate sales. No interest is paid on such loans. In India Venture Capital Financers charge royalty ranging between 2 to 15 per cent; actual rate depends on other factors of the venture such as gestation period, cash flow patterns, riskiness and other factors of the enterprise.
- e. (iii) *Income Note:* It is a hybrid security which combines the features of both conventional loan and conditional loan. The entrepreneur has to pay both interest and royalty on sales but at substantially low rates
- (iv) *Participating Debenture:* Such security carries charges in three phases- in the start- up phase, no interest is charged, next stage a low rate of interest is charged upto a particular level of operations, after that, a high rate of interest is required to be paid. **(1 mark for each point)**

c. (i) (2 marks)

In dividend price approach, cost of equity capital is computed by dividing the expected dividend by market price per share. This ratio expresses the cost of equity capital in relation to what yield the company should pay to attract investors. It is computed as:

$$K_e = \frac{D_1}{P_0}$$

Where,

D_1 = Dividend per share in period 1

P_0 = Market price per share today

Whereas, on the other hand, the advocates of earnings price approach co-relate the earnings of the company with the market price of its share. Accordingly, the cost of ordinary share capital would be based upon the expected rate of earnings of a company. This approach is similar to dividend price approach, only it seeks to nullify the effect of changes in dividend policy.

(ii) (2 marks)

Concentration Banking: In concentration banking the company establishes a number of strategic collection centres in different regions instead of a single collection centre at the head office. This system reduces the period between the time a customer mails in his remittances and the time when they become spendable funds with the company. Payments received by the different collection centers are deposited with their respective local banks which in turn transfer all surplus funds to the concentration bank of head office.

d.

(i) **Difference between Scrap and Defectives (2 marks)**

Scrap	Defectives
1. It is loss connected with output	1. This type of loss connected with the output but it can be in the input as well.
2. Scraps are not intended but cannot be eliminated due to nature of material or process itself.	2. Defectives also are not intended but can be eliminated through proper control.
3. Generally scraps are not used or rectified.	3. Defectives can be used after rectification.
4. Scraps have insignificant recoverable value.	4. Defectives are sold at lower value from that of good one.

(ii) **Difference between Preference Shares and Debentures (2 marks)**

Basis of difference	Preference shares	Debentures
Ownership	Preference Share Capital is a special kind of share	Debenture is a type of loan which can be raised from the public
Payment of Dividend/ Interest	its holders enjoy priority both as regard to the payment of a fixed amount of dividend and also towards repayment of capital in case of winding up of a	It carries fixed percentage of interest.
Nature	Preference shares are a hybrid form of financing with some characteristic of equity shares and some attributes of Debt Capital	Debentures are instrument for raising long term capital with a period of maturity.

Question 6

a.

(i) **M/s ABID Constructions
Contract Account (4 marks)**

Particulars		Amount (in '000)	Particulars		Amount (in '000)
To Material issued		7,700	By Material returned		175
To Direct wages	3,300		By Profit & Loss A/c (Material Destroyed by fire)		130
Add: Outstanding	100	3,400	By W-I-P:		
To Site Office Cost	550		- Work uncertified	225	
Less: Prepaid	50	500	- Work certified	12,650	12,875
To Depreciation*		40	By Material at site		110

To Notional Profit	1,650		
	13,290		13,290
To Profit & Loss A/c (Working Note -2)	880	By Notional Profit	1,650
To W-I-P (Reserve)	770		
	1,650		1,650

* Depreciation on plant = ₹ 8,00,000 × 15% × $\frac{4 \text{ months}}{12 \text{ months}}$ = ₹ 40,000

(ii) **Contractee's Account (1 mark)**

Particulars	Amount (₹ in '000)	Particulars	Amount (₹ in '000)
To Balance c/d	10,120	By Bank A/c	10,120
	10,120		10,120

(iii) **Relevant items of Profit & Loss Account(1 mark)**

Particulars	Amount (₹ in '000)	Particulars	Amount (₹ in '000)
To Contract A/c (loss of material due to fire)	130	By Contract A/c (Profit on contract)	880
To Net Profit	750		
	880		880

(iv) **Balance Sheet (Extracts) as on 31st March, 2014(2 marks)**

(Amount in '000)

Liabilities	Amount (₹)	Amount (₹)	Assets	Amount (₹)	Amount (₹)
Add: Profit	750		Plant at cost	800	
			Less: Dep.	40	760
Outstanding Wages		100	Contract W-I-P:		
			-Uncertified	225	
			-Certified	12,650	
			-Reserve	(770)	
			Less: Advances	(10,120)	1,985
			Materials at site		110
			Prepaid exp.		50

Working Notes:

$$1. \text{ Percentage of Completion} = \frac{\text{Work Certified}}{\text{Value of contract}} \times 100$$

$$= \frac{1,26,50,000}{1,71,00,000} \times 100 = 73.98\%$$

2. Profit from the incomplete contract

$$= \text{Notional Profit} \times \frac{2 \text{ Cash Received}}{3 \text{ Work Certified}}$$

$$= \text{Rs. } 16,50,000 \times \frac{2}{3} \times \frac{1,26,50,000}{1,01,20,000}$$

$$= \text{Rs. } 8,80,000$$

(Note: The above figures calculated on traditional prudent basis followed in Contract costing.)

b.

Projected Statement of Cash Flow for the year ended 31st March 20X8

	(Rs.)
Cash flow from Operating Activities	
Profit before taxation	1,04,500
Adjustments:	
Less: Profit on sale of machine {Rs. 38,000 – (Rs. 95,000 – Rs.66,500)}	(9,500)
Add: Depreciation	1,14,000
<i>Operating profit before working capital changes</i>	2,09,000
Increase in Inventories & Trade receivable (Rs.5,60,500 – Rs.4,75,000)	(85,500)
Increase in Trade payables (Rs.1,48,200 – Rs.1,14,000)	34,200
Increase in Bills payable (Rs. 98,800 – Rs. 76,000)	22,800
<i>Cash generated from operations</i>	1,80,500
Less: Income tax paid*	Nil
<i>Net Cash from Operating activities (A)</i>	1,80,500
Cash flow from Investing Activities	
Purchase of plant	(1,90,000)
Sale of machine	38,000
<i>Net cash from Investing activities (B)</i>	(1,52,000)
Cash Flow from Financing Activities	
Dividend paid	(57,000)

(2 marks)

(2 marks)

Dividend distribution tax (Working note)	(19,000)
<i>Net cash from Financing activities (C)</i>	(76,000)
Net Increase/(Decrease) in cash and cash equivalents (A+B+C)	(47,500)
Cash and cash equivalent at the beginning of the year	66,500
Cash and cash equivalent at the end of the year	19,000

(2 marks)

* No information is given on corporate tax.

Working note:

Dividend distribution tax is paid on the gross amount of dividend paid. The gross dividend is calculated as : $\frac{\text{Dividend Payable}}{(1 - \text{tax rate})}$

$$\text{Gross Amount of Dividend} = \frac{\text{Rs. } 57,000}{(1 - 0.25)} = \text{Rs. } 76,000$$

$$\text{Dividend Distribution Tax} = \text{Rs. } 76,000 \times 25\% = \text{Rs. } 19,000$$

(2 marks)

Question 7

Attempt any **four** of the following

a. (1 mark each)

Industry	Method of Costing
(a) Oil Refinery	– Process costing
(b) Bicycle manufacturing	– Multiple costing
(c) Interior decoration	– Job costing
(d) Airlines	– Operating costing

b. (4 marks)

Explicit costs: These costs are also known as out of pocket costs. It refers to those costs which involves immediate payment of cash. Salaries, wages, postage and telegram, interest on loan etc. are some examples of explicit costs because they involve immediate cash payment. These payments are recorded in the books of account and can be easily measured.

Main points of difference: The following are the main points of difference between Explicit and Implicit costs.

- (i) Implicit costs do not involve any immediate cash payment. As such they are also known as imputed costs or economic costs.
- (ii) Implicit costs are not recorded in the books of account but yet, they are important for certain types of managerial decisions such as equipment replacement and relative profitability of two alternative courses of action.

c.

- The financing of current assets involves a trade off between risk and return. A firm can choose from short or long term sources of finance. Short term financing is less expensive than long term financing but at the same time, short term financing involves greater risk than long term financing. **(1 mark)**
- Depending on the mix of short term and long term financing, the approach followed by a company may be referred as matching approach, conservative approach and aggressive approach. **(1 mark)**
- In matching approach, long-term finance is used to finance fixed assets and permanent current assets and short term financing to finance temporary or variable current assets. Under the conservative plan, the firm finances its permanent assets and also a part of temporary current assets with long term financing and hence less risk of facing the problem of shortage of funds. **(1 mark)**
- An aggressive policy is said to be followed by the firm when it uses more short term financing than warranted by the matching plan and finances a part of its permanent current assets with short term financing. **(1 mark)**

d.

i) Time Value of Money: **(1/2 mark for each point)**

It means money has time value. A rupee today is more valuable than a rupee after a year. Similarly, a rupee received in future is less valuable than it is today.

Time value of money can be of two types, present value of money and future value of money. Concept of discounting is applicable to present value of money and compounding is applicable to future value of money.

In a nutshell, time value of money represents monetary value arising out of difference of time.

- ii) ABC Analysis: It is a system of selective inventory control whereby the measure of control over an item of inventory varies with its usage value. It exercises discriminatory control over different items of stores grouped on the basis of the investment involved. Usually the items of material are grouped into three categories viz; A, B and C according to their use value during a period. In other words, the high use value items are controlled more closely than the items of low use value. **(1 mark)**

'A' Category of items consists of only a small percentage i.e., about 10 % of the total items of material handled by the stores but require heavy investment i.e., about 70% of inventory value, because of their high prices and heavy requirement.

'B' Category of items comprises of about 20% of the total items of material handled by stores. The percentage of investment required is about 20% of the total investment in inventories.

'C' category of items does not require much investment. It may be about 10% of total inventory value but they are nearly 70% of the total items handled by stores **(1 mark)**
