

Note:

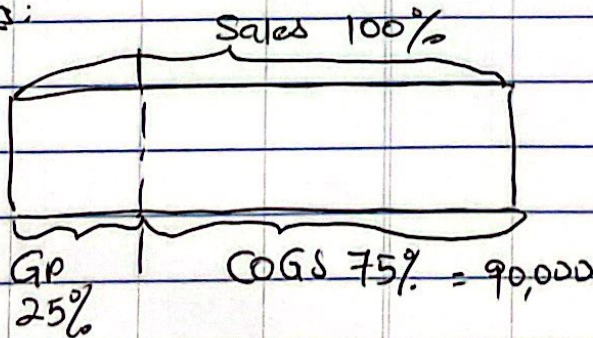
- ① These Suggested Solutions may contain error/s and/or omission/s.
- ② Most theory questions are not answered as students can easily get them answered with resources such as Google Search, ChatGPT or other references methods.

Q1 (d)

Pradeep

Statement of Estimated Gross Profit for 1 January 2021 to
31 March 2021

	\$	\$
Sales (100%)		120,000
Less: Cost of goods sold (75%)		
Purchases (25,000 + 35,000 + 38,000)	(98,000)	
Less: Closing Inventory	(2,000)	
		(90,000)
Gross Profit (25%)		30,000

Workings:

a)

Margareta's Company

Income statement for year ended 31 December 2019

	\$	\$
<u>Income :</u>		
Fees for print & promotional materials	61,400	
<u>Less:</u> Cost of print & promotional materials	<u>(36,480)</u>	
Net income for print & promotional materials	24,920	
<u>Add:</u> Commission income	2666	
Fees for digital design work	178,000	
	<hr/>	
	205,586	
<u>Add: Other income</u>		
Discount received from suppliers	<u>4200</u>	
Total income		209,786
<u>Less: Expenses</u>		
Administrative	53,680	
motor vehicle expenses	16,720	
Depreciation on: - office equipment	5250	
- motor vehicles	4100	
Impairment loss on trade receivables	3040	
	<hr/>	
		<u>(82,790)</u>
Net profit		<hr/> <u>126,996</u> <hr/>

26)

Margaret's Co.

Statement of Changes in equity for year ended 31 Dec 2019

	Ordinary Share	Asset revaluation reserve	Retained Earnings	Total
	Capital	reserve	Earnings	
	\$	\$	\$	\$
Beginning balance @ 1/1/2019	—	—	—	—
Add: 150,000 ordinary shares, issued for business acquired	150,000			150,000
• 30,000 ordinary shares of \$1 each issued for cash	30,000			30,000
• Revaluation of business premises		75,000		75,000
• Profit for the year			126,996	126,996
• Bonus shares issued	45,000		(45,000)	—
• Dividend paid to ordinary shareholders (225,000 x \$0.15)			(33,750)	(33,750)
Ending balance @ 31/12/2019	225,000	75,000	48,246	348,246

2c). The net asset per share of Margareta's Co. is:-

$$\frac{\text{Net asset @ 31/12/2019}}{\text{No. of ordinary shares}} = \frac{\$348,246}{225,000} = \$1.54776$$

$$\approx \$1.55$$

Which means, if the siblings were to liquidate the Company, they can expect to get back about \$1.55 for each of their ordinary share held, which is \$0.25 or 19.2% more than the offer of \$1.30 per share.

• The Earning per share for year 2019 is:-

$$\text{(EPS)} = \frac{126,996}{225,000} = \$0.5644$$

$\times 3$ (PE ratio)

Expected sale price per share \$1.693

The siblings would expect that the sale price would be at least 3 years of the current year's profit based on the current market expectation for their industry (PE ratio of 3).

The offer of \$1.30 per share falls short of their expected price of \$1.693 by \$0.39 or 30%.

• As Giann strongly objects the sale, selling the Company will antagonize the relationship amongst both siblings. The relationship may get so bad that the siblings may go to fight in court which is very bad.

Based on all the above factors, Margareta should not sell the business.

3 a) Date	Purchase		Sold (Cost)		Balance	
	Units	\$	Units	\$	Units	\$
2020						
Apr 1					-	-
2	240 @ \$1850	444,000			240	444,000
May 7	160 @ \$2200	352,000			400	796,000
14			80 @ \$1800	144,000	320	648,000
June 2	32 @ \$200	64000			352	712,000
16			300	604,000	52	108,000
			Cost	<u>752,000</u>		

Workings:

$$\begin{aligned} \text{June 16 sales cost} &= (160 \times 1850) + (140 \times 2200) \\ &= \$604,000 \end{aligned}$$

$$\text{bi) sales revenue} = (80 \times 3200) + (300 \times 3250) = \$1,231,000$$

$$\text{ii) Cost of sales (cos)} = \$752,000 \text{ (as per 3(a))}$$

$$\text{iii) Gross Profit} = \text{Sales} - \text{cos} = 1231,000 - 752,000 = \$479,000$$

Q3

7

REQUIRED

(c) Copy the following table into your answer booklet.

Adjustment	Working capital	Profit
1	Decrease	Decrease
2	Decrease	Decrease
3	Increase	Increase
4	Decrease	Decrease

Complete the table by placing 'increase' or 'decrease' to indicate the effect of each adjustment on working capital and profit. [8]

(d) Explain one other method a business may use to value its inventory. [2]

Weighted Average method

[Total: 20]

a)

Amostac Pte Limited

Balance sheet at 30 June 2020

AssetsNon-current

Freehold property at cost/valuation

Fixtures & Fittings

Equipment

Motor vehicles

\$000	\$000	\$000
Cost/ valuation	Acc Depn	NBV

1380 - 1380

420 <342> 78

835 <160> 675

310 <95> 215

2945 <597> 2348
Current Assets

Trade Receivables (818-118)

Less: Allowance for impairment (W2)

Net Trade Receivables

Inventories

Cash at bank

Cash in hand

700

<56>

644

560

205

98

1507
Total Assets

3855

4a) Equity₹000 ₹000

Ordinary Share Capital ₹1 each

2000

Asset revaluation reserve on property

480

Retained Earnings (w)

356

2836Non-current liability

Long Term borrowing

250

Current liabilities

Trade Payables

721

Other payables (20 + 13)

33

Accrued interest (250 × 6%)

15

769Total equity & liabilities3855

4a) Workings (w) (8000)

① Retained earnings	518
less: Bad debt	(118)
Impairment of trade receivables	(16)
Accrued legal cost	(13)
Accrued interest	(15)
	<hr/>
	356

② Allowance needed ($700 \times 8\%$)	56
Allowance balance	<u>40</u>
↑	16

$$\begin{aligned} 4b) \text{ Working capital ratio} &= \frac{\text{Current Assets}}{\text{Current liabilities}} \\ \text{(current ratio)} & \\ &= \frac{1507}{769} \\ &= 1.96 \end{aligned}$$

$$\begin{aligned} \text{Quick ratio} &= \frac{\text{Quick assets}}{\text{Current liabilities}} \\ &= \frac{1507 - 560}{769} \\ &= 1.23 \end{aligned}$$

$$\begin{aligned} \text{Debt - equity ratio} &= \frac{\text{Total liabilities}}{\text{Equity}} \\ &= \frac{250 + 769}{2836} = \frac{1019}{2836} \\ &= 0.3693 \text{ or } 36.93\% \\ &\approx 0.37 \end{aligned}$$

c) Current ratio of 1.96 is better than the industry standard of 1.8 which means ~~the~~ Amostac has \$1.96 of current assets to pay off every dollar of ~~in~~ their current obligations, better than the standard's \$1.8. However, Amostac still falls short of the ideal of at least \$2.1 to be regarded as having good solvency.

Quick ratio being a stricter test of solvency where taking into consideration only assets that can be converted to cash quickly, for Amostac, they have \$1.23 of ~~per~~ such assets to pay off every dollar of current obligations which is better than the industry a standard of \$1.1. \$1.1 is the minimum ideal to be regarded as having good liquidity. This shows Amostac would be safely able to pay its current debt when it falls due.

Amostac have a higher debt-equity ratio of 0.37 compared to industry's of 0.3 which indicates Amostac's ~~have~~ shareholders and debt holders face a slightly higher risks of non-repayment. Generally 0.37 is still regarded as low.

f) Revised debt-equity ratio :-

$$= \frac{\text{Total liabilities}}{\text{Equity}} = \frac{1019 + 350}{2836} = 0.48$$

g) As the debt-equity ratio of 0.48 exceeds 0.4, the bank is unlikely to make the loan based on this. However, the bank may re-consider on the premise that the company appears to be generating good profits and may request for a fixed charge on the asset purchase or stipulate other conditions.

i) In order to gain maximum advantages out of its Human Capital, the company should lend money to staff after carefully considering and devising a carefully planned and well written organization wide policy and conditions for such loans. Based on objectivity concept, such loans should be made without biasness and the giving of such loans should adhere to Company's policy, so that the company will be seen as caring, compassionate to employees as well as fair and objective.

1b) Year	0	1	2	3	4
Cash flows.	\$000	9000	8000	\$000	\$000
Purchase cost of machine	<160>				
Sales		208	208	220	165
variable cost		<93.6>	<93.6>	<99>	<99>
Fixed cost excluding depreciation		<50>	<50>	<50>	<50>
Annual net cash flows of machine A	<160>	64.4	64.4	71	16

ci)

Year	\$000
0	<160>
1	64.4
2	64.4
	<u>31.2</u>

$$\frac{31.2}{71} = 0.44$$

Thus pay back period = 2.44 years

ii) machine A	NPV	Year				
		0	1	2	3	4
Annual cash flows (\$)		<160,000>	64,400	64,400	71,000	16,000
Discount factor		1	0.909	0.826	0.751	0.683
Net present value (NPV)	= <u>15,983</u>	<160,000>	58,540	53,194	53,321	10,928

∴ NPV = \$15,983

d) There are benefits of purchasing either machines, depending on the preference of the Directors.

Machine A

- lower capital outlay of \$160k, \$40 lower than B.
- longer payback of 2.44 years, 0.44 years longer than B.
- higher NPV of \$15,983, \$5483 more than B.

Machine B

- faster payback of 2 years, 5.28 months faster than A.

Based on balanced of above, should purchase A as it is lower risk with lower capital outlay and higher NPV which is a more reliable appraisal method compared to payback method.

$$2b) \quad \text{Overheads applied} = \$132000 + 2000$$

$$= \$134,000$$

$$\text{Overheads application rate (OAR) for Printing dept.} = \frac{134,000}{4000 \text{ (Budgeted)}}$$

$$= \$33.5 \text{ per Direct labour hour (DLH)}$$

c) Dept.	Total	Printing	Marketing
	\$	\$	\$
Materials	5000	4000	1000
Direct labour cost	10,430	1680 (140 × 12)	8750 (350 × 25)
Overheads.	22,190	4690 (140 × 33.5)	17500 (350 × 50)
Total cost	37,620		
Mark up 50%	18,810		
Price quote to client	<u>56,430</u>		

works

$$\text{OAR for marketing} = \frac{250}{5} = \$50 \text{ per DLH.}$$

2d) There are pros and cons of accepting the offer, each decision will depend on the preferences of the Director.

Pros.

- The offer will give a contribution of $40,000 - 37,620 = \$2380$ towards fixed costs
- The offer will be a good grounds to create clientele relationship with the client for hope of more future businesses.
- client may give good testimonials and referrals.

Cons

- Accepting a low paying job will be bad precedence for the company
- deprives the company of other better paying jobs when opportunities arises as a factory capacity will be allocated to this client
- If information about this low fee being accepted is leaked to other higher paying clients, the other clients will not be happy to have paid the higher price.

Based on these, should only accept if the company has spare capacity and in need of clients to build up the business.

$$3b) \text{ Contribution per unit} = 20 - (8 + 4 + 2) \\ = \$6$$

$$\text{Total fixed cost} = 420,000 + 96,000 = \$516,000$$

$$\text{Break-even level of sales} = \frac{516,000}{6} = 86,000 \text{ units.}$$

a) For year ended 31/12/2020

	\$
Contb per unit	<u>6</u>
units sold	110,000
i) Total contb	<u>660,000</u>
less, Total fixed costs	(516,000)
ii) net profit	<u><u>144,000</u></u>

3d) Revised

₹

₹

Selling price (20 x 0.9)

18

Less: variable costs

Direct labour (8 x 0.85)

6.8

Direct labour (4 x 1.05)

4.2

variable selling cost

2(13)

Contribution per unit

5

$$\text{New break even point} = \frac{516,000}{5} = 103,200 \text{ units.}$$

Break even units increase by 17,200 or 20%

- e) Product 2 gives a contribution of \$5 per unit towards fixed cost. The estimated total costs for product 2 = 30,000 units x \$5 = \$150,000 towards fixed costs. The total fixed costs for the factory of $(80,000 + 30,000 + 90,000) \times 6 = \$1,200,000$ will not be reduced if product 2 is stopped. Product 2 attracts a high demand of 30,000 units, thus stopping will be bad customers' service, disappointed customers will turn to other brands altogether. Stopping product 2 will entail staff layoff which is negatively contributing towards Corporate Social Responsibility.
- In conclusion, do not adopt Laura's proposal.

4c)

Lee's Business

Flexible Budgeted Income Statement for 9 months ended

30 Sept 2020

Adverse (A)
Favourable (F)

	units	Actual \$000	Flexed Budget \$000	Variances \$000	
Sales	97,000	@ \$18 1746	@ \$20 1940	194	A
Less: Cost of sales 97,000					
materials		@ \$11 1067	@ \$12 1164	97	F
Depreciation of equipment		45	45	-	
(w1) warehouse rental		162	162	-	
Total COS		<1274>	<1371>		
Gross Profit		472	569	97	A
Less: Expenses					
Other Fixed business expenses (w1 & 2)		53	54	1	F
Office manager's salary		129	108	21	A
Variable selling expenses		171	194	23	F
		10-		-	
Total expenses		<353>	<356>	3	F
Net (loss)/profit		<u>119</u>	<u>213</u>	94	A

Lic Workings (w)

$$\textcircled{1} \text{ Budgeted sales} = 10000$$

$$\text{Depn of equipment} = 300,000 \times 0.2 \times \frac{9}{12} = 45,000$$

$$\text{Fixed business expenses} = (29,000 \times 9) - 45,000 = 216,000$$

$$\text{Variable selling exp} = 97,000 \times 2 = 194,000$$

$$\text{Warehouse rental} = 18,000 \times 9 = 162,000$$

$$\langle 162,000 \rangle$$

59

Actual

$$\text{Fixed biz exp} = 260,000 - 45,000 = 215,000 - 162,000 = 53,000$$

$$\text{Chun's salary} = (12,000 \times 2) + (15,000 \times 7) = 129,000$$

di)

Lee's

Budgeted and actual cash flows for 9 months ended
30 Sept 2020

	Budgeted \$000	Actual \$000
Beginning bank Balance @ 1/1/20	-	-
Lee's Capital	35	35
Borrowings from parents	400	400
purchase equipment	(300)	(300)
Collection from sales	1740 (1940-200)	1486 (1746-260)
payment to supplier	(1080) (90x12)	(1315) (w2)
Office manager (Chun's) salary	(108) (12x9)	(129)
variable selly expenses	(194)	(171)
warehouse rental	(162)	(162)
Other fixed business expenses	(54)	(53)
Drawings	(72) (8x9)	(110)
Repayment of borrowings from parents	(20)	-
Ending bank balance @ 30/9/2020	<u>185</u>	<u>(319)</u>

Adj) Workings (w)

① Budgeted

② Actual

$$\text{payment to suppliers} = (140,000 \times 11) - 225,000 = 1,315,000$$

4 d ii) Actual bank balance overdrawn is \$319,000 which is \$504,000 less than the positive budgeted balance of \$185,000 at 30/9/2020. The causes: -

- Actual collection from sales was \$254k less than that budgeted. As per income statement sales falls short by \$194k plus collection fall short by \$60k. The reason was selling price was \$2 less than that budgeted and lax in collection management.

- Actual payment to supplier exceeds that budgeted by \$235k. While Lee managed to save \$97k on purchase cost but he purchased a lot more extra stock than that budgeted. He budgeted 10,000 units extra stocks in inventory but had actually purchased $(140,000 - 97,000) = 43,000$ units more than that sold.

- There isn't a significant difference in payment for office expenses. While there is an increase in Chun's salary paid of \$21k, there was a savings of variable selling expenses of \$23k.

- Actual drawing exceeds that budgeted by \$38k and Lee budgeted to repay \$20k to his parents but did not actually do so.

e) Lee should reduce his drawings as that could potentially reduce his bank overdraft by up to \$110k bringing the overdraft down to \$209k. He should also adopt other strategies to reduce his bank overdraft such as not purchasing too many excess inventories.