INSTITUTE AND FACULTY OF ACTUARIES

EXAMINATION

21 April 2021 (am)

Subject CB1 – Business Finance
Core Principles

Time allowed: Three hours and fifteen minutes

In addition to this paper you should have available the 2002 edition of the Formulae and Tables and your own electronic calculator from the approved list.

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1 Why are quoted companies required to have non-executive directors on their boards?

A Executive directors are corrupt and incompetent.
B Executive directors are often inexperienced.
C Non-executive directors can fulfil a supervisory role.
D Non-executive directors require lower salaries than executives.

[2]

2 Which of the following is an agency cost?

A Board meetings
B Directors' salaries
C External audit of a company's financial statements
D Interest on corporate debt.

[2]

3 A parent company has a foreign subsidiary located in a host country that does not have a double tax arrangement with the parent's home country. The foreign subsidiary pays regular dividends to the parent company. Which of the following will apply?

A The subsidiary will not be taxed on profits earned in its host country and the parent will pay tax on dividends in its home country.
B The subsidiary will pay tax on profits earned in its host country and the parent will not be required to declare the dividends as taxable income in its home country.
C The subsidiary will pay tax on profits earned in its host country and the parent will pay tax on dividends received in its home country.
D The subsidiary will pay tax on profits earned in its host country and the parent will pay tax on dividends received in the subsidiary's host country.

[2]

4 A company has issued subordinated debt securities. Which of the following reflects the priority that would apply in the event of default?

A Mortgage loans first, followed by preference shares, then equity shares, then subordinated debt.
B Mortgage loans first, followed by preference shares, then subordinated debt, then equity shares.
C Mortgage loans first, followed by subordinated debt, then preference shares, then equity shares.
D Subordinated debt first, followed by mortgage loans, then preference shares, then equity shares.

[2]

5 A company with floating rate debt has entered into a swap arrangement with a counterparty that has fixed rate debt.

What are the implications to the company of a default by the counterparty?

A Nothing will change.
B The company will be forced to pay interest on both loans.
C The company will be left with floating rate debt.
D The company's loan will be written off.

[2]

6 A holiday company takes bookings for holidays up to a year before customers travel. The company recognises revenue from those bookings in the same accounting period as the costs associated with providing the holidays is incurred.

Which accounting concept is the holiday company applying?

A Accruals
B Dual aspect
C Matching
D Prudence.

[2]

7 Why do analysts disregard intangible assets when calculating net asset value per share?

A Intangible assets have no value to the shareholders.
B Intangible assets may prove difficult to sell if the company fails.
C It is unrealistic to expect company directors to use intangible assets to create value.
D Only tangible assets can be controlled.

[2]

8 Which of the following is a valid formula for Return on Capital Employed (ROCE)?

A $\dfrac{\text{Profit before tax}}{\text{share capital + reserves + long term debt}}$

B $\dfrac{\text{Profit before tax and interest}}{\text{share capital + reserves}}$

C $\dfrac{\text{Profit before tax and interest}}{\text{share capital + reserves + long term debt}}$

D $\dfrac{\text{Profit before tax and interest}}{\text{share capital + long term debt}}$

[2]

9 A company's factory cost $50 million. Depreciation to date on the building is $12 million. The factory was recently valued at $55 million. What amount will appear in the company's revaluation reserve in respect of this revaluation?

A $5 million
B $17 million
C $38 million
D $55 million.

[2]

10 J is a quoted company that owns 5% of K, an unquoted company. J has contracts in place that gives it the right to be involved in any decisions made by K's directors. J also has the right to replace K's directors at any time. How should K be accounted for in the J Group's consolidated financial statements?

A As an associate
B As an investment
C As a non-controlling interest
D As a subsidiary.

[2]

11 Directors are duty-bound to maximise shareholder wealth.

Discuss the impact on this duty if they must also consider the needs of a wider range of stakeholders. [5]

12 Describe the difficulties in deciding whether a particular quoted company is a suitable acquisition target for a larger quoted company. [5]

13 A change in safety regulations will require a train company to fit new equipment to all trains. The company does not believe that the equipment will reduce the risk of accidents and it will be expensive.

Explain the usefulness of the Net Present Value (NPV) criterion in planning the company's response to this change. [5]

14 A quoted company has a policy of seeking an internal rate of return of at least 14% p.a. on all investments of more than €5 million. This rate was set 5 years ago.

Describe the company's approach to capital project appraisal. [5]

15 A quoted company's directors have drafted their financial statements in a manner that they claim is realistic, despite the fact that it does not comply with International Financial Reporting Standards (IFRS). Changing the figures to comply with IFRS would lead to the recognition of a loss instead of the profit shown in the draft statements.

Explain how the company's external auditor would respond to this. [5]

16 Describe the purpose of integrated reporting. [5]

17 An actuarial consultancy invoices its clients on a monthly basis, based on the time spent on each client. The consultancy has four major clients who often take as long as 3 months to settle any given invoice.

Explain the implications of slow payment by these clients for the consultancy. [5]

18 An actuarial consultancy has a budgetary system in place to monitor costs and revenues. During the year ended 31 March 2021, hours charged to clients exceeded the budget by 8%. Profit was 3% over budget, after taking account of adverse variances on staff overtime and on office heat and light. The consultancy's Board is considering reducing the office manager's bonus because of the two adverse variances.

Describe the implications of holding the office manager responsible for the adverse variances under these circumstances. [5]

19 The information provided below was obtained from Hopplo plc's financial statements for the year ended 31 March 2021.

(i) Calculate the following ratios for the two accounting years:

(a) Return on Capital Employed (ROCE) [2]

(b) Gross profit percentage [2]

(c) Distribution costs as a percentage of revenue. [2]

(ii) Assess Hopplo's performance for the year ended 31 March 2021. [9]

(iii) Discuss the difficulties in assessing Hopplo's performance on the basis of the information provided. [5]

[Total 20]

Hopplo plc

Statement of Profit or Loss
for the year ended 31 March

	2021	2020
	$000	$000
Revenue	22,427	19,502
Cost of sales	(7,177)	(7,411)
Gross profit	15,250	12,091
Distribution costs	(2,467)	(1,365)
Administrative expenses	(1,121)	(1,170)
Operating profit	11,662	9,556
Finance costs	(6,080)	(3,360)
Profit before tax	5,582	6,196
Income tax expense	(1,228)	(1,363)
Profit for the year	4,354	4,833

Hopplo plc

Statement of Financial Position
as at 31 March

	2021	2020
	$000	$000
ASSETS		
Non-current assets		
Property, plant and equipment	181,000	146,000
Current Assets		
Inventory	658	680
Trade receivables	1,869	1,625
Cash at bank	43	340
	2,570	2,645
Total assets	183,570	148,645
EQUITY AND LIABILITIES		
Equity		
Called-up share capital	70,000	70,000
Share premium account	20,000	20,000
Retained earnings	15,792	14,706
Total equity	105,792	104,706
Non-current liabilities		
Borrowings	76,000	42,000
Current liabilities		
Trade payables	598	618
Tax	1,180	1,321
	1,778	1,939
Total of equity and liabilities	183,570	148,645

20 Drentel is a quoted company that manufactures bicycles and was established many years ago. It has been making losses for the past 5 years because its products have not kept up with consumer tastes and sales have been declining.

Despite the losses, Drentel has continued to pay a steady dividend each year.

Drentel's Board is considering a proposal to sell a range of battery-powered electric bicycles, which is a major growth area in the bicycle market. Drentel's current range of bicycles is suitable for modification to carry an electric motor. This would require a significant investment in order to acquire the rights to use patented manufacturing processes and also to acquire the specialised machinery that would have to be built to Drentel's specifications. The investment required is equivalent to approximately 25% of the company's market capitalisation.

Drentel's beta is currently 1.8. The Board believes that the beta will fall to 1.6 if the company proceeds with the electric bicycle project.

(i) Evaluate the relevance of the decline in Drentel's beta for the decision to invest in electric bicycles. [10]

(ii) Discuss Drentel's policy of maintaining its dividend payments despite losses. [10]

[Total 20]

END OF PAPER