INTERMEDIATE EXAMINATION GROUP II (SYLLABUS 2016)

SUGGESTED ANSWERS TO QUESTIONS JUNE 2019

Paper- 10: COST & MANAGEMENT ACCOUNTING AND FINANCIAL MANAGEMENT

Time Allowed: 3 Hours

Full Marks: 100

The figures in the margin on the right side indicate full marks.

All workings must form part of your answer.

Wherever necessary, Candidates may make appropriate assumptions and clearly state them.

Please

- (1) Write answers to all parts of a question together.
- (2) Open a new page for answers to a new question.
- (3) Attempt the required number of questions only.

This Paper has been divided into two Parts A& B, each carrying 50 marks. Further each Part has been divided into two sections each.

Part-A

(COST & MANAGEMENT ACCOUNTING)

(50 Marks)

Section – I

Answer the following questions.

- 1. (a) Choose the correct answer from the given four alternatives (You may write only the Roman numeral and Alphabet chosen for your answer): 1x6=6
 - (i) Management Accounting
 - (A) accumulates, summarises and analyses the available data.
 - (B) is primarily concerned with the requirements of the management.
 - (C) makes Corporate Planning and Strategy effective.
 - (D) All of the above

- (ii) XYZ Ltd. makes a special gadget for the car it manufactures. The machine for the gadget works to full capacity and incurs ₹ 15 Lakhs and ₹ 40 Lakhs respectively as Variable and Fixed Costs. If all the gadgets were purchased from an outside supplier, the machine could be used to produce other items, which would earn a total contribution of ₹ 25 Lakhs. What is the maximum price that XYZ Ltd. should be willing to pay to the outside supplier for the gadgets, assuming there is no change in Fixed Costs?
 - (A) ₹40 Lakhs
 - (B) ₹ 65 Lakhs
 - (C) ₹ 25 Lakhs
 - (D) ₹15 Lakhs
- (iii) When a manager is concerned with monitoring total cost, total revenue and net profit conditioned upon the level of productivity, an accountant should normally recommend

Flex	ible	Standard
Budgeting		costing
(A)	Yes	Yes
(B)	Yes	No
(C)	No	Yes
(D)	No	No

- (iv) In a system whereby all activities are re-evaluated each time a budget is formulated and starts with assumption that requirement of funds does not exist is called
 - (A) Performance Budgeting
 - (B) Programme Budget
 - (C) Flexible Budget
 - (D) Zero-based Budgeting
- (v) The difference between hours paid and hours worked is known as
 - (A) Labour rate variance
 - (B) Labour efficiency variance
 - (C) Idle time variance
 - (D) Net efficiency variance
- (vi) The difference in total cost that results from two alternative courses of action is called
 - (A) Relevant Cost
 - (B) Opportunity Cost
 - (C) Differential Cost
 - (D) Marginal Cost
- (b) Match the statement under Column I with the most appropriate statement under Column II: (You may opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book): 1x4=4

	Column I		Column II		
1	Budgetary Control System	(A)	are useful for budget and performance evaluation		
2	Standard Costs	(B)	helps in profit planning and analysis		
3	Marginal Costing	(C)	aims at adherence to planning costs		
4	Cost Control	(D)	The introduction and implementation of the system may be expensive		

- (c) State whether the following statements are Trueor False: (You may write only the Roman numeral and whether True or False without copying the statement into the answer book.): 1x4=4
 - (i) Marginal Costing is useful for long term planning.
 - (ii) Profit Planning and Control is not a part of Budgetary Control Mechanism.
 - (iii) Standard Costs are based on technical assessments.
 - (iv) PV Chart exhibits the relationship between profit and overhead volume.

Answer:

1. (a)

- (i) (D)
- (ii) (A)
- (iii) (A)
- (iv) (D)
- (v) (C)
- (vi) (C)

1. (b)

- **1.** (D)
- **2**. (A)
- **3**. (B)
- **4**. (C)

1. (c)

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

Section – II

Answer any three questions from question nos. 2, 3, 4 and 5.

Each question carries 12 marks.

2. (a) AARINA LTD. sells its product at ₹ 30 per unit. During the quarter ending 31st March, 2019 it produced and sold 16000 units and suffered a loss of ₹ 10 per unit. If the volume of sales is raised to 40000 units, it can earn a profit of ₹ 8 per unit.

You are required to calculate:

- (i) Break-Even Point in Rupees.
- (ii) Profit, if the sales volume is 50000 units.
- (b) TRITONI LTD. produces 3 products A, B and C from the same manufacturing facilities. The cost and other details of the 3 products are as follows:

Particulars	Α	В	С	Total
Selling Price/unit (₹)	200	160	100	
Variable Cost/unit (₹)	120	120	40	
Fixed Expenses/month (₹)				2,76,000
Maximum Production/month (units)	5000	8000	6000	
Total Hours available for the month				200
Maximum demand/month (units)	2000	4000	2400	

The processing hours cannot be increased beyond 200 hours/month. You are required to:

- (i) Compute the most profitable mix.
- (ii) Compute the overall break-even sales of the company for the month based on the mix calculated in (i) above.
 4+4=8

Answer:

2. (a)

P/V ratio = (Change in Profit/ Change in Sales Values) × 100

= {₹3,20,000 - (- ₹1,60,000)}/(₹12,00,000 - ₹4,80,000)×100

= (₹4,80,000 / ₹7,20,000) × 100 = 66.67%

Total Contribution in case of 40,000 units = Sales Value x P/V ratio

Fixed Cost = Contribution - Profit = ₹8,00,000 - ₹3,20,000 = ₹4,80,000

- (i) Break Even Point in ₹ = Fixed Cost / P/V Ratio = ₹4,80,000 / 66.67% = ₹7,20,000
- (ii) If Sales volume is 50,000 units, then Profit = {(Sales Value × P/V ratio) Fixed Cost}

2+2=4

= {(50,000 units × 30) × 66.67%} – ₹4,80,000

=₹5,20,000

(b)

Most Profitable Product Mix

(i)

Product	* No. of units to be produced	Contribution /unit (₹)	Total Contribution (₹)
A	2,000	80	1,60,000
В	1,600	40	64,000
С	2,400	60	1,44,000
	Total Contribution 3,68,000		
	Less: Fixed Cost (2,76,000)		
		Profit	₹ 92,000

* Please refer to Working Note-1:

(ii) Overall Break Even Sales (based on the mix calculated in (i) above)

Break Even Sales (in ₹) = (Fixed Cost /Contribution) × Sales

= (₹2,76,000 /₹3,68,000) × ** 8,96,000

=₹6,72,000

Working Note - 1:

Products	Α	В	С
Selling Price/unit (₹)	200	160	100
Less Variable Cost/unit (₹)	(120)	(120)	(40)
Contribution/unit (₹)	80	40	60
Maximum Production/hr (units)	(5,000/200) = 25	(8,000/200) = 40	(6,000/200) = 30
Contribution per hour (₹)	2,000	1,600	1,800
Contribution/unit x Maximum Production/hr	(80x25)	(40x40)	(60x30)
Ranking	I	Ш	II
Units to be produced	2,000	1,600	2,400
Time requirement for the units to be produced-hrs	80	40	80

Working Note - 2:				
Products	Units	Selling Price/unit (₹)	Sales Revenue (₹)	
А	2,000	200	4,00,000	
В	1,600	160	2,56,000	
С	2,400	100	2,40,000	
			** 8,96,000	

3. (a) WESTLAND LTD., a manufacturing company, operates standard costing system and showed the following data in respect of the month of May 2019:

Budgeted		Actual	
Working days	20	Working days	22
Man hours	4000	Man hours	4200
Fixed overhead cost (₹)	2400	Fixed overhead cost (₹)	2500
Output (units)	800	Output (units)	900

You are required to calculate the following Fixed overheads variances:

- (i) FOH Budget Variance
- (ii) FOH Cost Variance
- (iii) FOH Efficiency Variance
- (iv) FOH Capacity Variance
- (v) FOH Calendar Variance
- (vi) FOH Volume Variance
- (b) SHIBHUMA LTD., budgets to sell in the quarter ending March 31, 2019:
 - 500 Units of product P @ ₹ 30 per unit,
 - 400 Units of product Q @ ₹ 20 per unit and
 - 100 Units of product R @ ₹ 50 per unit.
 - During the quarter Actual Sales were as follows:
 - 400 Units of product P @ ₹40 per unit.
 - 500 Units of product Q @ ₹10 per unit.
 - 50 Units of product R @ ₹40 per unit.

You are required to determine the following sales variances:

- (i) Sales Value variance
- (ii) Sales Price Variance
- (iii) Sales Volume Variance
- (iv) Sales Mix Variance
- (v) Sales Sub-Volume Variance

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Answer:

 $SR = \frac{Budgeted FOH}{Budgeted Hours} = \frac{2400}{4000} = 0.60 \ (\overline{\textbf{T}})$

Standard Man hours per unit = $\frac{4000}{800}$ = 5

Standard hours for Actual Output = 900 × 5 = 4500

Revised Budgeted Hours = $\left(\frac{22}{20} \times 4000\right)$ = 4400

SRSH (₹) (1)	SRAH (₹) (2)	RBH5R (₹) (3)	SRBH (₹) (4)	ARAH (₹) (5)
0.6x4500 = 2,700	0.6x4200 = 2,520	0.6x4400 = 2,640	0.6x4000 = 2,400	2,500

Fixed overhead Variances:

(i)	FOH Budget Variance	= (4)-(5)=₹ 100(A)
(ii)	FOH Cost Variance	= (1)-(5)=₹ 200 (F)
(iii)	FOH Efficiency Variance	= (1)-(2)=₹ 180 (F)
(i∨)	FOH Capacity Variance	= (2)-(3)=₹ 120 (A)
(~)	FOH Calendar Variance	= (3)-(4)=₹ 240 (F)
(∨i)	FOH Volume Variance	= (1)-(4)=₹ 300 (F)

(b)

Product	AQAP (₹) (1)	AQSP (₹) (2)	RSQSR (₹) (3)	SQSP (₹) (4)
Р	400×40 =16,000	400×30 =12,000	475×30 =14,250	500×30 =15,000
Q	500×10 =5,000	500×20 =10,000	380×20 =7,600	400×20 =8,000
R	50×40 =2,000	50×50 =2,500	95×50 =4,750	100×50 =5,000
	23,000	24,500	26,600	28,000

RSQ =
$$\frac{SQ}{SQ}$$
 for that products × AQ for all products
P = $\frac{5}{10} \times 950 = 475$
Q = $\frac{4}{10} \times 950 = 380$
R = $\frac{1}{10} \times 950 = 95$
(i) Sales Value Variance = (1-4) = ₹ 5,000 (Adverse)
(ii) Sales Price Variance = (1-2) = ₹ 1,500 (Adverse)
(iii) Sales Volume Variance = (2-4) = ₹ 3,500 (Adverse)
(iv) Sales Mix Variance = (2-3) = ₹ 2,100 (Adverse)
(v) Sales Sub Volume Variance = (3-4) = ₹ 1,400 (Adverse)

4.(a) SBT LTD., a newly established manufacturing company, has an installed capacity to produce 100000 units of a consumer product annually. However its practical capacity is only 90%.

The actual capacity utilization may be substantially lower, as the firm is new to the market and the demand is uncertain.

The following budget has been prepared for 90% capacity utilization.

Particulars	Cost per unit (₹)
Direct Materials	12
Direct Labour	8
Direct Expenses	5
Production Overheads	10 (40% Variable)
Administrative Overheads	5 (100% Fixed)
Selling and Distribution	6 (50% Variable)

You are required to prepare the budgets at 70% and 80% levels of capacity utilization giving clearly the

- (i) Unit Variable Costs
- (ii) Unit Fixed Cost
- (iii) Total Cost under various heads at all the above levels

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(b) DANDIA LTD., a manufacturing company, received an order for 16 units of a new product. So far, 4 units have been completed; the first unit required 40 direct labour hours and a total of 102.40 Direct labour hours has been recorded for the 4 units. The Production Manager expects on 80% learning effect for this type of work.

The direct cost attributed to the centre in which the unit is manufactured and its costs are as follows:

	₹
Direct Material	30.00 per unit
Direct Labour	6.00 per hour
Variable overhead	0.50 per direct labour hour
Fixed overheads apportioned	5.00 per direct labour hour

You are required to produce an estimated product cost for the initial order based on the cost data given. 6

Answer:

4. (a)

				Amount in (₹)
Particulars		90%	70%	80%
Unils (A)		90,000	70,000	80,000
Direct Material	₹12	10,80,000	8,40,000	9,60,000
Direct Labour	₹8	7,20,000	5,60,000	6,40,000
Direct Expenses	₹5	4,50,000	3,50,000	4,00,000
Variable Production Overhead	₹4	3,60,000	2,80,000	3,20,000
Variable Selling Overhead	₹3	2,70,000	2,10,000	2,40,000
Total Variable Cost (B)		<u>28,80,000</u>	<u>22,40,000</u>	<u>25,60,000</u>
Variable Cost/unit (C) = (B) \div (A)		₹32	₹32	₹32
Fixed Production Overhead	(₹)	5,40,000	5,40,000	5,40,000
Fixed Administrative Overhead	(₹)	4,50,000	4,50,000	4,50,000
Fixed Selling Overhead	(₹)	2,70,000	2,70,000	2,70.000
Total Fixed Overhead (D)	(₹)	12,60,000	12,60,000	12,60,000
Fixed Cost/unit (E) = (D) \div (A)	(₹)	14	18	15.75
Total Cost/unit (F) = (C) + (E)	(₹)	46	50	47.75
Total Costs (B) +(D)		41,40,000	35,00,000	38,20,000

SBT Ltd. Budget for 70% and 80% level of capacity utilization

(b) 80% learning curve results are given below:

Production (units)	Cumulative Avg.	time (hours)	Total time (hours)
1		40	40
2	(0.80×40)	32	64
4	(0.80×32)	25.6	102.40
8		20.48	163.843
16		16.384	262.144
32		13.1072	419.4304

Computation of total cost for the initial order of 16 units:

	₹
Material (30x16)	480.00
Direct labour (262.144x6)	1572.86
Variable overheads (0.5x262.144)	131.07
Fixed overhead apportioned (5x262.144)	1310.72
Total cost	3494.65

5. Write short notes on *any three* out of the following:

4x3=12

(a) Distinction between Standard Costing and Budgetary Control

- (b) Inter Firm Comparison
- (c) Methods of Transfer Pricing
- (d) Limitations of Marginal Costing

Answer:

5. (a)

Distinction between Standard Costing and Budgetary Control

	Standard Costing		Budgetary Control
*	Standard Costs are pre-determined costs representing what costs should be, at the level of efficient condition of production and operation.	*	Budgets are financial and or quantitative statements, prepared and approved prior to a defined period of time, of the policy to be pursued during that period for achieving the objective.
*	are generally restricted to costs.	*	include estimates of Income, Costs and employment of capital.
*	Scope of Standard Costing is comparatively narrow as it covers mainly production costs.	*	Budget is more widening, as it relates to the operation of the business as a whole. It covers Capital, Sales and Financial expenses in addition to production.
*	It is a projection of cost accounts.	*	Budget is a projection of financial accounts.

(b) Inter-Firm Comparison:

Inter-Firm Comparison, as the name denotes, means the techniques of evaluating the performances, efficiencies, deficiencies, costs and profits of similar nature of firms engaged in the same industry or business. It consists of exchange of information, voluntarily, concerning production, sales, costs with various types of break-up prices, profits etc., among the firms who are interested of willing to make the device a success.

The basic purposes of Inter-firm comparison are to find out the weak points in an organization and to improve the efficiency by taking appropriate measures to wipe out the weakness gradually over a period offime.

Inter-firm comparison makes the management of the organization aware of the strengths and weaknesses in relation to other organizations in the same industry. Such comparison helps in developing cost-consciousness amongst the members of the industry.

(c) Methods of Transfer Pricing:

There are several methods for fixation of 'Transfer Price'.

Some of them are:

- (i) Pricing based on Actual Cost/Cost plus basis/Standard Cost/Marginal Cost.
- (ii) Market Price as transfer price. This will act as a good incentive for efficient production to the selling divisionand any inefficiency in production and abnormal costs will not be borne by the buying division.
- (iii) Negotiated Pricing as the transfer price. The transfer prices are fixed through negotiations between the seller and the buyer division.
- (iv) Pricing based on Opportunity Cost. This method recognizes the minimum price that the selling division is ready to accept and the maximum price that the buying division is ready to pay.

(d) Limitations of Marginal Costing:

- (i) The separation of costs into fixed and variable presents technical difficulties. Infact, no variable cost is completely variable nor is a fixed cost completely fixed.
- (ii) It is not correct to eliminate fixed costs from finished stock and work-in-progress.
- (iii) The exclusion of fixed overhead from the inventories affects the P&L A/c and produces an unrealistic and conservative Balance Sheet, unless adjustments are made in the financial accounts at the end of the period.
- (iv) In Marginal Costing System, marginal contribution and profits increase or decrease with changes in sales volume. Where sales are seasonal, profits fluctuate from period to period. Monthly operating statements under the Marginal Costing System will not, therefore, be as realistic or useful as in Absorption Costing.
- (v) Marginal Costing does not give full information. For example, increased production and sales may be due to extensive use of existing equipments; (by working overtime or in shifts), or by an expansion of the resources, or by the replacement of labour force by machines. The Marginal Contribution fails to reveal these.
- (vi) Marginal Costing does not provide any standard for the evaluation of performance. A system of Budgetary Control and Standard Costing provides more effective control than that obtained by Marginal Costing.
- (vii) Though for short-term assessment of profitability, marginal costs may be useful, longterm is correctly determined on full costs only.
- (viii) Although marginal costing eliminates the difficulties involved in the apportionment and under/over absorption of fixed overhead, the problem still remains in so far as the variable overhead is concerned.
- (ix) With automation and technological developments, the impact of fixed costs on products is much more than that of variable costs. A system wwhich ignores fixed cots is therefore less effective because a major portion of costs is not taken care of.
- (x) During earlier stages of a period of recession, the low profits or increase in losses in a magnified way in the marginal cost statements may unduly create panic and compel the management to take action that may lead to further depression of the market.

Part-B

(FINANCIAL MANAGEMENT)

(50 Marks)

Section – III

Answer the following questions:

- 6. (a) Choose the correct answer from the given four alternatives (You may write only the Roman numeral and Alphabet chosen for your answer): 1x6=6
 - (i) Objective of Financial Management is
 - (A) Management of Liquidity
 - (B) Maximization of Profit
 - (C) Maximization of Shareholders' Wealth
 - (D) Management of Fixed Assets
 - (ii) Which of the following variables is not known in Internal Rate of Return?
 - (A) Initial Cash Flows
 - (B) Discount Rate
 - (C) Terminal Inflows
 - (D) Life of the Project
 - (iii) Cost of Capital refers to
 - (A) Floatation Cost
 - (B) Dividend
 - (C) Required Rate of Return
 - (D) None of the above
 - (iv) Working Capital Management involves financing and management of
 - (A) All Assets
 - (B) All Current Assets
 - (C) Cash and Bank Balance
 - (D) Receivables and Payables
 - (v) All listed companies are required to prepare
 - (A) Funds Flow statement
 - (B) Cash Flow Statement
 - (C) Statement of Affairs
 - (D) All of the above
 - (vi) Ratio Analysis can be used to study liquidity, turnover, profitability etc., of a firm. What does Debt-Equity Ratio help to study?
 - (A) Solvency
 - (B) Liquidity
 - (C) Profitability
 - (D) Turnover

(b) Match the statement under Column I with the most appropriate statement under Column II: (You may opt to write only the numeral and the matched alphabet instead of copying the contents into the answer book): 1x4=4

Column I		Column II	
1.	Important element of Capital Budgeting is	(A)	represents a risky situation
2.	High Operating and Financial Leverage	(B)	may affect the size of working capital
3.	A consistent dividend policy	(C)	a tool for analysis of financial statements
4.	Fund Flow Statement is	(D)	the analysis of risk and uncertainty

- (c) State whether the following statements are Trueor False: (You may write only the Roman numeral and whether True or False without copying the statement into the answer book.)
 1 x4=4
 - (i) In Financial Management, the objective of Financial Manager is profit maximization.
 - (ii) Investment Decisions and Capital Budgeting are one and the same.
 - (iii) Operating Leverage analyses the relationship between Sales Level and Earning Per Share (EPS).
 - (iv) The Cost of Capital is the required rate of return to maintain the value of the firm.

Answer:

- 6. (a)
 - (i) (C)
 - (ii) (B)
 - (iii) (C)
 - **(iv)** (B)
 - **(v)** (B)
 - **(vi)** (A)

(b)

- **1**. (D)
- **2.** (A)
- **3.** (B)
- **4**. (C)

(c)

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

Section – IV

Answer any three questions from question nos. 7, 8, 9 and 10.

Each question carries 12 marks.

7. (a) The Balance Sheet of VASUDHA LTD. as on March 31, 2019 is as given below:

(Amount in ₹ lakhs)

Equity and Liabilities	Amount	Assets	Amount
Equity Share Capital	250	Fixed Assets	400
General Reserve	280	Investment	50
Profit & Loss a/c (Current year)	30	Stock	460
Secured Loans—Long Term	300	Debtors	460
Secured Loans—Short Term	360	Cash and cash equivalents	10
Creditors	150	Miscellaneous Expenditure (not Written off)	20
Other Liabilities	30		
	1,400		1,400

Additional information:

- (i) From the P&L A/c, ₹ 90 Lakhs was transferred to General Reserve during the year
- (ii) Interest Cost amounted to ₹ 120 lakhs
- (iii) Taxation @ 40%
- You are required to calculate
- (i) Current Ratio
- (ii) Debt-Equity Ratio

. . . .

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(b) The following are the financial statement of KODIAC LTD. for the year ended March 31. Balance Sheet as on March 31, (Amount in ₹ Thousand)

	2019	2018		2019	2018
Equity & Liabilities			Assets		
Share Capital	5,000	5,000	Fixed Assets	10,500	8,500
Profit & Loss A/c	5,000	4,250	Stock	3,000	3,400
Long-term Loan	5,500	5000	Debtors	3,450	3,800
Creditors	1,800	1,750	Cash and cash equivalents	350	300
	17,300	16,000		17,300	16,000

Income Statement for the year ended 31.3.2019

(Amount in ₹ Thousand)

Sales

21,500

Less:	Cost of Sales	(14,700)
		6,800
Less:	Operating Expenses:	
	Administrative Expenses	(2,400)
	Depreciation	(1,000)
		3,400
Add:	Dividend Received	250
		3,650
Less:	Interest Paid	(700)
		2,950
Less:	Income Tax Profit after Tax	(1,300)
		1,650

KODIAC Ltd. paid dividend of $\stackrel{?}{=}$ 9,00,000 during the year ended 31.03.2019.

Required:

Prepare a Cash Flow Statement of Kodiac Ltd. as per AS-3 (Revised) for the year ended March 31, 2019 using Indirect Method. 6

Answer:

7. (a)

(i) Current Ratio = Current Assets /Current Liabilities

= ₹930 lakhs /₹540 lakhs

(ii) Debt-Equity Ratio = Debt /Equity

= ₹ 300 lakhs/₹560 lakhs

= 0.54

Working Notes:

Current Assets :

Stock	=₹460 lakhs
Debtors	=₹460 lakhs
Cash and Cash Equivalent	= <u>₹ 10 lakhs</u>
	= <u>₹930 lakhs</u>

Current Liabilities :

Short term loans	=₹360 lakhs
Trade Creditors	=₹150 lakhs

Other Liabilities	= <u>₹ 30 lakhs</u>
	<u>₹ 540 lakhs</u>
Debt :	
Term loan	=₹300 lakhs
Equity :	
Capital	=₹250 lakhs
Reserves	= ₹ 280 lakhs
P&L A/c	= <u>₹ 30 lakhs</u>
	<u>₹ 560 lakhs</u>

Alternatively, Debt-Equity Ratio may be calculated as under:

Debt-Equity Ratio = ₹ 300 lakhs / ₹ 540 lakhs = 0.56

<u>Debt</u> Term Loan = ₹ 300 lakhs

<u>Equity</u>	
Capital	₹ 250 lakhs
Reserves	₹ 280 lakhs
P&LA/c	₹ 30 lakhs
	₹ 560 lakhs
Less: Misc. Exp.	₹ 20 lakhs
	<u>₹ 540 lakhs</u>

7.(b)

Cash Flow Statement of KODIAC Ltd. for the year ended March 31, 2019 (Indirect Method)

			(₹ In Thousand)
			₹
Α.	Cash	Flow from Operating activities:	
	Profit	before Tax (PBT)and extra ordinary items:	2,950
	Add:	Depreciation	1,000
	Intere	st paid	700
	Less:	Dividend received (non-operation)	(250)
		Operating Profit	4,400
	Add:	Decrease in stock	400
		Decrease in debtors	350
		Increase in creditors	50
			5,200
	Less:	Tax paid	(1,300)
		Total cash provided by operating activities	3,900
B.	Cash	Flow from Investing activities:	
	Purch	ase of Fixed assets (10,500+1,000-8,500)	(3,000)

	Dividend received on investments	250
	Cash used in investing activities	(2,750)
C.	Cash Flow from Financing activities;	
	Long-term Loan taken 500	
	Interest paid (700)	
	Dividend paid (900)	
	Net cash outflow from financing activities	(1,100)
Ne	t increase in cash during the year (A+B+C)	50
Add: Cash and Cash equivalents on 31.03.2018		<u>300</u>
Co	ish and cash equivalents on 31.03.2019	350

8. (a) GOLDILOCKS LTD. sells goods to domestic market on a gross profit of 25% on sales without considering depreciation. Its estimates for the year 2019-20 are as follows:

Sales:	
Domestic Market at 2 months' Credit	1600
Export (Selling price 10% below home price)	540
(Exports at 3 months' Credit)	
Cost:	
Materials used (Suppliers extend 2 months' Credit)	600
Wages paid (1/2 month in Arrear)	400
Manufacturing Expenses (Paid 1 month in Arrear)	600
Sales Promotion (Payable quarterly in advance)	80
Administration Expenses (Paid 1 month in Arrear)	200

The company maintains one month's stock of each raw material and finished goods.

A cash balance of ₹ 20 lakh is also maintained.

There is no Work-in-Progress (WIP).

All expenses and incomes are made evenly throughout the year.

Required:

Prepare a statement of Working Capital Requirements of the Company for 2019-20 on Cash Cost basis. 7

(b) HILSON LTD. was started a year back with equity capital of ₹40 lakhs. The other details are as under:

(Amount in ₹ Lakh)

Earnings of the company	₹ 4,00,000
Price Earning ratio	12.5
Dividend paid	₹ 3,20,000
Number of Shares	40,000
Required:	

- (i) Find the Current Market price of the share, and
- (ii) Find whether the Company's D/P ratio is optimal —using Walter's model.

Answer:

8. (a)

Statement Showing the Requirement of Working Capital of Goldilocks Ltd. for 2019-20.

	-	(Amour	nt in ₹ Lakh)
Particulars		₹	₹
(A) Current Assets :			
Raw Materials	(600 x $\frac{1}{12}$)	50.00	
Finished Goods	$(1800 \times \frac{1}{12})$	150.00	200.00
Debtors :			
Domestic Market Sales	$(1600 \times 0.75 \times \frac{1}{6})$	200.00	
Export Market	$(600 \times 0.75 \times \frac{3}{12})$	112.50	312.50
Sales Promotion Expenses	(80 × 0.25)		20.00
Cash Balance to be maintaine	ed		20.00
Total Current Assets			552.50
(B) Current Liabilities :			
Creditors for Raw materials	$(600 \times \frac{2}{12})$	100.00	
For wages	$(400 \times \frac{1}{24})$	16.67	
For Manufacturing Expenses	(600 x 1/12)	50.00	
For Administration Expenses	(200 x $\frac{1}{12}$)	16.67	183.34
Tc	otal Current Liabilities		183.34
Working Cap	oital Required (A – B)		369.16

Working Notes:

(**₹**in Lakhs)

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(i)	Cost of Production :	
	Material used	600
	Wages paid	400
	Manufacturing Expenses	600
	Administration Expenses	200
		<u>1,800</u>
(ii)	Export sales at equivalent to D. Sales (540/0.90)	600

(b)

(i) Walter's model is given by

$$P = \frac{D + (E - D)(r / k_e)}{K_e}$$

Where,

- P = Market price per share.
- E = Earnings per share =₹ 10
- D = Dividend per share = ₹ 8
- r = Return earned on investment = 10%
- $K_e = Cost of equity capital 1/12.5 = 8\%$

P =
$$\frac{8 + (10 - 8) \times \frac{0.10}{0.08}}{0.08} = \frac{8 + 2 \times \frac{0.10}{0.08}}{0.08}$$

(ii) According to Walter's model when the return on investment is more than the cost of equity capital, the price per share increases as the dividend pay-out ratio decreases. Hence, the optimum dividend pay-out ratio in this case is nil.

So, at a pay-out ratio of zero, the market value of the company's share will be:

$$\frac{0 + (10 - 0)\frac{0.10}{0.08}}{0.08} = ₹ 156.25$$

9. (a) The WONDERLAND LTD. has the following Book Value Capital Structure as on March 31, 2019:

	(Amount in ₹ Thousand)
600000 Equity Share at ₹ 10 each fully paid	0006
10000, 9% Preference Shares of ₹ 100 each	1000
30000, 12% Debentures of ₹ 100 each	3000
	10000

The equity share of the Company sells at $\stackrel{?}{\sim}$ 20 per share. The dividend expected next year is $\stackrel{?}{\sim}$ 2.5 per share, which is expected to grow at 5% per annum. Corporate tax rate is 30%.

You are required to determine the Weighted Average Cost of Capital (WACC) of Wonderland Ltd. based on the existing Capital Structure. 6

(b) ELROND LTD. (EL) has just installed MACHINE A at a cost of ₹ 2,00,000. This machine has 5 years life with no residual value. The annual volume of production is estimated at 150000 units, which can be sold at ₹ 8 per unit. Annual operating costs are estimated at ₹ 2,00,000 (excluding depreciation) at this output level. Fixed costs are estimated at 4,50,000 per annum for the same level of production.

The company has just come across another model called MACHINE B capable of giving the same output at an annual operating costs of $\stackrel{?}{=}$ 1,50,000 (excluding depreciation). There will be no change in fixed costs. Capital cost of this machine is $\stackrel{?}{=}$ 2,50,000 and the estimated life is 5 years with no residual value.

The company has an offer for sale of MACHINE A at $\stackrel{?}{\stackrel{?}{_{\sim}}}$ 1,00,000. But the cost of dismantling and removal will amount to $\stackrel{?}{\stackrel{?}{_{\sim}}}$ 30,000. As the company has not yet commenced operation, it wants to sell MACHINE A and purchase MACHINE B.

ELROND LTD. will be zero-tax company for 7 years in view of several incentives and allowances available. The cost of capital is 14%.

Required:

Based on the NPV Criterion, advise the Company whether it should opt to replace MACHINE A by installing MACHINE B.

[Given : PVIFA (14%, 5 years) = 3.433 and PVIF (14%, 5 years) = 0.519] (Solve the problem by an incremental cash flow approach.) 6

Answer:

9. (a)

$$K_e = (D_1/P_0) + g = \frac{2.5}{20} + 0.05 = 0.175 = 17.5\%$$

 $K_p = 9\%$

K_a= 12(1-0.30) =8.4%

Calculation of Weighted Average Cost of Capital:

(₹ In thousand)

Sources	Amount	Weight	Cost %	K₀ (%)
Equity Shares	6,000	0.60	17.5	10.50
9% Preference Shares	1,000	0.10	9	0.90
12% Debentures	3,000	0.30	8.4	2.52
	10,000	1.00		13.92

Hence the weighted Average Cost of Capital (WACC) of Wonderland Ltd. is 13.92%.

(b)

Appraisal of Replacement decision Under NPV Method:

Calculation of Present Value of Net Cash outflow:

(Amount in ₹)

Cost of Machine B		2,50,000
Less : Sale proceeds of Machine A	1,00,000	
Cost of dismantling and removal	(30,000)	(70,000)
Net outf	low	1,80,000

Calculation of Present Value of Incremental Cash inflow:

			(Amount in ₹)
Particulars	Machine-A	Machine-B	Incremental
Sales P.A (units) Sales P.A (1,50,000 × 8)	1,50,000 12,00,000	1,50,000 12,00,000	-
Less : Expenditures :			
Operating Cost	2,00,000	1,50,000	50,000
Fixed Cost	4,50,000	4,50,000	-
Net Cash inflow			50,000
Present Value	50,000 ×3.433		1,71,650
Less: Out flow			(1,80,000)
Net Present Value			(8,350)

Decision: As NPV of Machine B is negative, the replacement decision is not financially feasible. So the Company should not replace the Machine A.

10. Write short notes on any three out of the following:

4x3= 12

- (a) Lease Financing
- (b) Objectives, Functions and Powers of the Securities Exchange Board of India (SEBI)
- (c) Window Dressing
- (d) Significance of Funds Flow Statement (FFS)

Answer:

(a) Lease Financing:

Lease Financing is an arrangement that provides a firm with the use and control over assets without buying and owning the same. It is a form of renting assets. It is a contract

between the owner of asset(lessor) and the user of the asset called the lessee, whereby the lessor gives the right to use the asset to the lease over an agreed period of time for a consideration called the lease rental. The contract is regulated by the terms and conditions of the agreement. The lessee pays the lease rent periodically to the lessor as regular fixed payments over a period of time.

There are two basic kinds of leases. They are:

- (i) Operating or Service Lease
- (ii) Financial Lease

An Operating Lease is a short term lease with the lease period being less than the useful life of asset. Such a lease is cancellable at a short notice by the lessee. Such a leasing is common to the equipments which require expert technical staff for maintenance and are exposed to technological developments e.g., computers, vehicles, data processing equipments etc.

A Financial Lease ensures the lessor for amortization of the entire cost of investment plus the expected return on capital outlay during the terms of the lease. Such a lease is usually for a longer period and non-cancellable. These leases are commonly used for leasing land, building, machinery, fixed equipments etc.

(b) Objectives, Functions and Powers of the Securities Exchange Board of India (SEBI):

The overall objective of the SEBI is to protect the interests of the investors in securities and to promote the development of and to regulate the securities market and for matters connected therewith or incidental thereto.

To carry out its overall objectives, the SEBI performs the following functions:

- Regulate the business in stock exchanges and other securities markets;
- Registering and regulating the working of stock brokers, share-transfer agents, bankers, underwriters, portfolio managers, investment advisor and such other intermediaries, who may be associated with the securities market in any manner;
- Registering and regulating the working of depositories, custodians of securities, credit rating schemes, including mutual funds;
- Prohibiting fraudulent and unfair trade practices relating to the securities market.

It has the powers to call for periodical return from any recognized stock exchange.

It performs such functions and exercises such powers, under the Securities Contract(Regulation) Act, 1956, as may be delegated to it by the Central Government.

(c) Window Dressing in Accounts:

Window Dressing in accounts means action taken to improve the appearance of a company's financial statements. Window Dressing is particularly common when a business has a large number of shareholders, so that management can give the appearance of a well-run company, to its investors, who probably do not have much day -to-day contact with the business. It may also be used when a company, wants to impress a lender in order to qualify for a loan.

The Window Dressing concept is also used by fund managers, who replace poorlyperforming securities with higher-performing ones just before the end of a reporting period, to give the appearance of having a robust set of investments.

The entire concept of Window Dressing is clearly unethical, since it is misleading. Also, it merely robs results from a future period in order to make the current period look better, so it is extremely short-term in nature.

From the legal point of view, Window Dressing is not illegal. But in some cases, it can be so. Window Dressing can be an illegal or fraudulent action, if it contradicts the law or accounting standards.

Generally, Window Dressing is considered to be an unethical practice because it involves a deception and advancement of management's interest instead of interests of information users (i.e., Owners, Investors, Government etc.

Some examples of Window Dressing are:

Cash: Postpone paying off suppliers, so that the period end cash balance appears higher than it should be.

Accounts Receivable: Record an unusually low bad debt expense, so that the Accounts Receivable figure looks better than is really the case.

(d) Significance of Funds Flow Statement (FFS):

Funds Flow Statement (FFS) is a widely used tool in the hands of financial executives for analysing the financial performance of a business concern. The Balance Sheet provides only a static view of the business. It is a statement of assets and liabilities on a particular date. It does not show the movement of funds. In business, funds flow from different sources and similarly funds are invested in various sources of investment. It is a continuous process. The study and control of this funds flow process is the main objective of Financial Management. There is a need to prepare a statement to know the changes in assets, liabilities and owners' equity between dates of two Balance Sheets. Such a statement is called FFS or 'Statement of Sources and Uses of funds' or 'Where come and Where gone statement'

FFS provides a summary of management decisions on financing activities of the firm and investment policy.

FFS helps the Finance Managers to completely analyse the various financial operations. It guides the management in formulating the financial policies such as dividend, reserves etc.

FFS serves as a measure of control to the management.

FFS helps in evaluating the firm's financing. It shows how the funds were obtained from various sources and used.

FFS acts as a guide for the future .It helps the management in knowing how effectively the working capital is put to use. It reveals the financial soundness of the business. It helps the management in framing its investing policy.