## Pillar F

## F2 - Financial Management <br> Specimen Examination Paper

## Instructions to candidates

| You are allowed three hours to answer this question paper. |
| :---: |
| You are allowed 20 minutes reading time before the examination begins during which you should read the question paper and, if you wish, highlight and/or make notes on the question paper. However, you will not be allowed, under any circumstances, to open the answer book and start writing or use your calculator during this reading time. |
| You are strongly advised to carefully read ALL the question requirements before attempting the question concerned (that is all parts and/or subquestions). The requirements for all questions are contained in a dotted box |
| ALL answers must be written in the answer book. Answers or notes written on the question paper will not be submitted for marking. |
| Answer the FIVE compulsory questions in Section A on pages 2 to 7. |
| Answer the TWO compulsory questions in Section B on pages 8 to 11. |
| Maths Tables are provided on pages 12 to 14. |
| The list of verbs as published in the syllabus is given for reference on the inside back cover of this question paper. |
| Write your candidate number, the paper number and examination subject title in the spaces provided on the front of the answer book. Also write your contact ID and name in the space provided in the right hand margin and seal to close. |
| Tick the appropriate boxes on the front of the answer book to indicate the questions you have answered. |

## SECTION A - 50 MARKS

[Note: The indicative time for answering this section is 90 minutes]
ANSWER ALL FIVE QUESTIONS IN THIS SECTION - 10 MARKS EACH

## Question One

The statements of comprehensive income for $A B, C D$ and $E F$ for the year ended 31 May 2009 are shown below:

|  | AB | CD | EF |
| :---: | :---: | :---: | :---: |
|  | \$000 | \$000 | \$000 |
| Revenue | 6,000 | 3,000 | 1,000 |
| Cost of sales | (4,800) | (2,400) | (800) |
| Gross profit | 1,200 | 600 | 200 |
| Distribution costs | (64) | (32) | (10) |
| Administrative expenses | (336) | (168) | (52) |
| Finance costs | (30) | (15) | (5) |
| Profit before tax | 770 | 385 | 133 |
| Income tax expense | (204) | (102) | (33) |
| PROFIT FOR THE YEAR | 566 | $\underline{283}$ | 100 |
| Other comprehensive income: |  |  |  |
| Revaluation of property | 200 | 100 | 30 |
| Tax effect of revaluation | (42) | (21) | (6) |
| Other comprehensive income for the year, net of tax | 158 | 79 | $\underline{24}$ |
| TOTAL COMPREHENSIVE INCOME |  |  |  |
| FOR THE YEAR | 724 | 362 | 124 |

## Additional information:

1. $A B$ operates a defined benefit pension plan for its employees. At the year end, there is an actuarial loss of $\$ 52,000$ on the pension plan liabilities and an actuarial gain of $\$ 40,000$ on pension plan assets. These amounts are not reflected in the above statements. In accordance with the amendment to IAS 19 Employee Benefits, AB recognises actuarial gains and losses from the defined benefit plan in other comprehensive income in the period that they occur.
2. $A B$ holds a $15 \%$ investment in $X Y$ which is designated as available for sale. The fair value of this investment at 31 May 2009 was $\$ 106,000$. The investment is currently recorded in the financial statements at $\$ 92,000$.
3. AB owns $80 \%$ of the ordinary share capital of $C D$ and exercises control over its operating and financial policies. AB owns $30 \%$ of the ordinary share capital of EF and exerts significant influence over its operating and financial policies.

## Required:

Prepare the consolidated statement of comprehensive income for the AB Group, taking account of the information provided in the notes above. Ignore any further taxation effects of notes 1 and 2.

## Question Two

Shareholders are becoming increasingly interested in the environmental policies, impacts and practices of business entities, however financial statements have not traditionally provided this information. As a result, there has been significant growth in entities providing narrative environmental information on a voluntary basis.

## Required:

Identify and explain the principal arguments against voluntary disclosures by business entities of their environmental policies, impacts and practices.
(Total for Question Two = 10 marks)

Section A continues on the next page

## Question Three

## Convertible bonds

RP issued $\$ 4$ million 5\% convertible bonds on 1 October 2008 for $\$ 3.9$ million. The bonds have a four year term and are redeemable at par. At the time the bonds were issued the prevailing market rate for similar debt without conversion rights was 7\%. The effective interest rate associated with the bonds is $7 \%$ and the liability is measured, in accordance with IAS 39 Financial Instruments: recognition and measurement, at amortised cost. The interest due was paid and recorded within finance costs during the year.

## Share options

RP granted share options to its 300 employees on 1 October 2007. Each employee will receive 1,000 share options provided they continue to work for RP for the following three years from the grant date. The fair value of the options at the grant date was $\$ 1.10$ each. In the year ended 30 September 2008, 10 employees left and another 30 were expected to leave over the next two years. For the year ended 30 September 2009, 20 employees left and another 15 are expected to leave in the year to 30 September 2010.

## Required:

(a) Prepare the accounting entries to record the issue of the convertible bonds and to record the adjustment required in respect of the interest expense on the bonds for the year ended 30 September 2009.
(b) Discuss the accounting treatment to be adopted for the share options and calculate the amount to be recognised in the income statement in respect of these options for the year ended 30 September 2009. Prepare appropriate accounting entries.
(Total for Question Three = 10 marks)

## Question Four

JKA acquired $50 \%$ of the issued ordinary share capital of CBX, an entity set up under a contractual agreement as a joint venture between JKA and one of its customers. JKA adopts a policy of proportionate consolidation in accounting for joint ventures.
The statements of financial position for JKA and CBX as at 31 May 2009 are provided below:

|  | JKA | CBX |
| :---: | :---: | :---: |
| ASSETS | \$000 | \$000 |
| Non-current assets |  |  |
| Property, plant and equipment | 11,000 | 7,500 |
| Investment in CBX | 2,000 |  |
|  | 13,000 | 7,500 |
| Current assets |  |  |
| Inventories | 3,100 | 1,200 |
| Receivables | 3,300 | 1,400 |
| Cash and cash equivalents | $\underline{600}$ | 400 |
|  | 7,000 | 3,000 |
| Total assets | 20,000 | 10,500 |
| EQUITY AND LIABILITIES |  |  |
| Equity |  |  |
| Share capital (\$1 ordinary shares) | 10,000 | 4,000 |
| Revaluation reserve | 1,500 | 500 |
| Other reserves | 500 | - |
| Retained earnings | 2,000 | 4,500 |
| Total equity | 14,000 | 9,000 |
| Non-current liabilities | 2,000 | - |
| Current liabilities | 4,000 | 1,500 |
| Total liabilities | 6,000 | 1,500 |
| Total equity and liabilities | 20,000 | 10,500 |

Additional information:

## 1. Intra-group trading

During the year to 31 May 2009 CBX sold goods to JKA with a sales value of \$200,000. $25 \%$ of the goods remain in JKA's inventories at the year end. CBX makes 20\% margin on all sales.

The final invoice amount of $\$ 34,000$ remains unpaid at the year end.

## 2. Sale of land

On 31 May 2009 JKA sold a piece of land to DEX Finance for $\$ 500,000$ when the carrying value of the land was $\$ 520,000$ (the original cost of the asset). Under the terms of the sale agreement JKA has the option to repurchase the land within the next three years for between $\$ 560,000$ and $\$ 600,000$ depending on the date of repurchase. The land must be repurchased for $\$ 600,000$ at the end of the three year period if the option is not exercised before that time.

JKA has derecognised the land and recorded the subsequent loss within profit for the year ended 31 May 2009.

## Required:

(a) Explain how the sale of the land should be accounted for in accordance with the principles of IAS 18 Revenue and the Framework for Preparation and Presentation of Financial Statements.
(b) Prepare the consolidated statement of financial position for JKA as at 31 May 2009.

## Question Five

BG is an entity with several overseas operations. One of its subsidiaries, DG operates in a country which experiences relatively high rates of inflation in its currency, the Dez. Most entities operating in that country voluntarily present two versions of their financial statements: one at historic cost, and the other incorporating current cost adjustments. DG complies with this accepted practice.

Extracts from the income statement of DG, including adjustments for current costs for the year ended 30 June 2009 are shown below:

|  | Dez’000 |
| :--- | :---: |
| Historical cost profit from operations | 926 |
| Current cost adjustments: | $(82)$ |
| Cost of sales adjustment | $(37)$ |
| Depreciation adjustment | $\underline{(9)}$ |
| Monetary working capital adjustment | $\underline{798}$ |
| Current cost profit from operations |  |

## Required:

(a) Discuss the defects of historical cost accounting in times of increasing prices.
(b) Explain how EACH of the three current cost accounting adjustments shown above contributes to the maintenance of capital.
(6 marks)
(Total for Question Five = 10 marks)

## End of Section A Section $B$ starts on the next page

TURN OVER

SECTION B - 50 MARKS
[Note: The indicative time for answering this section is 90 minutes]
ANSWER BOTH QUESTIONS IN THIS SECTION - 25 MARKS EACH

## Question Six

The consolidated statement of financial position for MIC as at 31 March 2009 and its comparative for 2008 is shown below:

|  | 2009 | 2008 |
| :---: | :---: | :---: |
| ASSETS | \$000 | \$000 |
| Non-current assets |  |  |
| Property, plant and equipment | 16,800 | 15,600 |
| Goodwill | 2,900 | 2,400 |
| Investment in associate | 8,000 | 7,800 |
|  | 27,700 | 25,800 |
| Current assets |  |  |
| Inventories | 11,600 | 12,000 |
| Receivables | 9,400 | 8,200 |
| Held for trading investment | 2,200 | 1,800 |
| Cash and cash equivalents | 1,400 | 4,100 |
|  | 24,600 | 26,100 |
| Total assets | 52,300 | 51,900 |
| EQUITY AND LIABILITIES |  |  |
| Equity attributable to owners of the parent |  |  |
| Share capital (\$1 ordinary shares) | 12,000 | 10,000 |
| Share premium | 2,800 | - |
| Other reserves | 400 | 400 |
| Retained earnings | 7,300 | 6,300 |
|  | 22,500 | 16,700 |
| Non-controlling interest | 6,500 | 6,100 |
| Total equity | 29,000 | 22,800 |
| Non-current liabilities |  |  |
| Long term loans | 14,000 | 18,000 |
| Current liabilities |  |  |
| Payables | 8,700 | 10,200 |
| Income tax | 600 | 900 |
|  | 9,300 | 11,100 |
| Total liabilities | 23,300 | 29,100 |
| Total equity and liabilities | 52,300 | 51,900 |

The consolidated income statement for MIC for the year ended 31 March 2009 is shown below:

|  | $\$ 000$ |
| :--- | ---: |
| Revenue | 12,000 |
| Cost of sales | $(8,400)$ |
| Gross profit | $(\mathbf{4 0 0 0}$ |
| Distribution costs | $(1,260)$ |
| Administrative expenses | $(450)$ |
| Finance costs | $\underline{500}$ |
| Share of profit of associate | 1,990 |
| Profit before tax | $\underline{(600)}$ |
| Income tax expense | $\underline{1,390}$ |
| PROFIT FOR THE YEAR | 1,200 |
| Attributable to: | $\underline{190}$ |
| Owners of the parent | $\underline{1,390}$ |

## Additional information

1. There were no disposals of property, plant and equipment in the year. Depreciation charged in arriving at profit totalled $\$ 1,800,000$.
2. MIC acquired $90 \%$ of the ordinary share capital of GH on 1 December 2008 for a cash consideration of $\$ 460,000$ plus the issue of 1 million $\$ 1$ ordinary shares in MIC, which had a deemed value of $\$ 3.60$ per share at the date of acquisition. The fair values of the net assets acquired were as follows:

## \$000

Property, plant and equipment 800
Inventories 2,200
Receivables 700
Cash and cash equivalents 200
Payables $\underline{(500)}$
3,400
MIC made no other purchases or sales of investments in the year. The group policy is to value the non-controlling interest at acquisition at the proportionate share of the fair value of the net assets.
3. Finance costs include interest on loans and any gains or losses on held for trading investments. All interest due was paid in the year.

## Required:

Prepare the consolidated statement of cash flows for MIC for the year ended 31 March 2009.
(Total for Question Six = 25 marks) !

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## Question Seven

XYZ has a strategy of growth by acquisition. Two entities, $A$ and $B$, have been identified and will be considered at the next board meeting. The target entities are of a similar size and operate within similar economic parameters. Neither entity is listed. The entities are subject to different tax regimes. Takeover is unlikely to be resisted by either entity, provided a reasonable price is offered for the shares.

XYZ can afford to fund only one acquisition and the board are asking for a review of the financial statements of both entities together with a recommendation on which of the entities looks a more promising prospect. In previous acquisitions, the board focussed mainly on key benchmarks of profitability, efficiency and risk and to that end it is expecting any report to include analysis of the following key financial ratios:

- Gross profit percentage
- Profit before tax as a percentage of revenue
- Return on capital employed
- Non-current asset turnover
- Gearing (debt/equity)

The most recent income statements for both $A$ and $B$ are presented below, together with extracts from their statements of financial position.

|  | A | B |
| :--- | :---: | :---: |
|  | $\$ 000$ | $\$ 000$ |
| Revenue | 3,800 | 4,400 |
| Cost of sales | $(2,700)$ | $(2,820)$ |
| Gross profit | 1,100 | 1,580 |
| Distribution costs | $(375)$ | $(420)$ |
| Administrative expenses | $(168)$ | $(644)$ |
| Finance costs | $\underline{(25)}$ | $\underline{(32)}$ |
| Profit before tax | 532 | 484 |
| Income tax expense | $\underline{(148)}$ | $\underline{(170)}$ |
| PROFIT FOR THE YEAR | $\underline{384}$ | $\underline{314}$ |
|  | $\$ 000$ | $\$ 000$ |
| Extracts from statement of financial position | 950 | 1,500 |
| Total equity | 500 | 650 |
| Non-current liabilities (borrowings) | 1,700 | 1,500 |
| Non-current assets |  |  |

Additional information:

1. A's administrative expenses include a gain of $\$ 350,000$ on the disposal of non-current assets, following a major restructuring of the entity. The refocusing of the business activities also resulted in some capital investment which was undertaken near the end of its financial period.
2. A has a Held for Trading investment on the statement of financial position. Entity $A$ made a gain on this investment of $\$ 20,000$ in the period and this has been deducted from finance costs.

## Required:

(a) Prepare a report for presentation to the board of $X Y Z$, which analyses the financial information provided and recommends the most suitable takeover target. ( 8 marks are available for the calculation of ratios).
(18 marks)
(b) Explain the limitations of analysis when comparing two entities, using $A$ and $B$ as examples.

## End of Question Paper.

Maths Tables and Formulae are on pages 12 to 14

## MATHS TABLES AND FORMULAE

## Present value table

Present value of $\$ 1$, that is $(1+r)^{-n}$ where $r=$ interest rate; $n=$ number of periods until payment or receipt.

| Periods ( $n$ ) | Interest rates (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 |
| 16 | 0.853 | 0.728 | 0.623 | 0.534 | 0.458 | 0.394 | 0.339 | 0.292 | 0.252 | 0.218 |
| 17 | 0.844 | 0.714 | 0.605 | 0.513 | 0.436 | 0.371 | 0.317 | 0.270 | 0.231 | 0.198 |
| 18 | 0.836 | 0.700 | 0.587 | 0.494 | 0.416 | 0.350 | 0.296 | 0.250 | 0.212 | 0.180 |
| 19 | 0.828 | 0.686 | 0.570 | 0.475 | 0.396 | 0.331 | 0.277 | 0.232 | 0.194 | 0.164 |
| 20 | 0.820 | 0.673 | 0.554 | 0.456 | 0.377 | 0.312 | 0.258 | 0.215 | 0.178 | 0.149 |


| Periods ( $n$ ) | Interest rates (r) |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 0.079 | 0.065 |
| 16 | 0.188 | 0.163 | 0.141 | 0.123 | 0.107 | 0.093 | 0.081 | 0.071 | 0.062 | 0.054 |
| 17 | 0.170 | 0.146 | 0.125 | 0.108 | 0.093 | 0.080 | 0.069 | 0.060 | 0.052 | 0.045 |
| 18 | 0.153 | 0.130 | 0.111 | 0.095 | 0.081 | 0.069 | 0.059 | 0.051 | 0.044 | 0.038 |
| 19 | 0.138 | 0.116 | 0.098 | 0.083 | 0.070 | 0.060 | 0.051 | 0.043 | 0.037 | 0.031 |
| 20 | 0.124 | 0.104 | 0.087 | 0.073 | 0.061 | 0.051 | 0.043 | 0.037 | 0.031 | 0.026 |

## Cumulative present value of $\mathbf{\$ 1}$ per annum

Receivable or Payable at the end of each year for $n$ years $\frac{1-(1+r)^{-n}}{r}$

| Periods <br> ( $n$ ) | Interest rates (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 | 10.368 | 9.787 | 9.253 | 8.760 | 8.306 | 7.887 | 7.499 | 7.139 | 6.805 | 6.495 |
| 12 | 11.255 | 10.575 | 9.954 | 9.385 | 8.863 | 8.384 | 7.943 | 7.536 | 7.161 | 6.814 |
| 13 | 12.134 | 11.348 | 10.635 | 9.986 | 9.394 | 8.853 | 8.358 | 7.904 | 7.487 | 7.103 |
| 14 | 13.004 | 12.106 | 11.296 | 10.563 | 9.899 | 9.295 | 8.745 | 8.244 | 7.786 | 7.367 |
| 15 | 13.865 | 12.849 | 11.938 | 11.118 | 10.380 | 9.712 | 9.108 | 8.559 | 8.061 | 7.606 |
| 16 | 14.718 | 13.578 | 12.561 | 11.652 | 10.838 | 10.106 | 9.447 | 8.851 | 8.313 | 7.824 |
| 17 | 15.562 | 14.292 | 13.166 | 12.166 | 11.274 | 10.477 | 9.763 | 9.122 | 8.544 | 8.022 |
| 18 | 16.398 | 14.992 | 13.754 | 12.659 | 11.690 | 10.828 | 10.059 | 9.372 | 8.756 | 8.201 |
| 19 | 17.226 | 15.679 | 14.324 | 13.134 | 12.085 | 11.158 | 10.336 | 9.604 | 8.950 | 8.365 |
| 20 | 18.046 | 16.351 | 14.878 | 13.590 | 12.462 | 11.470 | 10.594 | 9.818 | 9.129 | 8.514 |


| Periods | Interest rates $(r)$ |  |  |  |  |  |  |  |  |  |  | $19 \%$ | $20 \%$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $(n)$ | $11 \%$ | $12 \%$ | $13 \%$ | $14 \%$ | $15 \%$ | $16 \%$ | $17 \%$ | $18 \%$ | $19 \%$ | 0.840 |  |  |  |
| 1 | 0.901 | 0.893 | 0.885 | 0.877 | 0.870 | 0.862 | 0.855 | 0.847 | 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 | 7.793 | 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 |  |  |  |
| 16 | 7.379 | 6.974 | 6.604 | 6.265 | 5.954 | 5.668 | 5.405 | 5.162 | 4.938 | 4.730 |  |  |  |
| 17 | 7.549 | 7.120 | 6.729 | 6.373 | 6.047 | 5.749 | 5.475 | 5.222 | 4.990 | 4.775 |  |  |  |
| 18 | 7.702 | 7.250 | 6.840 | 6.467 | 6.128 | 5.818 | 5.534 | 5.273 | 5.033 | 4.812 |  |  |  |
| 19 | 7.839 | 7.366 | 6.938 | 6.550 | 6.198 | 5.877 | 5.584 | 5.316 | 5.070 | 4.843 |  |  |  |
| 20 | 7.963 | 7.469 | 7.025 | 6.623 | 6.259 | 5.929 | 5.628 | 5.353 | 5.101 | 4.870 |  |  |  |

## Formulae

## Annuity

Present value of an annuity of \$1 per annum receivable or payable for $n$ years, commencing in one year, discounted at $r \%$ per annum:

$$
\mathrm{PV}=\frac{1}{r}\left[1-\frac{1}{[1+r]^{n}}\right]
$$

## Perpetuity

Present value of \$1 per annum receivable or payable in perpetuity, commencing in one year, discounted at $r \%$ per annum:

$$
\mathrm{PV}=\frac{1}{r}
$$

## Growing Perpetuity

Present value of \$1 per annum, receivable or payable, commencing in one year, growing in perpetuity at a constant rate of $g \%$ per annum, discounted at $r \%$ per annum:

$$
\mathrm{PV}=\frac{1}{r-g}
$$

## LIST OF VERBS USED IN THE QUESTION REQUIREMENTS

A list of the learning objectives and verbs that appear in the syllabus and in the question requirements for each question in this paper.

It is important that you answer the question according to the definition of the verb.

| LEARNING OBJECTIVE | VERBS USED | DEFINITION |
| :---: | :---: | :---: |
| Level 1 - KNOWLEDGE |  |  |
| What you are expected to know. | List | Make a list of |
|  | State | Express, fully or clearly, the details of/facts of |
|  | Define | Give the exact meaning of |
| Level 2 - COMPREHENSION |  |  |
| What you are expected to understand. | Describe | Communicate the key features |
|  | Distinguish | Highlight the differences between |
|  | Explain | Make clear or intelligible/State the meaning or purpose of |
|  | Identify | Recognise, establish or select after consideration |
|  | Illustrate | Use an example to describe or explain something |
| Level 3 - APPLICATION |  |  |
| How you are expected to apply your knowledge. | Apply | Put to practical use |
|  | Calculate/compute | Ascertain or reckon mathematically |
|  | Demonstrate | Prove with certainty or to exhibit by practical means |
|  | Prepare | Make or get ready for use |
|  | Reconcile | Make or prove consistent/compatible |
|  | Solve | Find an answer to |
|  | Tabulate | Arrange in a table |
| Level 4 - ANALYSIS |  |  |
| How are you expected to analyse the detail of what you have learned. | Analyse | Examine in detail the structure of |
|  | Categorise | Place into a defined class or division |
|  | Compare and contrast | Show the similarities and/or differences between |
|  | Construct | Build up or compile |
|  | Discuss | Examine in detail by argument |
|  | Interpret | Translate into intelligible or familiar terms |
|  | Prioritise | Place in order of priority or sequence for action |
|  | Produce | Create or bring into existence |
| Level 5 - EVALUATION |  |  |
| How are you expected to use your learning to evaluate, make decisions or recommendations. | Advise | Counsel, inform or notify |
|  | Evaluate | Appraise or assess the value of |
|  | Recommend | Propose a course of action |

## Financial Pillar

## Management Level Paper

## F2 - Financial Management

Specimen Paper

## Thursday Afternoon Session


[^0]:    TURN OVER

