CMA DECEMBER, 2019 EXAMINATION
PROFESSIONAL LEVEL-I
SUBJECT: 101. INTERMEDIATE FINANCIAL ACCOUNTING

MODEL SOLUTION

Solution of the Question No. 1

(a) At present, the accounting literature contains many terms that have peculiar and specific meanings. Some of these terms have been in use for a long period of time, and their meanings have changed over time. Since the elements of financial statements are the building blocks with which the statements are constructed, it is necessary to develop a basic definitional framework for them.

(b)

i. Full disclosure principle.
ii. Full disclosure principle.
iii. Fair value principle.
iv. Economic entity assumption.
v. Revenue recognition principle.
vi. Economic entity assumption.
vii. Accrual-basis assumption.
viii. Historical cost principle.

(c)

Some of the arguments which might be used are outlined below:

(1) Cost is definite and reliable; other values would have to be determined somewhat arbitrarily and there would be considerable disagreement as to the amounts to be used.

(2) Amounts determined by other bases would have to be revised frequently.

(3) Comparison with other companies is aided if cost is employed.

(4) The costs of obtaining fair values could outweigh the benefits derived.

(d)

(i) Some costs are recognized as expenses on the basis of a presumed direct association with specific revenue. This presumed direct association has been identified as the expense recognition principle, or in this case as —associating cause and effect (matching concept.)

Direct cause-and-effect relationships can seldom be conclusively demonstrated, but many costs appear to be related to particular revenue, and recognizing them as expenses accompanies recognition of the revenue. Generally, the expense recognition principle requires that the revenue recognized and the expenses incurred to produce the revenue be given concurrent periodic recognition in the accounting records. Only if effort is properly related to accomplishment will the results, called earnings, have useful significance concerning the efficient utilization of business resources. Thus, applying the expense recognition principle is recognition of the cause-and-effect relationship that exists between expense and revenue.

Examples of expenses that are usually recognized by associating cause and effect are sales commissions, freight-out on merchandise sold, and cost of goods sold or services provided.

(ii) Some costs are assigned as expenses to the current accounting period because

(1) Their incurrence during the period provides no discernible future benefits;

(2) They are measures of assets recorded in previous periods from which no future benefits are expected or can be discerned;

(3) They must be incurred each accounting year, and no build-up of expected future benefits occurs;

(4) By their nature they relate to current revenues even though they cannot be directly associated with any specific revenues;

(5) The amount of cost to be deferred can be measured only in an arbitrary manner or great uncertainty exists regarding the realization of future benefits, or both;

(6) And uncertainty exists regarding whether allocating them to current and future periods will serve any useful purpose.

Thus, many costs are called ―period costs‖ and are treated as expenses in the period incurred because they have neither a direct relationship with revenue earned nor can their occurrence be directly shown to give rise to an asset. The application of this principle of expense recognition results in charging many costs to expense in the period in which they are paid or accrued for payment. Examples of costs treated as period expenses would include officers' salaries, advertising, research and development, and auditors' fees.

(iii) A cost should be capitalized, that is, treated as a measure of an asset when it is expected that the asset will produce benefits in future periods. The important concept here is that the incurrence of the cost has resulted in the acquisition of an asset, a future service potential. If a cost is incurred that resulted in the acquisition of an asset from which benefits are not expected beyond the current period, the cost may be expensed as a measure of the service potential that expired in producing the current period's revenues. Not only should the incurrence of the cost result in the acquisition of an asset from which future benefits are expected, but also the cost should be measurable with a reasonable degree of objectivity, and there should be reasonable grounds for associating it with the asset acquired. Examples of costs that should be treated as measures of assets are the costs of merchandise on hand at the end of an accounting period, costs of insurance coverage relating to future periods, and the cost of self-constructed plant or equipment.

(iv) In the absence of a direct basis for associating asset cost with revenue and if the asset provides benefits for two or more accounting periods, its cost should be allocated to these periods (as an expense) in a systematic and rational manner. Thus, when it is impractical, or impossible, to find a close cause-and-effect relationship between revenue and cost, this relationship is often assumed to exist. Therefore, the asset cost is allocated to the accounting periods by some method. The allocation method used should appear reasonable to an unbiased observer and should be followed consistently from period to period. Examples of systematic and rational

allocation of asset cost would include depreciation of fixed assets, amortization of intangibles, and allocation of rent and insurance.

(v) A cost should be treated as a loss when no revenue results. The matching of losses to specific revenue should not be attempted because, by definition, they are expired service potentials not related to revenue produced. That is, losses result from events that are not anticipated as necessary in the process of producing revenue.

There is no simple way of identifying a loss because ascertaining whether a cost should be a loss is often a matter of judgment. The accounting distinction between an asset, expense, loss, and prior period adjustment is not clear-cut. For example, an expense is usually voluntary, planned, and expected as necessary in the generation of revenue. But a loss is a measure of the service potential expired that is considered abnormal, unnecessary, unanticipated, and possibly nonrecurring and is usually not taken into direct consideration in planning the size of the revenue stream.

Solution of the Question No. 2

i.

Carmel Corp.
Statement of Cash Flows
For the year ended December 31, 2x16

Cash flows from operating activities:		
Net income		Tk.105,000
Adjustments for non-cash revenue and expense items in the income statement:		
Depreciation expense	Tk.48,000	
Gain on sale of investments	(2,200)	
Loss on sale of building	5,000	
Decrease in investments – trading	136,600	
Increase in accounts receivable (Tk.109,040 − Tk.89,040)	(20,000)	
Decrease in accounts payable (Tk.146,000 − Tk.55,200)	(90,800)	76,600
Net cash from operating activities		181,600
Cash flows from investing activities:		
Proceeds from sale of building (Tk.225,000 − Tk.5,000)	220,000	
Purchase of land	(220,000)	
Net cash from investing activities		0
Cash flows from financing activities		
Reduction in long-term mortgage principal	(30,000)	
Issuance of common shares	20,000	
Payment of cash dividends	(8,000)	
Net cash from financing activities		(18,000)
Net increase in cash		163,600
Cash at beginning of year		84,000
Cash at end of year		Tk.247,600

Note:

• The purchase of equipment through the issuance of Tk.50,000 of common shares is a significant non-cash financing transaction that would be disclosed in the notes to the financial statements.

• Cash paid interest Tk.35,000

Had there been cash paid income taxes, this would also be disclosed.

ii. Free cash flow:

Net cash provided by operating activities	Tk. 81,600
Capital purchases – land	(220,000)
Cash paid dividends	(8,000)
Free cash flow	Tk.(46,400)

An analysis of Carmel's free cash flow indicates it is negative as shown above. Including dividends paid is optional, but it would not have made a difference in this case. What does make the difference in this case is that the capital expenditures are those needed to sustain the current level of operations. In Carmel's case, the land was purchased for investment purposes and not to meet operational requirements. With this in mind, the free cash flow would more accurately be:

Net cash from operating activities	Tk. 181,600
Capital purchases	0
Cash paid dividends	(8,000)
Free cash flow	Tk. 173,600

This makes intuitive sense and is supported by the results from one of the coverage ratios. The current cash debt coverage provides information about how well Carmel can cover its current liabilities from its net cash flows from operations:

Net cash from operating activities ÷ Average current liabilities

Carmel's current cash debt coverage is (Tk.181,600 ÷ ((87,200+176,000) × 50%) = 1.38. The company has adequate cash flows to cover its current liabilities as they come due and so overall, its financial flexibility looks positive.

In terms of cash flow patterns, Carmel has managed to more than triple its cash balance in the year mainly from cash generated from operating activities, which is a good trend. Carmel was able to pay Tk.8,000 in dividends, or a 1.7% return. If dividends are paid several times throughout the year, the return is more than adequate to investors. Carmel also sold off its traded investments for a profit and some idle buildings at a small loss to obtain sufficient internal funding for some land that it wants as an investment. Carmel also managed to lower its accounts payable levels by close to 60%. All this supports the assessment that Carmel's financial flexibility looks reasonable.

iii. The information reported in the statement of cash flows is useful for assessing the amount, timing, and uncertainty of future cash flows. The statement identifies the specific cash inflows and outflows from operating activities, investing activities, and financing activities. This gives stakeholders a better understanding of the liquidity and financial flexibility of the enterprise. Some stakeholders have concerns about the quality of the earnings because of the various bases that can be used to record accruals and estimates, which can vary widely and be subjective. As a result, the higher the ratio of cash provided by operating activities to net income, the more stakeholders can rely on the earnings reported.

Solution of the Question No. 3

(a)

i.

General Journal				
Date	Account/Explanation	PR	Debit	Credit
July 1	Accounts receivable........................ Freight-out (operating expense) .... Cost of goods sold......................... Sales revenue .... Inventory .... Cash		120,000 3,200 60,000	 120,000 60,000 3,200
July 5	Sales returns and allowances .... Accounts receivable (3 × Tk.3,000)		9,000	 9,000
July 10	Cash .... Sales discounts............................ Accounts receivable .... For Sales discounts: ((Tk.120,000 − 9,000) × 1%)		109,890 1,110	 111,000
July 14	Merchandise inventory..................... Accounts payable....................... (Tk.1,500 × 50 + 4,000)		79,000	 79,000
July 17	Accounts receivable........................ Cost of goods sold......................... Inventory .... Sales revenue		224,000 112,000	 112,000 224,000
July 26	Cash .... Sales discounts............................ Accounts receivable .... For Sales discounts: (Tk.224,000 × 1.5% × 50%), for Accounts receivable: (Tk.224,000 × 50%)		110,320 1,680	 112,000
Aug 30	Cash .... Accounts receivable		112,000	 112,000

ii. The implied interest rate on accounts receivable paid to Busy Beaver from Heintoch within the 15-day discount period = 1% ÷ [(30 − 15) ÷ 365] = 24.33%. This means that Heintoch would be using funds from the bank at a lower rate of 8% to save 24.33% interest on early payment of amounts owing to Busy Beaver. It is definitely worthwhile to take advantage of the early payment discount terms in this case.

(b)

i.

Scenario i:

General Journal				
Date	Account/Explanation	PR	Debit	Credit
July 1	Note receivable .... Accounts receivable		120,000	 120,000
Dec 31	Interest receivable .... Interest income......................... (Tk.120,000 × 5% × 6 months)		3,000	 3,000

Scenario ii:

General Journal				
Date	Account/Explanation	PR	Debit	Credit
July 1	Note receivable .... Accounts receivable		105,000	 105,000
Dec 31	Interest receivable .... Interest income......................... (Tk. 105,000 × 5% × 6 ÷ 12))		2,625	 2,625

Scenario iii:

General Journal				
Date	Account/Explanation	PR	Debit	Credit
July 1	Note receivable .... Accounts receivable .... PV = (1 N, 10 I/Y, 115000 FV)		104,545	 104,545
Dec 31	Note receivable .... Interest income......................... (Tk.104,545 × 10% × 6 months)		5,227	 5,227

ii.

Calculate interest from January 1 to July 1:

General Journal				
Date	Account/Explanation	PR	Debit	Credit
July 1	Note receivable .... Interest income......................... (Tk.104,545 + Tk.5,227 − Tk.115,000)		5,228	 5,228

Calculate the loss from impairment:

General Journal				
Date	Account/Explanation	PR	Debit	Credit
July 1	Cash .... Loss on impairment of notes receivable ..... Note receivable......................... For Cash: (115,000 × 75%)		86,250 33,750	 115,000

Solution of the Question No. 4

(a)

The unrealized holding gain or loss on non-trading equity investments should be reported as income when this security is designated as a hedged item in a qualifying fair value hedge. If the hedge meets the special hedge accounting criteria (designation, documentation, and effectiveness), the unrealized holding gain or loss is reported as income.

(b)

Journal

SL	Account Title	Ref.	Debit	Credit
1.	Dividends Payable—Preference (2,000 X Tk. 8)		16,000	
	Dividends Payable—Ordinary (20,000 X Tk. 2)		40,000	
	Cash			56,000
2.	Treasury Shares		108,000	
	Cash (2,700 X Tk. 40)			108,000
3.	Land		30,000	
	Treasury Shares (700 X Tk. 40)			28,000
	Share Premium—Treasury			2,0000
4.	Cash (500 X Tk. 105)		52,500	

	Share Capital—Preference (500 X Tk. 100)			50,000
	Share Premium—Preference			2,500
5.	Retained Earnings (1,800* X Tk. 5)		9,000	
	Ordinary Share Dividend Distributable (1,800 X Tk. 5)			9,000
	*(20,000 – 2,700 + 700 = 18,000; 18,000 X 10%)			
6.	Ordinary Share Dividend Distributable		9,000	
	Share Capital—Ordinary			9,000
7.	Retained Earnings		59,600	
	Dividends Payable—Preference (2,500 X Tk. 8)			20,000
	Dividends Payable—Ordinary (19,800* X Tk. 2)			39,600
	*(18,000 + 1,800)			

Req. b

ELIZABETH COMPANY
Partial Statement of Financial Position
December 31, 2016

Equity		
Share capital—preference, 8%, Tk. 100 par, 10,000 shares authorized, 2,500 shares issued and outstanding	Tk. 2,50,000	
Share capital—ordinary, Tk. 5 par, 100,000 shares authorized, 21,800 shares issued, 19,800shares outstanding	1,09,000	3,59,000
Share premium—preference		1,27,500
Share premium—treasury		2,000
Retained earnings		7,11,400
Less: Treasury shares (2,000 ordinary shares)		80,000
Total equity		11,19,900

(c)

Req.a

Journal

Date	**Account title**	**Ref.**	**Debit**	**Credit**
2015 Jan.1	Debt Investments		369,114	
	Cash			369,114

Req. b

The amortization schedule is as follows:
Schedule of Interest Revenue and Bond Discount Amortization
8% Bonds Purchased to Yield 10%

Date	Interest Receivable Or Cash Received	Interest Revenue	Bond Discount Amortization	Carrying Amount of Bonds
1/1/15	-	-	-	Tk. 369,114
7/1/15	Tk. 16,000	TK. 18,456	Tk. 2,456	371,570
12/31/15	16,000	18,579	2,579	374,149
7/1/16	16,000	18,707	2,707	376,856
12/31/16	16,000	18,843	2,843	379,699
7/1/17	16,000	18,985	2,985	382,684
12/31/17	16,000	19,134	3,134	385,818
7/1/18	16,000	19,291	3,291	389,109
12/31/18	16,000	19,455	3,455	392,564
7/1/19	16,000	19,628	3,628	396,192
12/31/19	16,000	19,808*	3,808	400,000
	Tk. 160,000	Tk. 190,886	Tk. 30,886	

*Tk. 2 difference due to rounding.

Req.c Interest entries:

July 1, 2015

Date	Account title	Ref.	Debit	Credit
2015 July.1	Cash		16,000	
	Debt Investments		2,456	
	Interest Revenue			18,456

December 31, 2015

Date	Account title	Ref.	Debit	Credit
2015 Dec.31	Interest Receivable		16,000	
	Debt Investments		2,579	
	Interest Revenue			18,579

Req.d

January 1, 2017 sale entry:

Selling price of bonds	Tk. 370,726
Less: Amortized cost (see schedule from (b))	379,699
Realized loss on sale of investment	Tk. (8,973)

January 1, 2017

Date	Account title	Ref.	Debit	Credit
2017 Jan.1	Cash		370,726	
	Loss on Sale of Debt Investments		8,973	
	Debt Investments			379,699

Req.e December 31, 2015 adjusting entry:

Securities	Amortized Cost	Fair Value	Unrealized Gain (Loss)
Aguirre (total portfolio value)	Tk. 374,149*	Tk. 368,000	Tk. (6,149)

*This is the amortized cost of the bonds on December 31, 2015. See (b) schedule.

December 31, 2015

Date	Account title	Ref.	Debit	Credit
2015 Dec.31	Unrealized Holding Gain or Loss—Income		6,149	
	Fair Value Adjustment			6,149

Solution of the Question No. 5

(a)

i. Determine the recoverable amount:

Value in use = Tk.110,000
Fair value less costs of disposal = Tk.116,000

The recoverable amount is the greater amount: Tk.116,000
Carrying value = Tk.325,000 − Tk.175,000 = Tk.150,000
As the carrying value exceeds the recoverable amount, the asset is impaired by Tk.150,000 − Tk.116,000 = Tk.34,000

ii.

General Journal				
Date	Account/Explanation	PR	Debit	Credit
	Loss on impairment........................		34,000	
	Accumulated impairment loss...........			34,000

iii. New carrying value = Tk.150,000 − Tk.34,000 = Tk.116,000
Depreciation =Tk.(116,000 – 0) ÷ 3 years= Tk.38,667

General Journal				
Date	Account/Explanation	PR	Debit	Credit
	Depreciation expense......................		38,667	
	Accumulated depreciation			38,667

iv. Determine the recoverable amount:

Value in use Tk. 90,000
Fair value less costs to sell Tk.111,000

The recoverable amount is the greater amount: Tk.111,000

The carrying value is now Tk.116,000 − Tk.38,667 = Tk.77,333

The asset is no longer impaired. However, the reversal of the impairment loss is limited. If the impairment had never occurred, the carrying value of the asset would have been:

Unimpaired carrying value on Jan 1, 2016	Tk.150,000
Depreciation for 2016 (150,000 ÷ 3)	(50,000)
Unimpaired carrying value at Dec 31, 2016	100,000

Therefore, the reversal of the impairment loss is limited to: Tk.100,000 − Tk.77,333 = Tk.22,667
The journal entry will be:

General Journal				
Date	Account/Explanation	PR	Debit	Credit
	Accumulated impairment loss		22,667	
	Recovery of previous impairment loss....			22,667

(b)

i)No grouping

Description	Category	Cost (Tk.)	Selling Price (Tk.)	LCNRV
Brake pad #1	Brake pads	159	140	140
Brake pad #2	Brake pads	175	180	175
Total brake pads		334	320	315
Soft tire	Tires	325	337	325
Hard tire	Tires	312	303	303
Total tires		637	640	628

Total LCNRV =Tk. (315 + 628) = Tk. 943
Current carrying value = Tk. (334 + 637) = Tk. 971
Adjustment required = Tk. (943 − 971) = Tk. (28)

Journal entry required:

	Dr.	Cr.
Loss due to decline in inventory value.......	28	
Inventory		28

ii) With grouping

Description	Category	Cost (Tk.)	Selling Price (Tk.)	LCNRV
Brake pad #1	Brake pads	159	140	
Brake pad #2	Brake pads	175	180	
Total brake pads		334	320	320
Soft tire	Tires	325	337	
Hard tire	Tires	312	303	
Total tires		637	640	637

Only the brake pad category needs to be written down.
Total adjustment required = Tk. (320 − 334) = Tk. 14

Journal entry required:

	Dr.	Cr.
Loss due to decline in inventory value.......	14	
Inventory		14

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