



RHODES UNIVERSITY

DEPARTMENT OF MANAGEMENT

MANAGEMENT 102: FOUNDATIONS OF CORPORATE FINANCE

MOCK TEST: SEPTEMBER 2023

SOLUTIONS

1.

A	Corporate finance takes a balance sheet view of the firm. Conveniently, the accountants happen to prepare just such a report. However, this is not a good primary source of decision-making information for the financial manager, because of two main problems, one of which (a haphazard system of inconsistent rules) is listed here. The other two choices are much less important as central problems of accounting numbers for financial decision-making.
Notes	F 167

2.

C	PPE has been recently revalued, so market value would normally be assumed to be R200 million. Inventories are obsolete and have been written down to the amount shown in the balance sheet, so their market value should be R40 million. Cash can almost always be assumed to be at market value, in this case R10 million. BUT there is a problem with all of these assumptions, because the auditors have concerns. Why? We are not told. So insufficient information has been provided. All we know at this stage is that there could be errors or deliberate misstatements which invalidate our market value estimates.
Notes	F 46

3.

C	Market cap = number of issued shares x share price; so issued shares = market cap / share price = 900 million / 120 = 7.5 million = 7,500,000.
Notes	F 134

4.

B	The King IV report requires that the interests of the shareholders should be placed on the same level as all other corporate stakeholders. Therefore, no priority should be given to shareholders when making managerial decisions for the company. King IV is indeed based on ESG, but the acronym is an abbreviation for environmental, social, and governance. The formal title of King IV is <i>Report on corporate governance for South Africa</i> , and it is published by the Institute of Directors in Southern Africa. It is not legislation, so it is wrong to describe it as a set of "government laws for corporate entities".
Notes	F 169

5.

B	This is a LEAST LIKELY question, so you are looking for the alternative that is false. Of the three options, maximising accounting profit is the least appropriate goal of the financial manager because it focusses on an accounting number, not cash flows. Although maximising MVE (in this case represented by share price) is the primary objective, it usually also acceptable to refer to maximising MVA (in this case referred to as company value).
Notes	F 25

6.

C	The market value of shareholder equity = MVE. Rearranging the corporate finance identity, $MVE = MVA - MVD$. $MVA =$ present value of operating cash flows discounted at WACC (9%) = R80 million. $MVD =$ present value of interest and principal discounted at cost of debt (6%) = R50 million. So $MVE = 80 \text{ million} - 50 \text{ million} = R30 \text{ million}$.
Notes	F 92

7.

B	The market values of debt and equity represent the company's capital structure. If the debt-equity mix is optimised, the company can in theory achieve the lowest possible cost of capital, which will increase the value of the company. The other alternatives are wrong. The objective function is to maximise the value of equity, not debt. The financial manager should strive to minimise the cost of debt, which is the same thing as the required rate of return on debt.
Notes	F 33

8.

A	In discounted cash flow valuation, present value has an inverse relationship with the discount rate, and a direct relationship with the cash flows. A decreased discount rate therefore results in an increased present value; and the increased cash flows will also cause an increased present value. The two effects therefore work in the same (positive) direction.
Notes	F 171

9.

A	Capital budgeting is the process of making investment decisions about whether to accept or reject potential new projects. Equivalently, we could say that capital budgeting answers the question of which assets the firm should buy. Choice B is nonsensical, and is a garbled reference to static trade-off theory in the capital structure decision. Choice C is wrong because it refers to the financing decision, not the investment decision (which is capital budgeting by another name).
Notes	F 119

10.

C	Statement 1 is wrong. IRR and NPV are indeed closely related and will often conclude with identical investment decisions. However, there are conditions under which the IRR method leads to a different outcome from an NPV analysis, or even breaks down completely. When this happens, the investment decision should be made on the basis of the NPV method, because it is a more valid indicator of whether or not the project fulfils the value-maximisation objective function. Statement 2 is correct, because the payback period method is suitable for low-level managers and small projects.
Notes	F 72

11.

C	The discount rate used to determine present value in the NPV equation is either the firm's WACC, or an adjusted WACC suitable for the risk characteristics of the project being evaluated. For maintenance projects, WACC is used. For expansion projects, an adjusted rate higher than WACC is used. For new business lines, an even higher rate is called for. In this case, a new business line project is being evaluated: the company will become involved in different industry. Unadjusted WACC (choice A) is wrong, because this is definitely not a maintenance project. It is also not an expansion project, so Choice B (WACC + 4%) is also wrong. The correct answer is WACC plus the 7% risk adjustment for new business line projects.
Notes	F 165

12.

A	NPV = PV of project's operating cash flows – project cost. Here, we do not know the PV of project's operating cash flows, so we cannot calculate NPV. Note that PV is not the simplistic total of the future cash flows for years 1 – 4. Because of TVM effects, amounts at different points in time cannot be added together without first discounting them to the same point on the timeline.
Notes	F 163

13.

B	The capital asset pricing model (CAPM) is a method for estimating the cost of equity using three input variables: the risk-free rate, beta, and the market risk premium.
Notes	F 18

14.

B	This is a LEAST LIKELY question, requiring the identification of the false statement. CDE has a beta less than 1, so it is a defensive company. Therefore, without more information it is impossible to say whether or not CDE has a lower beta than another company that is also defensive. Choices A and C are both true. CDE will indeed have a lower beta (and therefore a lower cost of equity) than a cyclical company, defined as one that has a beta greater than 1. A passenger airliner is a typical example of a cyclical company.
Notes	F 164

15.

A	Market risk premium (MRP) = overall stock market return minus the risk-free rate = 12% – 7% = 5%.
Notes	F 172

16.

C	If the company does not issue bonds, its cost of debt is the interest rate it pays on borrowings from banks or other financial institutions. In South Africa, as in many other countries, the interest rate charged by commercial banks on loans to their most creditworthy customers is called the prime rate.
Notes	F 166

17.

B	Because the company's current capital structure is also its target, the weights of equity (w_e) and debt (w_d) in the WACC equation are calculated using market values. Start with $MVA = MVE + MVD = 500 + 250 = 750$. Then $w_e = MVE/MVA = 500/750 = 66.7\%$ and $w_d = MVD/MVA = 250/750 = 33.3\%$. Choice A is wrong because it uses book values, which is another name for the accounting numbers. These should never be used for calculating the WACC weights. Choice C is clearly wrong because $w_e + w_d$ must equal 100%. Note that the buildings number was an irrelevant distraction for answering this question.
Notes	F 105

18.

A	This is a LEAST LIKELY question, requiring the identification of the false statement. In terms of pecking order theory, firms prefer internal financing, then new issuance of debt, and will issue new equity as a last resort. The other two statements are true. In particular, a key implication of pecking order theory is that firms do not target an optimal capital structure.
Notes	F 173

19.

C	Mature companies, with their stable and predictable positive operating cash flows, are able to benefit from the tax shield of debt. This will tend to increase the proportion of debt in their optimal capital structure. Choice A is wrong because the both pecking order theory and static trade-off theory are in alignment with the high level of debt in a company with these characteristics. Choice C is wrong because start-ups, not mature companies, have high growth prospects. In any case, this condition results in high equity levels, not debt.
Notes	F 174

20.

A	As the business cycle moves through expansionary and contraction phases, cyclical companies experience more variability in their operating cash flows than defensive companies. This relative lack of cash flow predictability is not generally supportive of the obligations attached to debt. A cyclical company is also at a particular risk of not being able to meet its financial obligations during downturns. Therefore, cyclical companies tend to have less debt than defensive companies. The other two statements are false. Higher levels of debt are associated with larger holdings of tangible (not intangible) assets. The higher the level of liquid assets, the higher the debt level.
Notes	F 175