2022 PU3 Mid-year Examination Paper 1

Mark scheme

Question 1

(a)

Computation of credit sales

Ending balance of Trade receivables = Beginning balance + Credit sales – Receipts from credit customers

154 000	=	162 000 + Credit sales – 420 000
Credit sales	=	420 000 + 154 000 – 162 000
	=	$412 000
Cost of sales	=	$(70 000 + 412 000) X 80%
	=	$385 600

Computation of purchases

Ending balance of trade payables = Beginning balance + Credit purchases – Payments to credit suppliers

130 000	= 124 000 + Credit purchases – 288000
Credit purchases	= 130 000 – 124 000 + 288 000
	= $294 000

Computation of ending inventory

Ending balance of inventory	= Beginning balance + Purchases – Cost of sales
	= 153 000 + 294 000(2m) – 385 600 (4m)
	= $61 400 9(1m)
Cost of inventory destroyed	= $(61 400 – 14 000)
	= $47 400. (1m)

(b)

Computation of units of closing inventory = (1 + 2 +3 +2) – 5 = 3

(i) Computation of value of inventory under FIFO	= (2 units X $24000) + (1 unit X $23 000)
	= $(48 000 + 23 000)
	= $71 000 (2m)

(ii) Computation of value of inventory under WAC

	IN			OUT			BAL		
2021	Units	Unit cost($)	$	Units	Unit cost($)	$	Units	Unit cost ($)	$
May							1	14 000	14 000
	2	20 000	40 000				3	18 000	54 000 (1m)
June				1	18 000	18 000	2	18 000	36 000
Sept	3	23 000	69 000				5	21 000	105 000 (1m)
Oct				3	21 000	63 000	2	21 000	42 000
Nov	2	24 000	48 000				4	22 500	90 000 (1m)
Dec				1	22 500		3	22 500	67 500 (1m)

Value of inventory under WAC = $67 500.

(c) **Impact on ending inventory:** Higher than under WAC (1m) as the cheaper units bought earlier is assumed to be sold, leaving behind the higher priced units unlike WAC where the prices are averaged. (1m)

Impact on gross profit: Higher than under WAC (1m) as the cheaper units are assumed to be cost resulting in a lower cost of sales (1m) and hence a higher gross profit.

(d) **Advantage of WAC**

- Averaging of cost smoothens out the monthly ending inventory and profits.
- Results in a cost of sales which approximates the current cost of inventory which is a more prudent indicator of future profits in times of rising prices.
- More difficult to manipulate profits using WAC.

[Any 1 X 2m]

Question 2

(a) Wanderlust Pte Limited

Income Statement for the year ended 30 June 2022

	$	$	
Sales of holiday packages (1 269 300 – 31 000)		1 238 300	1m
Less: Expenses			
Payments to travel companies (650 000 – 12000)	638 000		1m
Rental of shop premises	220 600		
Staff salaries	90 500		
Operating costs (192 700 – 8000)	184 700		1m
Depreciation [20% X (260 000 + 8000)]	53 600		1m
Impairment loss on trade receivables	4 200		1m
		1 191 600	
Net profit		46 700	

(b)Balance sheet as at 30 June 2022

	$	$	$	$	
Non-current Assets	Cost	Acc Depn	Net book value		
Computer & office equipment	268 000	107 600	160 400		2m
Total non current assets				160 400	
Current Assets					
Trade receivables (35 100 +1000)		36 100			1m
Less: Allowance for impairment loss		(4 200)			1m
Net trade receivables			31 900		
Prepayments			12 000		1m
Other receivables- insurance claim			23 000		1m
				66 900	
				227 300	
Equity					
Share capital and reserves					
Ordinary share capital (80 300 + 10 000)			90 300		1m
Retained earnings (-10 000 + 46 700 – 8 100)			28 600		1m
				118 900	
Current Liabilities					
Trade payables (17 900 – 10 000)			7 900		1m
Deposits from customers			31 000		1m
Provision for fire damage			23 000		1m
Bank overdraft			46 500		
				108 400	
				227 300	

(c) Accrual concept: Income to be recognised only when earned regardless of receipt. The income for the tour packages has not been earned as service will be provided after year end and should be excluded from current year’s income. To be shown as a current liability (deposits) as at accounting year end. (2m)

Matching principle: To determine profit, expenses must be matched against income that it helped earn. As the income from the promotion packages will only be recognised in the next accounting period, the related cost should also be recognised only in the next accounting period. The payment made to travel companies should shown as a current asset, prepayment in current period. (2m)

Question 3

(a)	Present ($)	Option 1($)	Option 2 ($)	Option 3($)
Ordinary shares of $0.25 each	2 600 000	2 600 000	2 600 000	2 600 000
Issue of ordinary shares	-	5 000 000	5 000 000	-
8% preference shares of $1.00 each	1 600 000	1 600 000	1 600 000	1 600 000
Revaluation reserve	4 000 000	4 000 000	-	4 000 000
Retained earnings	1 300 000	1 300 000	300 000	1 300 000
Net asset value	9 500 000	14 500 000	9 500 000	9 500 000
No of shares	10 400 000	20 400 000	30 400 000	10 400 000
(i)Net asset value = Net asset value / No. of ordinary shares	$0.91 (9500000/10400000)	$0.71 (2m) (14500 000/20400000)	$0.31(2m) (9500 000/30400000)	$0.91(2m) (9500 000/ 10400000)
(ii)Debt-equity ratio = Total liabilities/ Equity	10.52% (1 000 000/ 9 500 000)	6.89% (1m) (1000000/9500000)	10.52% (1m)	63.16%(1m)

(b)	Advantage	Disadvantage
Rights Issue of shares	▪ Encourages existing shareholders to invest by allowing them to invest at $0.10 below market price. ▪ No dilution of control as shares are issued in proportion of existing shareholdings. ▪ Dividends are not mandatory. It is declared only if the company makes profits. Ordinary share dividends are also not fixed. ▪ Share capital need not be returned to shareholders until dissolution of the company. ▪ Lower gearing decreases the risk of a business not being able to repay its interest and debt. (6.89%)	▪ Ordinary shares have voting rights which allows the shareholders to interfere with mgt decisions. ▪ Fall in Net asset value per ordinary from $0.91 to $0.71 may not gain the support of existing shareholders.
Bonus issue	▪ No outflow of cash. Conserves the cash which may otherwise be used for dividend distribution. ▪ Maximises the use of revaluation reserves to reward shareholders.	▪ No inflow of cash. Hence, does not bring the funds needed for expansion. ▪ Fall in net asset value per share from $0.91 to $0.31 may not gain shareholder support.
Issuing bonds	▪ Bond holders have no voting rights and have no direct control over the management of a business. ▪ If interest rates are lower than the returns on capital employed of a company, it stands to earn a higher return for its shareholders.	▪ Interest expense is mandatory and must be paid regardless of whether the company makes a profit or not. ▪ Bonds must be repaid sometime in the future. Business must set aside resources or seek new funding to meet such payments. ▪ Increased level of gearing will increase risk of business not being able to settle its interest and borrowings, leading to insolvency.(63.16%)

[1m adv + 1m disadv] X 3 = 6

(c)

A long term loan of $5 000 000 will increase its debt-equity ratio from 10.92% to 63.16% .This increases its fixed cost of capital in the form of interest. It runs the risk of not being able to generate enough profits to cover its interest, resulting in a loss especially as trading conditions are expected to deteriorate.(1m)

Increasing long tern borrowing in adverse economic conditions could results in a disproportionate fall in Earnings Per Share as much of its lower operating profit will be used to service or pay interest on its fixed cost loans.(1m)

The company should consider Option 1(1m) raising funds through the rights issue of shares as dividends are not mandatory and can be avoided when there are losses or when profits are low.(1m) This allows it to reinvest its profits as well as conserve cash to tide over difficult trading conditions. A rights issue is likely to be more successful in difficult times as existing shareholders are likely to be more supportive of the business.(1m).

Question 4

(a) Retained earnings

Beginning balance + Net profit – dividends declared = Ending balance

70 000 + Net profit – (45+45) = 210

Net profit = 210+90-70

= 230

(b) Allswell Pte Limited

Statement of Cash Flows for the year ended 31 December 2021

Cash flows from operating activities	$'000	$'000	
Net profit for the year before interest [230 +(10% X 200)]	250		1
Adjustments for :			
Depreciation (500+400-50-800)	50		2
Loss on disposal (40 – 50)	10		1
Operating cash flows before movements in working capital		310	
Increase in inventory	(5)		
Decrease in trade receivables	10		1
Decrease in trade payables	(25)		1
		(20)	
Net cash provided by operating activities		290	
Cash flows from investing activities			
Purchase of non-current assets	(400)		1
Proceeds from sale of non -current assets	40		1
Net cash used in investing activities		(360)	
Cash flows from financing activities			
Proceeds from loan	100		1
Interest paid	(20)		1
Dividends paid (20+45)	(65)		1
Net cash provided by financing activities		15	
Net decrease in cash and cash equivalents		(55)	
Cash and cash equivalents at beginning of the year		35	
Net decrease in cash and cash equivalents		(55)	1
Cash and cash equivalents at end of the year		(20)	

(c)

Net profit of $230 000 but net cash outflow of $55 000

- Purchase of NCA of $400 000, a capital expenditure reduces cash but has no effect on net profit.
- Payment of dividends of $65 000 which results in cash outflows but has no impact on net profit as dividends are distribution of profits.
- Working capital management eg. Cash from operations used in payment of trade payables ($25000) or tied up in inventory ($5000).

[3 X 2m]

(d)

Ratio	Formula	Allswell	Industry
Gross profit margin	Gross profit/Net sales X 100	205/820 X 100 =25%	20%
Days-sales-in-inventory	Average inventory/Cost of sales X 365	[(90+95)/2]/615 X 365 =54.9 days	30 days
Accounts receivable collection period	Average accounts receivable/Sales X 365	[(60+50)/2]/820 X 365 = 24.48 days	20 days
Accounts payable payment period	Average trade payables/Cost of sales X 365	[(45+20)/2]/615 X 365 =19.29 days	35 days
Cash conversion cycle	Days-sales-in-inventory + Accounts receivable collection period – Accounts payable payment period	54.9+24.48-19.29 = 60.09	15 days

1m X 5

(e) Evaluation		
Gross profit margin	Better than industry average 20%. Better able to command higher selling prices or procuring cheaper supplies as compared to other businesses in the industry.	2m
Days-sales-in-inventory	Worse than industry average of 30 days. It took 24.9 longer to sell its inventory. It could be holding on to excess inventory or it's sales is not a brisk as other firms in the industry.	2m
Accounts receivable collection period	Worse than industry average of 20 days. Their credit customers taking 4.48 days longer to pay them. Implies that the business may have a more liberal credit policy or is inefficient in collecting its trade receivables.	2m
Accounts payable payment period	Worse that industry average. It pays its trade payables 15.71 days faster than other companies in the industry. The business may not have negotiated a competitive credit period with its suppliers or is not maximizing the credit period given.	2m
Cash conversion cycle	The above have resulted in a worse cash conversion cycle of 60.09 days as compared to 15 days for the industry. This means that Allswell has to wait 60.09 days after paying for its supplies before receiving cash from sales. This represents the period where it will have t finance its operations with its own funds instead of cash from its sales.	2m

(f)

Should not include as sale.(1m)

Although the goods have been delivered, under the terms of the contract, its is not considered sold as Sihat has the option to return any unsold goods (1m) and has no obligation to pay until it has sold the equipment (1m).

As Sihat has not confirmed that it has sold any equipment, the goods sent out should not be recorded as a sale. (1m)