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Solutions to Item Sets

1. Correct Answer is C: The balance sheet carrying value for held for trading and available for sale security will be at its fair value. The balance sheet carrying value for held-to-maturity security (Arc Inc.) = 280,000 + (280,000*0.05 – 300,000*0.04) = $282,000. The balance sheet carrying value for the portfolio = 282,000 + 505,000 + 210,000 = $997,000.
2. Correct Answer is A: Total income realized for Arc Inc. = 0.05*280,000 = $14,000. Income realized for Trident Ltd. = $530,000*0.05 = $26,500. Income realized for Crow Inc. = 200,000*0.05 + (210,000 – 200,000) = $20,000. Total income = 60,500.
3. Correct Answer is C: Change in income statement due to Arc Inc. = (289,500 – 282,000) = $7,500. Change in income statement due to Trident Ltd. = (504,200 – 505,000) + (505,000 – 530,000 - 530,000*0.05 + 500,000*0.06) = -$22,300. *{ Change in value + The loss in OCI will be realized into income statement; Loss in OCI last year = -25,000 + (500,000*0.06 – 530,000*0.05) = -21,500}* Change in income statement due to Crow Inc. = (210,050 – 210,000) = $50. Total change in income statement = 7,500 – 22,300 + 50 = -$14,750.
4. Correct Answer is B: Statement 5 is not correct. The disappearance of an active market in not an evidence of impairment. Rest statements are correct.
5. Correct Answer is B: Statement 2 is incorrect. The previous gain or loss that had been recognized in other comprehensive income is amortized over the remaining life of the security using the effective interest method.
6. Correct Answer is A: Statement 7 is not correct. The impairment loss is measured as the security's carrying value and the present value of its estimated future cash flows discounted at the security's original effective interest rate.

7. Correct Answer is C: Total excess purchase price paid in investments at the end of year 2009 = 150 – 400*0.30 = $30 million. Out of this amount, $50*0.3 = $15 million is attributed to the difference between the fair value and book value of plant and equipment. This $15 million will be amortized over 5 years at a rate of $3 million every year. Total unamortized purchase price at the end of year 2010 = 30 -3 = $27 million.
8. Correct Answer is A: Total investment at the end of year 2010 = Initial investment + Equity income in 2010 – Dividends received = 150 + (150*0.3 – 3) – 50*0.3 = 150 + 42 – 15 = $177 million.
9. Correct Answer is C: Neither U.S. GAAP not IFRS allow the reversal of impairment in case of investment in associates.
10. Correct Answer is C: Unrealized profit in upstream sale (associate to investor i.e. Eduraft to Genesis Mentors) = 20*0.3 = $6 million. Unrealized profit in downstream sale (investor to associate i.e. Genesis Mentors to Eduraft) = (60/180)*(180-120)*0.3 = $6 million. Total equity income in 2011 = 200*0.3 – 6 – 6 – 3 = $45 million.
11. Correct Answer is C: Dividends will have no impact on the equity income. However, it will reduce the investment in Eduraft by the proportionate amount of dividends in the balance sheet.
12. Correct Answer is B: Realized profit from downstream sale from the last year = (60/180)*(180-120)*0.3 = $6 million. Total equity income in 2012 = 240*0.3 – 3 + 6 = $75 million.

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13. Correct Answer is C: Statement 4 is incorrect because the equity will decrease because of write-down and which will lead to higher solvency ratios like D/E.
14. Correct Answer is A: Statement 5 is incorrect because the exception is when changes to LIFO method are made.
15. Correct Answer is B: Inventory (FIFO method) = Inventory (LIFO method) + LIFO reserve = 689 + 92 = $781 million.
16. Correct Answer is A: Change in net income = Increase in LIFO reserve*(1-tax rate) = (75-92)*(1-0.4) = -$10.2 million. Thus, the net income will be lower by $10.2 million for the year ending on 31 December 2012 in case of FIFO with respect to LIFO.
17. Correct Answer is A: The extra tax to be paid under FIFO will be increase in LIFO reserve times the tax rate. For the year 2011, extra tax paid = (92-70)*0.4 = $8.8 million. For the year 2012, extra tax paid = (75-92)*0.4 = -6.8 million. Total extra tax paid in 2011 and 2012 = 8.8 – 6.8 = $2.0 million.
18. Correct Answer is C: COGS (FIFO method) = COGS (LIFO method) – Increase in LIFO reserve = 2,010 – (75-92) = $2,027 million.

19. Correct Answer is C: Interest coverage ratio = EBIT/Interest = (600-300+60)/50 = 360/50 = 7.2.
20. Correct Answer is C: Return on equity = 330/2,570 = 12.84%. On expensing, the net income will decrease by 240,000*(1-0.4) = $144,000. The ROE is calculated at the beginning value of equity. So, it will not be impacted because of that. ROE = (330-144)/2,570 = 7.23%.
21. Correct Answer is C: Net profit margin = Net income/Revenue = 186/1,200 = 15.50%.
22. Correct Answer is A: The cash flow from investment would have increased by $300,000.
23. Correct Answer is A: The cash flow from operating activities would have decreased by $300,000 – (300,000-60,000)*0.4 = $204,000.
24. Correct Answer is C: Statement 3 is incorrect. The net income would be higher in later years and lower in the current year.

25. Correct Answer is C: Under U.S. GAAP, total impairment loss = carrying value – fair value = 250,000 – 220,000 = $30,000.
26. Correct Answer is C: Under IFRS, total impairment loss = carrying value – recoverable amount. Recoverable amount = higher of fair value minus selling costs or value in use = 250,000. Impairment loss = 250,000 – 250,000 = 0.
27. Correct Answer is B: Statement 2 is incorrect. An impairment of an asset would have no impact on tax payment. It will decrease the DTL.
28. Correct Answer is B: Total upward revaluation = Change in the value of asset limit to the earlier impairment losses = 4,500 – 1,500 = $3,000.
29. Correct Answer is B: Debt to equity ratio is lower in both year of capitalization and in the subsequent years.
30. Correct Answer is C: Salvage value = 50,000 - (50,000 – 34,000)*(10/4) = $10,000. Depreciation in 5^{th} year = (34,000 – 14,000)/6 = $3,333.33.

