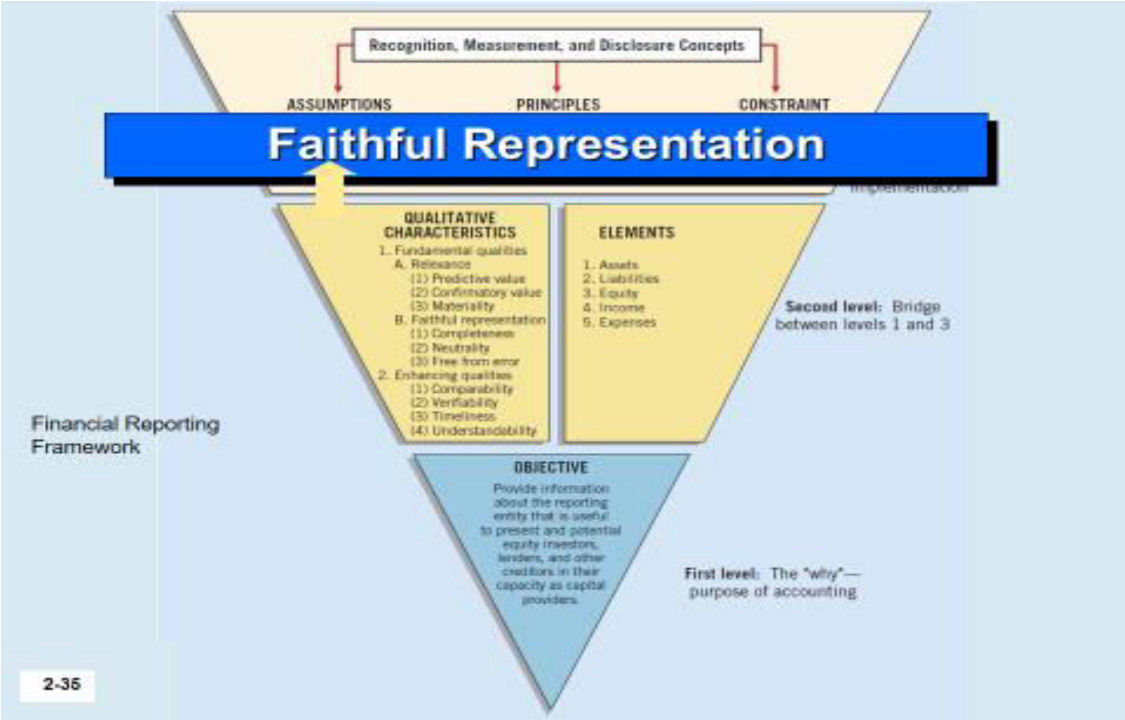
**CMA JUNE, 2020 EXAMINATION**
**PROFESSIONAL LEVEL - I**
**SUBJECT: 101. INTERMEDIATE FINANCIAL ACCOUNTING**

# Model Solution

**Solution of the Q. No. 1**

**(a)**




i. Confirmatory value
ii. Neutrality
iii. Comparability
iv. Verifiability
v. Relevance
vi. Materiality
vii. Timeliness
viii. Relevance & Faithful representation

**(b)**

Management has concluded that the **probability-weighted method** is the most predictive approach:

| | |
|---|---|
| 60% chance of $150,000 = | $ 90,000 |
| 30% chance of $145,000 = | 43,500 |
| 10% chance of $140,000 = | 14,000 |
| | $147,500 |

**Most likely outcome**, if management believes they will meet the deadline and receive the $50,000 bonus, the total transaction price would be = $150,000 (the outcome with 60% probability)

**(c)**

**i.**

Return on common stockholders' equity = 20% = Net Income / Average Equity
= 0.20 = Net Income/ (400,000+101,000+400,000+130,000)/2
= .20 X $515,500 = **Net income = $103,100**

**ii.**
Return on assets = 16% = Net Income / Average Asset
Average assets = 103,100/ 0.16 = 644,375
Total assets= (685,000+X)/2 = 644,375
**Closing Asset = $603,750**

**iii.**
Inventory turnover = 5 = Cost of goods sold/ Average Inventory
= 5 = Cost of goods sold/ (200,000+180,000)/2
5 X $190,000 = Cost of goods sold
**Cost of goods sold = $950,000.**

iv.
Accounts Receivable turnover = 7 = Net Sales (credit) / Average Accounts Receivable
=7 = Net Sales (credit) / (85,000+125,000)/2
7 X $105,000 = **Net sales (credit) = $735,000 (Ans.)**

**Solution of the Q. No. 2**

**(a)**
Only the fresh issue of ordinary shares generates cash = 200,000 x Tk. 1.20 = Tk. 240,000

The redeemable preference shares are classified as borrowings so the Tk. 110,000 received will be classified as proceeds from issue of borrowing, not proceeds from issue of equity share capital.

**(b)**

| | |
|---|---|
| Increase in cash in hand = Tk. (1,100 – 1,000) | = Tk. 100 |
| Increase in cash at bank = Tk. (21,932 + 41,627) | = Tk. 63,559 |
| Net increase | = Tk. 63,659 |

**(c)**

SULLIVAN CORP.
Statement of Cash Flows
For the Year Ended December 31, 2015

| | | |
|---|---|---|
| Cash flows from operating activities | | |
| Net income | | $370,000 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Depreciation | $147,000 (a) | |
| Gain on sale of equipment | (2,000) (b) | |
| Equity in earnings of Myers Co. | (35,000) (c) | |
| Decrease in accounts receivable | 40,000 | |
| Increase in inventories | (135,000) | |
| Increase in accounts payable | 60,000 | |
| Decrease in income taxes payable | (20,000) | 55,000 |
| Net cash provided by operating activities | | 425,000 |
| Cash flows from investing activities: | | |
| Proceeds from sale of equipment | 40,000 | |
| Loan to TLC Co. | (300,000) | |
| Principal repayment of loan receivable | 50,000 | |
| Net cash used by investing activities | | (210,000) |

| | | |
|---|---|---|
| Cash flows from financing activities: | | |
| Dividends paid | (100,000) | |
| Net cash used by financing activities | | (100,000) |
| | | |
| Net increase in cash | | 115,000 |
| Cash, January 1, 2015 | | 700,000 |
| Cash, December 31, 2015 | | $815,000 |

Separate schedule presented in the notes:

| | |
|---|---|
| Non-cash investing and financing activities: | |
| Issuance of lease liability for building | $400,000 |

Explanation of Amounts

(a) Depreciation

| | | |
|---|---|---|
| Net increase in accumulated depreciation for the year ended December 31, 2015 | | $125,000 |
| Accumulated depreciation on equipment sold: | | |
| Cost | $60,000 | |
| Carrying value | 38,000 | 22,000 |
| Depreciation for 2015 | | $147,000 |

(b) Gain on sale of equipment

| | |
|---|---|
| Proceeds | $ 40,000 |
| Carrying value | (38,000) |
| Gain | $ 2,000 |

(c) Equity in earnings of Myers Co.

| | |
|---|---|
| Myers's net income for 2015 | $140,000 |
| Sullivan's ownership | X 25% |
| Undistributed earnings of Myers Co. | $ 35,000 |

**Solution of the Q. No. 3**

**(a)** (1) The direct write-off approach is not theoretically justifiable even though required for income tax purposes. The direct write-off method does not match expenses with revenues of the period, nor does it result in receivables being stated at estimated realizable value on the balance sheet.

(2) Bad Debt Expense = 2% of Sales = (Tk.2,400,000 X 2%) = Tk.48,000

Bad Debt Expense = Direct Write-Off = (Tk.7,800 + Tk.9,700 + Tk.7,000 + Tk.9,830) = Tk.34,330

Net income would be Tk.13,670 (Tk.48,000 – Tk.34,330) lower under the percentage-of-sales approach.

**(b)**

Cash.............................................................................. 136,800*
Sales Discounts......................................................... 1,200
Accounts Receivable....................................... 138,000
*[Tk138,000 – (Tk60,000 X 2%)]
Accounts Receivable ................................................ 5,300
Allowance for Doubtful Accounts .................. 5,300

Cash.............................................................................. 5,300
Accounts Receivable....................................... 5,300
Allowance for Doubtful Accounts ............................ 17,500
Accounts Receivable....................................... 17,500
Bad Debt Expense..................................................... 14,900
Allowance for Doubtful Accounts .................. 14,900*

*(Tk.17,300 + Tk.5,300 – Tk.17,500 = Tk.5,100;Tk.20,000 – Tk.5,100 = Tk.14,900)

**(c)**

(1) In terms of IAS 2.18, any costs (regardless of the amount), that are directly attributable in bringing the inventory to the location and in a condition to be used as intended by management may be capitalised to the asset. Thus the Tk.50 000 can be included in the cost ofthe fabric. Note however that additional consideration must be given to calculating the net realisable value and ensuring that it is not less that this new higher cost of the fabric (or else a write down would be required).

(2) Yes, the consultant's fees may be capitalised to the cost of the baggies inventory under IAS 2.18: any costs (regardless of the amount), that are directly attributable in bringing the inventory to the location and in a condition to be used as intended by management may be capitalised to the asset.

(3) Fabric X should be valued at cost because no write down below cost to NRV is permitted if the finished goods in which the fabric is used (the T-shirts) are expected to be sold at or above cost (IAS 2.32).

**Solution of the Q. No. 4**

**(a)**

Taka 33 million

IAS 16.11 requires the capitalisation of essential safety equipment even if there are no future economic benefits flowing directly from its operation. It does however subject the total value of all the related assets to an impairment test. In this case the recoverable amount is Taka 33m, as the net selling price Taka 33m is greater than the value in use Taka 32m (ie Taka 3.2m / 0.1). As this is less than the total carrying amount of Taka 35m (Taka 30m + 5m), the assets are written down to Taka 33m.

**(b)**

Taka 0.7 million

IAS 36.60 and 61 (also IAS 16.40) require that an impairment that reverses a previous revaluation should be recognised through the revaluation reserve to the extent of that reserve. Any remaining amount is recognised through profit or loss. Thus:

- The carrying amount at 31 December 20X2 is 45/50 x Taka5.0m = Taka 4.5m.
- The revaluation reserve created is Taka 3.5m (i.e., Taka 8.0m –Taka 4.5m)
- The carrying amount at 31 December 20X7 is 40/45 x Taka 8.0m = Taka 7.1m
- The recoverable amount at 31 December 20X7 is Taka 2.9m.
- The total impairment charge is Taka 4.2m (i.e., Taka 7.1m –Taka 2.9m).
- Of this, Taka 3.5m is a reversal of the revaluation reserve, so only Taka 0.7 million is recognized through profit or loss.

**(c)**

| Account | Debit | Credit |
|---|---|---|
| Patents | 435,000 | |
| Goodwill | 360,000 | |
| Franchise | 450,000 | |
| Copyright | 156,000 | |
| Research and Development Expense (Tk. 215,000 – Tk. 55,000) | 160,000 | |
| Intangible Assets | | 1,561,000 |
| | | |
| Amortization Expense | 85,500 | |
| Patents (Tk. 380,000/8) + (Tk. 55,000 X 4/88)* | | 50,000 |
| Franchise (Tk. 450,000/10 X 6/12) | | 22,500 |
| Copyright (Tk. 156,000/5 X 5/12) | | 13,000 |

Economically viable R & D will lead to 'Patent'. Therefore total period applicable = (7 X 12) + 4 = 88

Balance of Intangible Assets as of December 31, 2015

| | | |
|---|---|---|
| Patents | = | Tk. 435,000 – Tk. 50,000 = Tk. 385,000 |
| Goodwill | = | Tk. 360,000 (no amortization) |
| Franchise | = | Tk. 450,000 – Tk. 22,500 = Tk. 427,500 |
| Copyright | = | Tk. 156,000 – Tk. 13,000 = Tk. 143,000 |

**(d)**

(i)

| Account | Debit | Credit |
|---|---|---|
| Buildings | 75,000 | |
| Equipment | 70,000 | |
| Trademarks | 15,000 | |
| Land | 80,000 | |
| Inventory | 125,000 | |
| Receivables | 90,000 | |
| Cash | 50,000 | |
| Goodwill | 95,000* | |
| Accounts Payable | | 200,000 |
| Notes Payable | | 150,000 |
| Cash | | 250,000 |

*Tk. 400,000 – [Tk. 235,000 + Tk. 40,000 + Tk. 25,000 + Tk. 5,000]
Note that the building and equipment would be recorded at the 7/1/15 cost to ABC; accumulated depreciation accounts would not be recorded.

(ii)

| Account | Debit | Credit |
|---|---|---|
| Trademark Amortization Expense | 1,500 | |
| Trademarks ([Tk. 15,000 – Tk. 3,000] X 1/4 X 6/12) | | 1,500 |

**Solution of Q. No. 5**

**(a) (1)**

| Account | Debit | Credit |
|---|---|---|
| <u>December 31, 20x2</u> | | |
| Available-for-Sale Securities | 1,200,000 | |
| Cash | | 1,200,000 |
| <u>June 30, 20x3</u> | | |
| Cash | 42,500 | |
| Dividend Revenue | | 42,500 |
| <u>December 31, 20x3</u> | | |
| Cash | 42,500 | |
| Dividend Revenue | | 42,500 |
| Securities Fair Value Adjustment (Available-for-Sale) | 150,000 | |
| Unrealized Holding Gain or Loss—Equity | | 150,000 |

[Tk.27 X 50,000 = Tk.1,350,000; Tk.1,350,000 – Tk.1,200,000 = Tk.150,000]

**(2)**

December 31, 20x2

Investment in Handerson's Stock...................... 1,200,000

Cash .......................................................... 1,200,000

June 30, 20x3

Cash ................................................................. 42,500

Investment in Handerson's Stock ........................... 42,500

December 31, 20x3

Cash ................................................................. 42,500

Investment in Handerson's Stock ........................... 42,500

Investment in Handerson's Stock...................... 146,000

Revenue from Investment................................ 146,000

[(20% X Tk.730,000)]

**(3)**

| | Fair Value Method | Equity Method |
|---|---|---|
| Investment amount (balance sheet) | Tk.1,350,000 | Tk.1,261,000* |
| Dividend revenue (income statement) | 85,000 | 0 |
| Revenue from investment (income statement) | | 146,000 |

[* Tk.1,200,000 + Tk.146,000 – Tk.42,500 – Tk.42,500}

**(b) (1)**

December 31, 20x2

Computer ............................................................ 409,806.00

Notes Payable............................................................ 409,806.00

(Computer capitalized at the present value of the note—Tk600,000 X .68301)

**(2)**

December 31, 20x3

Depreciation Expense ............................................... 67,961.20

Accumulated Depreciation—Computer

[(Tk409,806 – Tk70,000) ÷ 5] ......................................... 67,961.20

Interest Expense ....................................................... 40,980.60

Notes Payable................................................................. 40,980.60

**Schedule of Note Discount Amortization**

| Date | Debit, Interest Expense Credit, Discount on Notes Payable | Carrying Value of Note |
|---|---|---|
| 12/31/x2 | | Tk. 409,806.00 |
| 12/31/x3 | Tk.40,980.60 | 450,786.60 |
| 12/31/x4 | 45,078.66 | 495,865.26 |
| 12/31/x5 | 49,586.53 | 545,451.79 |
| 12/31/x6 | 54,548.21* | 600,000.00 |

*3.03 adjustment due to rounding.

**(3)**

December 31, 20x4

Depreciation Expense ............................................... 67,961.20

Accumulated Depreciation—Computer.............................. 67,961.20

Interest Expense ....................................................... 45,078.66

Notes Payable................................................................. 45,078.66

**= THE END =**