

GUIDED SOLUTIONS TO ACCOUNTING 2013 SESSION

1. Determination of the accounting mathematic value of partially realized shares of company A?

Using the formular based on the accounting net assets

= capital	=	8 000 000
+ Reserves	=	5 200 000
-Deferred Charges	=	400 000
Total	=	12 600 000
No of shares	=	800
Mathematic value	=	16,000F

$$= \frac{12800000}{800} = 16000\text{frs} = C$$

2. Determination of the accounting mathematic value of Company B

= capital	=	4 000 000
+ Reserves	=	2 400 000
-Deferred Charges	=	800 000
Total	=	5 600 000
No of shares	=	800
Mathematic value	=	28,000F

3. Calculation of the intrinsic mathematic value of Company A

- Capital + Reserves - Differed Charges ± Over value
- 8 000 000 + 52 00 000 - 400 000 + 1200 000 - 480 000 = 13 520 000frs
- No of shares = 800
- Intrinsic Mathematic value = 16 900frs B

4. Determination of the intrinsic mathematic value of company B

- Capital + Reserves - Differed Charges ± Over value
- 4 00 000 + 2 400 00 - 800 000 + 800 000 - 1600 000frs = 6 240 000
- No of shares = 200

$$\text{Intrinsic Mathematic value} = \frac{6\,240\,000}{200} = 31,200\text{frs} = A$$

5. Determination of the BEP of the enterprise

- Turnover tax exclusive 1 500 000frs
- Variable cost = 12 600 000 - 3 600 000 = 9 000 000
- Contribution Margin = 1 500 00 - 900 000 = 6 000 000frs
- Fixed Cost = 3 600 000frs

$$\text{Contribution margin ratio} = \frac{6\,000\,000}{1\,500\,000} \times \frac{100}{1} = 0.4$$

$$\text{BEP} = \frac{\text{Fixed Cost}}{\text{CMR}} = \frac{3\,600\,000}{0.4} = 9\,000\,000 = A$$

6. Determination of BEP Date

$$\text{BEP date} = \frac{\text{BEP} \times 365}{\text{Turnover}} = \frac{9\,000\,000 \times 365}{15\,000\,000} = 219 \text{ days}$$

Which approximately 7th August 2013 = D

7. Calculation of the safety margin in number of months of sales for the year

- Safety margin = Turnover - BEP
- SM = 15 000 000 - 9 000 000 = 6 000 000

$$\text{SM} = \text{in respect to months} = \frac{6\,000\,000}{15\,000\,000} \times 12 = 4,8\text{months} \quad A$$

8. Determination of operating result when turnover increase by 10%

$$\begin{aligned}\text{Turnover} &= 15\,000\,000 \times 1.1 = 16\,500\,000 \\ \text{Variable cost} &= 9\,000\,000 \\ \text{Contribution Margin} &= 7\,500\,000 \\ \text{Fixed Cost} &= 3\,600\,000 \\ \text{Operation Result} &= 3\,900\,000 \quad \text{C}\end{aligned}$$

9. Determination of the contribution margin

$$\begin{aligned}\text{Turnover} &= 16\,500\,000 \\ \text{Operating result} &= 2\,200\,000 \\ \text{Total expenses} &= 5\,500\,000 \quad \text{B}\end{aligned}$$

10. The amount of fixed cost is 6,600,000 B

Elements	Number	Unit Price	Amount
MV1	600	25000	150,000,000
Cash shares	2500	14000	35,000,000
Bonus shares	1000	0	0
MV2	6500	21765	18,500,000

11. Determination of the Maximum issue premium per share

$$\begin{aligned}\text{MAX IP} &= \text{MV1} - \text{NV} \\ \text{Max IP} &= 2500 - 10000 \\ \text{Max IP} &= 15000 \text{FRS} \quad \text{D}\end{aligned}$$

12. Calculation of subscription right per share

$$\begin{aligned}SR &= \frac{(MV2 - E)N'}{N} \\ SR &= \frac{(19474 - 1400)2500}{N6000} = 2280.883 + \\ SR &= 2280.8333 \quad \text{B}\end{aligned}$$

13. Determination of the cost of the operation to a share holder on that day who had 180 shares and realized 140 new shares among which were 60 free shares

$$\text{Subscription quotient} = \frac{N'}{N} = \frac{2500}{600} = 0.4166$$

$$\text{Attribution quotient} = \frac{N'}{N} = \frac{1000}{6000} = 0.16667$$

$$\text{Irreducible subscription right} = 0.41667 \times 180 = 75 \text{ shares}$$

$$\text{Irreducible attribution right} = 0.1667 \times 180 = 30 \text{ shares}$$

$$\text{Reducible subscription} = (140 - 60) - 75 = 5 \text{ shares}$$

$$\text{Reducible attribution} = 60 - 30 = 30 \text{ shares}$$

$$\text{Subscription right bought over} = \frac{5}{12N} = \frac{5N}{XN}$$

= He has to buy 12SR

$$\text{Value of subscription right} = 27340 \text{frs}$$

$$\text{Value of attribution right} = 180 \times \frac{(19474 \times 1000)}{600}$$

$$\text{VAR} = 584\,220 \text{FRS}$$

$$\text{Issue Premium} = N'(E - NV)$$

$$\text{IP} = 80(1400 - 10000) = 320000 \text{frs}$$

$$\text{Amount of capital paid} = 80 \times 10\,000 = 80\,000 \text{frs}$$

$$\text{Total amount spent} = \text{SR} + \text{AR} + \text{IP} + \text{Capital}$$

$$= 27370 + 584220 + 320000 + 800\,000 = 1731590 \text{frs} \quad \text{A}$$

14. Determination of attribution right attributed to each shareholder

Element	Quantity	UP	AMOUNT
MV1	6000	25000	150 000 000
Cash Share	2500	14000	35 000 000
MV2	8500	21765	185 000 000
Bonus Shares	1000	0	0
MV3	9500	19474	185 000 000

$$AR = MV2 - MV3$$

$$AR = 21765 - 19474$$

$$AR = 2291 \text{ frs}$$

A

15. C

16. B

17. Nominal Value = 3500frs, Reimbursement Premium = 42000, First Amortization = 4541730, Fourth Amortization = 5 908 684frs

Determination of the RECKON nominal rate of the annuities of Reimbursement

$$- AW4 = A1(1+r)^{4-1}$$

$$- 4541730 (1+r)^3 = 5 908 684$$

$$(1+r)^3 = \frac{5908684}{4541730}$$

$$(1+r)^3 = 1.3009765$$

$$(1+r) = \sqrt[3]{1.3009765}$$

$$(1+r) = 1.0916$$

$$r = 1.0916 - 1$$

$$r = 9.17\% \quad A.$$

18.

19.

20. Determination of the equation of the adjustment line using the least square method

21.