

Section A

Answer **all** the questions in this section.

1. Which of the following characteristics was reintroduced by the IASB's Conceptual Framework (2018), and refers to the need to exercise caution under conditions of uncertainty?

(Tick **one** box only)

- A Neutrality
- B Materiality
- C Relevance
- D Prudence

(1 mark)

2. The IASB's Conceptual Framework (2018) lists five elements of financial statements. Define any **three** of the five elements.

i _____

ii _____

iii _____

(3 marks)

3. There are four responsibilities for companies shown in Carroll's Corporate Social Responsibility (CSR) Pyramid. Outline **two** of them.

i _____

ii _____

(4 marks)

4. Preference shares are legally a type of equity but should be treated as debt rather than equity for statutory reporting purposes as they carry a fixed rate of dividend.

Is this **true** or **false**?

(Tick **one** box only)

True

False (1 mark)

5. Outline the main factors that determine the length of a company's working capital cycle (WCC).

(4 marks)

6. The capital asset pricing model (CAPM) was developed by Sharpe (1964) and Lintner (1965) to measure the cost of equity. Explain the main assumptions of the CAPM.

(6 marks)

Section B

Compulsory question – **you must answer this question.**

[This has been produced for sample purposes, adequate spacing for answers will be included in the examinations.]

8. Groceries plc (Groceries) started trading in January 2018 manufacturing and selling vegetable “smoothie” drinks. Groceries uses innovative technology for producing fresh drinks and giving them a shelf life of 8 weeks. Groceries currently operates solely in the UK and is the only producer to use this technology to date.

The two directors of Groceries each initially invested £50,000 of equity capital to start the business. The long-term borrowings were secured on 1 January 2018 and will be repaid over 4 years commencing 1 January 2020. The directors also negotiated a short-term bank overdraft facility of £75,000, which is intended to cover working capital requirements. This is due for review on 1 April 2020.

Groceries has completed its first year of trading, selling to three large supermarkets and securing a contract with another supermarket to produce an own-brand product. This contract was signed on 30 December 2018. The directors believe that Groceries could exploit similar opportunities in both domestic and overseas markets if they expanded further. However, any further expansion would require significant capital investment in property, plant and equipment.

A cash-rich individual is looking to make a private investment in an entity in return for equity shares. He has approached the directors of Groceries who have confirmed that they would be interested in such an investment into their business as it would potentially allow them to undertake the capital investment required to expand.

Financial information about Groceries as at 31 December 2018 and forecast for 2019 is as follows:

Statements of financial position as at 31 December		
	2019 Forecast	2018 Actual
	£000	£000
ASSETS		
Non-current assets		
Property, plant and equipment	349	350
Intangible assets – patented technology	49	52
	398	402
Current assets		
Inventories	30	40
Receivables	290	140
	320	180
Total assets	718	582
EQUITY AND LIABILITIES		
Share capital	100	100
Retained earnings	185	30
Total equity	285	130
Non-current liabilities		
Long-term borrowings	350	350
Current Liabilities		
Payables	23	50

Tax	10	12
Short-term borrowings (overdraft)	50	40
	83	102
Total liabilities	433	452
Total equity and liabilities	718	582

Statements of profit or loss for the year ended 31 December		
	2019Forecast	2018Actual
	£000	£000
Revenue	1,020	800
Cost of sales	(620)	(520)
Gross profit	400	280
Distribution costs	(90)	(70)
Administrative expenses	(100)	(140)
Finance costs	(25)	(20)
Profit before tax	185	50
Tax expense	(30)	(20)
Profit for the year	155	30

Additional information:

- (i) The forecast statement of profit or loss for the year ended 31 December 2019 is based on Groceries' existing contracts as at 31 December 2018 and does not take account of any potential new contracts from expansion.
- (ii) The directors have estimated that forecast revenue can be achieved with the current levels of property, plant and equipment.
- (iii) No dividends were paid in 2018 or are forecast to be paid in 2019.
- (iv) No further forecast information is currently available.
- (v) Administrative expenses for the year ended 31 December 2018 includes professional fees of £30,000 incurred in the business set-up, £40,000 in marketing and £20,000 for the cost of training staff in the production processes.

Required

- (a) Calculate relevant ratios for assessing the financial performance and position of Groceries.
(8 marks)
- (b) Analyse the actual and forecast financial performance and position of Groceries, on behalf of the cash-rich client, using the information provided and the ratios you have calculated in part (a).
(17 marks)

[Total for Question 8 = 25 marks]

TOTAL FOR SECTION B = 25 MARKS

Section C

Answer **two** questions only.

9. Bella plc (Bella) is a marketing company that has performed well in its first few years of trading. It is considering introducing a new Customer Relationship Management (CRM) system to help maintain more regular and better targeted communication with both current and potential clients. Bella would like to grow from its current annual revenue of £10 million. The CRM system project is to be appraised over a four-year time horizon.

An initial investment of £600,000 is required on 1 January 2020, with no residual value at the end of the four-year period. It is estimated that there would be on-going system maintenance costs of £40,000 a year but no other annual incremental costs attributable to the project.

In terms of savings, it is planned that staff numbers would be reduced by two people at an annual saving of salary costs of £80,000 and a saving of other costs of £20,000 per annum. However, redundancy pay and other associated costs are estimated to be £200,000, payable on 1 January 2020. Unless stated otherwise, all costs and revenue should be assumed to be paid or received at the end of the year in which they arise.

The directors of Bella are unsure how much new business would be generated by the new CRM system. The number of different unknown variables involved has made it very difficult to arrive at a firm answer. However, it is anticipated that any new business generated as a result of the CRM system would give rise to an increase in net cash inflows in each year. This increase in net cash flows would be equivalent to 52% of the annual cash inflow generated by new business. Assume that the additional net cash inflow generated by new business is the same in each of years 1 to 4.

Bella evaluates all projects using a conventional discounted cash flow approach based on costs and benefits that can be quantified with a degree of confidence. Its cost of capital of 12% is to be used as the discount rate.

Ignore taxation.

Required

- (a) (i) Calculate the net present value (NPV) of the proposed CRM system project, ignoring the additional cash flows that might arise from new business. (8 marks)
- (ii) Using your answer to (a)(i) above, calculate the additional annual cash inflow from new business that is required in order to achieve a breakeven result. (5 marks)

[Total for part (a) = 13marks]

- (b) Long-term forecasting of cash flows is an essential part of project appraisal and involves making assumptions. With reference to Bella, discuss the relevant and non-relevant factors for project appraisal purposes. (12 marks)

[Total for Question 9 = 25 marks]

11. Dillon plc (Dillon) has experienced a period of steady trading in the last two years, following the launch of a new product on 1 January 2017, and a significant investment in new property, plant and equipment to manufacture this new product. The following information is available from the company's financial statements:

Statements of cash flows for the years ended 31 December		
	2018(£m)	2017(£m)
Operating activities		
Cash generated from operations	420	478
Tax and pension payments	(108)	(115)
Net cash from operating activities	312	363
Investing activities		
Proceeds from disposals of property, plant and equipment	58	15
Acquisition of property, plant and equipment	(190)	(261)
Net cash used in investing activities	(132)	(246)
Financing activities		
Interest paid	(19)	(17)
Repayment of lease obligations	(9)	(4)
Equity dividends paid	(130)	(115)
Decrease in borrowings	(34)	(30)
Net cash used in financing activities	(192)	(166)
Decrease in cash and cash equivalents	(12)	(49)
Cash and cash equivalents at the end of the period	187	199

Additional information:

- Dillon disposed of old plant in both 2017 and 2018, as part of a process of reducing the manufacture of an existing product.
- Dillon invested £261m during 2017 as an initial cash payment towards new plant, property and equipment for this increase in production capacity.
- Dillon invested £190m during 2018 as a second payment towards the new plant, property and equipment identified above.
- Dillon is due to pay the balance of the total purchase cost of the new property, plant and equipment – this being £140m – in the summer of 2019.

Required

- (a) A statement of cash flows is a key element of financial information. Outline what the different users of financial reporting might interpret from Dillon's statements of cash flows. (8 marks)
- (b) Outline the recognition issues under IAS 16 'Property, plant and equipment' for accounting fully and appropriately for the investment in new property, plant and equipment made by Dillon. (8 marks)
- (c) With reference to Dillon outline the practice of working capital management in terms of managing cash and cash equivalents. (9marks)

[Total for Question 11 = 25 marks]

Present value table

Present value (in £) of a single payment of £1, n years from now, discounted at a rate of r% per annum

Years (n)	Discount rate (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424
10	0.905	0.820	0.744	0.676	0.614	0.558	0.508	0.463	0.422	0.386
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290
14	0.870	0.758	0.661	0.577	0.505	0.442	0.388	0.340	0.299	0.263
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065

Annuity table

Present value (in £) of a series of n equal annual payments of £1 a year, starting one year from now, discounted at a rate of r% per annum

Years (n)	Discount rate (r)									
	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909
2	1.970	1.942	1.913	1.886	1.859	1.833	1.808	1.783	1.759	1.736
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355
7	6.728	6.472	6.230	6.002	5.786	5.582	5.389	5.206	5.033	4.868
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	5.759
10	9.471	8.983	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145
11	10.37	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.495
12	11.26	10.58	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.814
13	12.13	11.35	10.63	9.986	9.394	8.853	8.358	7.904	7.487	7.103
14	13.00	12.11	11.30	10.56	9.899	9.295	8.745	8.244	7.786	7.367
15	13.87	12.85	11.94	11.12	10.38	9.712	9.108	8.559	8.061	7.606
	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675

Formulae

Economic order quantity	$Q = \sqrt{2cd/h}$
The capital asset pricing model (CAPM)	$R_{ADR} = R_{FR} + \beta(R_M - R_{FR})$ Alternative form: $R_S = R_f + \beta (R_m - R_f)$
The dividend growth model	$P_o = \frac{D_o(1+g)}{(K_e - g)}$ $K_e = \frac{D_o(1+g)}{P_o} + g$
Gordon's growth approximation	$g = r \times b$
The weighted average cost of capital (WACC)	$WACC = K_e \times \left(\frac{E}{E+D}\right) + K_d(1-t) \times \left(\frac{D}{E+D}\right)$
The Fisher formula	$(1+m) = (1+r) \times (1+i)$