



# Singapore CA Qualification (Foundation) Examination 4 December 2024 Principles of Financial Reporting

### INSTRUCTIONS TO CANDIDATES

- 1. The time allowed for this examination paper is **3 hours 15 minutes**.
- 2. This examination paper has **FOUR (4)** questions and comprises **SEVENTEEN (17)** pages (including this instruction sheet, Appendix A and Appendix B). Each question may have **MULTIPLE** parts and **ALL** questions are examinable.
- 3. This is a restricted open book examination. This means that you are allowed to only bring the following materials into the exam location:
  - One A4-sized double-sided cheat sheet
  - One A4-sized double-sided blank scratch paper
- 4. During the examination, you are allowed to use your laptop and any calculators that comply with the ISCA's regulations. Please note that smartwatches, mobile phones, tablets, and all other electronic devices **MUST NOT** be used during the examination and **MUST NOT** be within reach or sight or hearing from where you are seated to write the exam.
- 5. During the examination, videos of you and your computer screen will be recorded for the purpose of ensuring examination integrity and you have consented to these recordings.
- 6. This examination paper and all video recordings of this exam are the property of the Accounting and Corporate Regulatory Authority.

### **MODULE-SPECIFIC INSTRUCTIONS:**

- 7. Assume that all dollar amounts are in Singapore dollar (S\$) unless otherwise stated.
- 8. Unless specified otherwise, assume that all the reporting entities in all the questions adopt, for all the relevant years, the Singapore Financial Reporting Standards (International) (SFRS(I)) that were issued by the Accounting Standards Council as at 1 January 2024.
- 9. Present all Journal Entries in the following format:

DR Account Name xxx
CR Account Name xxx

(Narration or journal title)

Transaction date

### **IMPORTANT NOTICE:**

If you are not feeling well, please do not press "Start Assessment". If you have started and leave during the exam, you would be deemed to have attempted the paper.

## \*\*VERY IMPORTANT NOTICE\*\*

1

1. Your question paper is attached under the "Resource" tab found at the bottom right of EACH question.

### Other important information:

- 2. You will **only be allowed** to access the Excel function from your computer.
- You are <u>NOT ALLOWED</u> to access any websites or reference materials (except for your A4-sized double-sided cheat sheet) during the exam.
- 4. You are **NOT ALLOWED** to print the question paper.
- 5. Please take note that your screen will be monitored throughout the examination. If you are found to have accessed unauthorised materials or websites, or if you cheat or attempt to cheat, you will be liable to severe disciplinary action.

Should you encounter any issues during the exam, please call the following number:

+65 6028 9811

6. You do not need to fill in an answer to this instruction question.

# Question 1 – (a) and (b)

The following is the trial balance on 31 December 20x3 for Company Ant. This trial balance is prepared prior to adjustments based on additional information below.

Account	Debit	Credit
	S\$'000	S\$'000
Cash	850	
Accounts receivable	8,500	
Prepaid rent	1,200	
Inventory	12,500	
Marketable securities at FVPL (fair values	4,000	
recognised in profit/loss)		
Investment property	14,000	
Building	25,400	
Accumulated Depreciation – Building		8,000
Machinery	5,500	
Accumulated Depreciation – Machinery		1,000
Accounts payable		5,300
Allowance for uncollectible accounts		2,300
Salary payable		1,600
Bond payable		7,000
Tax payable		900
Deferred revenue		1,400
Share capital		30,000
Retained earnings		11,100
Sales		50,000
Purchases	40,000	
Salary expenses	4,400	
Other operating expenses (excluding salary	1,200	
expenses, interest expenses, depreciation		
expenses, impairment loss, bad debt expenses and		
tax expenses)		

Interest expenses	600	
Tax expense	250	
Other income		300
Dividend declared	500	
Total	<u>118,900</u>	<u>118,900</u>

### Additional information:

- 1. Prepaid rent on 31 December 20x3 was \$0.75 million.
- 2. Inventory on 31 December 20x3 was \$11.4 million before write-down. Inventory is accounted using the periodic method. Write-down was \$240,000.
- 3. Company Ant plans to sell marketable equity securities in 20x4. Fair values of the marketable equity securities on 31 December 20x3 were \$4.124 million.
- 4. Company Ant applies a fair value model on investment property and appraised the investment property fair value on 31 December 20x3 at \$14.87 million.
- 5. Company Ant applies a cost model on building and machinery held for business. The building cost was depreciated over 40 years on a straight-line basis with an expected residual value of \$400,000. Machinery was depreciated over 10 years on a straight-line basis with zero residual value.
- 6. On 31 December 20x3 afternoon, a fire broke out at the factory. Damages to the machinery were estimated to be \$380,000.
- 7. Allowance for uncollectible accounts was estimated to be \$2.42 million on 31 December 20x3.
- 8. Salary payable has not included \$70,000 owing to employees for work done from 15 December 20x3 to 31 December 20x3.
- 9. Bond payables with a coupon rate of 6% payable annually on 30 June are due on 30 June 20x4.
- 10. Deferred revenues on 31 December 20x3 are \$980,000.
- 11. An error in the trial balance was discovered on 15 January 20x4. Patent costs of \$230,000 were recognised erroneously as other operating expenses.

# e-Exam Question Number (a) Prepare Company Ant's income statement for the year ended 31 December 20x3. [You may present your answers in \$'000s] (14 marks) (b) Prepare Company Ant's statement of financial position (with classification into current and non-current assets and liabilities) as at 31 December 20x3. [You may present your answers in \$'000s] (16 marks) (Total: 30 marks)

### Question 2 – (a) to (e)

Company Bug (Bug) signed a contract with Customer C to renovate the latter's house. In addition to renovation, the contract requires Bug to paint the house and deliver furniture and furnishings such as curtains. Consideration for the contract is \$60,000. Bug charges customers \$4,000 for house painting and \$10,000 for the same furniture and furnishings on a standalone basis. Bug customised the renovation for Customer C hence there is no comparable pricing for the renovation.

On 1 October 20x3, Bug started the renovation work and Customer C paid Bug \$6,000. On 31 December 20x3, 60% of the renovation was completed and billed to Customer C, and Customer C paid Bug an amount of \$23,000. Bug completed the renovation on 15 March 20x4 and billed Customer C. Bug completed the house painting and billed Customer C on 31 March 20x4. Customer C settled the outstanding bill on 15 April 20x4. Bug delivered the furniture and furnishings and billed Customer C on 30 April 20x4.

e-Exam Question Number	Que	estion 2 required:
4	(a)	Identify the performance obligations in the contract between Bug and Customer C.  (3 marks)
5	(b)	Prepare the journal entries to record the transactions on 1 October 20x3, 31 December 20x3, 31 March 20x4, 15 April 20x4 and 30 April 20x4.  (7 marks)

### **Question 2 required:**

6

(c) Ignore part (b). Assume on 31 December 20x3, Bug agreed with Customer C to extend the scope of the renovation contract such that the completed scope is revised down from 60% to 40%. The additional consideration for the extended scope is \$7,000. Prepare the journal entries to recognise revenues on renovation work for 31 December 20x3 and 31 March 20x4.

(4 marks)

7

- (d) Ignore part (c). Assume on 31 December 20x3, the Chief Financial Officer (CFO) of Bug was instructed by the Chief Executive Officer (CEO) to recognise \$60,000 fully as revenues to beef up its revenues for the year 20x3. Although the CFO understands this is a violation of the revenue recognition standard, he felt intimidated by the aggressive CEO.
  - i. Explain the professional and ethical implications of this action.
  - ii. Recommend an appropriate course of action for the CFO.
  - **iii.** Assess the consequences of not complying with the standard.

(4 marks)

8

- (e) Ignore part (c). Assume that the CFO followed the instruction of the CEO in part (d). The auditor of Bug only discovered the error in 20x4 after the issuance of financial statements and raised the audit adjustment to correct the error in part (d).
  - **i.** Prepare the audit adjustment entry in 20x4.
  - ii. Outline the disclosures that Bug needs to make in relation to the error in **part (d)**.

(4 marks)

(Total: 22 marks)

### Question 3 – (a) to (d)

Company Cat (Cat) paid \$2 million purchase price and \$250,000 stamp duty to buy a piece of freehold land in country Paradise on 2 April 20x3. Cat paid \$100,000 to dismantle an old building and clear the land in May 20x3. Cat paid construction costs of \$1.3 million for the new building and completed the construction on 30 June 20x4. Freehold land and building is held for undetermined future use. The financial year end of Cat is 31 December.

On 1 July 20x4, Cat leased machinery with leased payments of \$10,000 due annually with the first payment on 30 June 20x5. The lease term is 4 years and the expected useful life of machinery is 10 years. In July 20x4, Cat paid legal costs of \$3,000 to get the lease agreement in place. The implicit interest rate in the lease is 6%. Cat's incremental borrowing rate is 5%.

On 1 July 20x4, Cat carried out an investment analysis to determine if the factory comprising freehold land and new building, and leased machinery mentioned above should be rented out or used for its own business. The investment analysis was completed on 1 January 20x5. Cat decided to use the factory and leased machinery for their own business and started production on 2 January 20x5.

The fair value of the factory (freehold land and building) was appraised at \$4.2 million with an allocation basis of 60% (land), and 40% (building) on 31 December 20x4.

All expenditures are paid in cash. Cat applied a cost model on property, plant, and equipment and a fair value model on investment property. The estimated useful life of building is 80 years on 1 January 20x5.

### **Question 3 required:**

9

(a) Record journal entries in relation to the transactions in April 20x3, May 20x3, June 20x4, July 20x4, December 20x4, June 20x5 and December 20x5.

(16 marks)

10

(b) On 1 April 20x3, Cat issued a five-year bond with a par value of \$2 million at price of \$2.05 million to fund the purchase of freehold land. The coupon rate of the bond is 5.8%, payable annually starting 31 March 20x4. The effective interest rate on bond is 5.225%.

Record journal entries on 1 April 20x3, 31 December 20x3 and 31 March 20x4 in relation to the bond transactions.

(6 marks)

### **Question 3 required:**

11

- (c) Assume on 31 December 20x5, an earthquake rocked country Paradise and severely damaged Cat's building and machinery. On 28 January 20x6, the selling price less disposal costs for the factory comprising building and machinery was estimated at \$600,000 while the value in use was estimated at \$500,000.
  - (i) Explain TWO specific indicators for assessment of impairment for the building and leased machinery and assess any going concern issue considering the factory comprises 80% of Cat's assets.
  - (ii) Assess whether the assessment is an adjusting event or non-adjusting event for 31 December 20x5 financial statements.
  - (iii) Assume carrying amounts of building and leased machinery as of 31 December 20x5 were \$1.6 million and \$30,000 respectively. Regardless of your answer in part (ii), determine what would have been the impairment for building and machinery individually.

(6 marks)

12

(d) Describe the measurement bases for property plant and equipment and bond liability presented on the statement of financial position.

(2 marks)

(Total: 30 marks)

### Question 4 - Part I and Part II

### Part I

Company Dog (Dog) runs a trading company that imports electrical appliances and computer equipment from China and the United States (US) for distribution to retailers in Singapore. Dog pays the suppliers in their local currencies and employees in Singapore dollars (SGD), Chinese Yuan (CNY) for imports from China, and US dollars (USD) for imports from the US. Dog sells the goods in Singapore and receives in SGD.

e-Exam Question Number	Que	estion 4 Part I required:
13	(a)	Explain the factors to consider in determining the functional currency of Dog, using supporting facts from the question, and state the functional currency of Dog.  (3 marks)

### Part II

Assume the functional currency of Dog is Singapore dollars (SGD). Dog purchased USD equity investment for USD 1,300,000 in cash on 1 December 20x3. The equity investment was classified at FVOCI (fair value changes recognised in other comprehensive income), with a fair value of USD 1,380,000 on 31 December 20x3.

Dog purchased goods from US suppliers costing USD 780,000 on credit evenly through the month of December 20x3. Purchases are recorded on a perpetual basis. On 1 December 20x3, Dog held inventory with a cost of USD 130,000 purchased on 25 November 20x3.

In December 20x3, Dog sold the opening inventory on 1 December 20x3 and 60% of its December 20x3 purchases through the month December 20x3. Dog sold all the above-mentioned inventory at SGD 710,000 on credit. Dog collected SGD 680,000 from customers and paid USD 630,000 to suppliers evenly through December 20x3. On 1 December 20x3, the USD accounts receivable and USD accounts payable balances were zero.

The foreign exchange rates are as follows:

	1 USD to SGD
25 November 20x3	1.3290
1 December 20x3	1.3368
31 December 20x3	1.3432
Average December 20x3	1.3406

Dog held cash balances of USD 2,700,000 on 1 December 20x3.

### **Question 4 Part II required:**

14

(a) Record journal entries for the month of December 20x3 in the functional currency of Company Dog. Journal entries for foreign exchange gains and losses on monetary assets and monetary liabilities should be recorded at month-end.

(15 marks)

(Total: 18 marks)

### **END OF PAPER**

# Appendix A - Common verbs used by the Examiners

Verb	Description
Assess	Make a judgment about the value, quality, outcomes, results, or size. Often there will be a qualifier in the instruction, which will tell you exactly what to <b>assess</b> . For instance, " <b>Assess</b> the <u>adequacy</u> of the disclosures in the financial statements relating to". Professional judgment and scepticism (a questioning mind) are called for when making an <b>assessment</b> . <b>Appraise</b> and <b>Assess</b> are interchangeable.
Describe	<b>Describe</b> requires you to provide the characteristics and features of an item or situation. For instance, " <b>Describe</b> the audit procedures to verify" requires you to <b>state</b> the specific audit procedure/s that you would use without going into step-by-step detail of how to perform that procedure.
Determine	Ascertain or <b>conclude</b> after <b>analysis</b> and <b>evaluation</b> the most appropriate course of action or most correct answer from a range of viable alternatives.
Explain	<b>Explain</b> requires you to write at least several sentences conveying how you have <b>analysed</b> the information in a way that a layperson can easily understand the concept or grasp the technical issue at hand.
Identify	Identify is similar to list, but requires you to also provide an explanation as to why the item that you have identified is relevant to the facts given in the question.  Often identify will require you to select a specific issue or issues, but not all issues, so you need to look out for any qualifying words. For instance, "Identify the Board Matters" is asking you to focus solely on issues that relate to Board Matters so if you digress and identify remuneration issues, you will not score well. Another example is "Identify the companies that qualify as members of the group for the purposes of group tax relief". In order to score well in this second example, you need to identify the companies and state why they are included in the group. You also need to state if a company is not included and why.
Outline	Outline requires you to provide a general overview of the situation and indicate the main features. Outline is used when the question is worth only a couple of marks, but a single sentence is usually never enough to achieve full marks.
Prepare / Present	<b>Prepare</b> (or <b>present</b> ) requires you to produce your answer using a specific format. For instance, " <b>Present</b> an extract of the notes to the accounts for" or " <b>Prepare</b> all the relevant journal entries for". Remember, a journal is only complete if it shows the date of the entry,

# Appendix A - Common verbs used by the Examiners

Verb	Description
	the correct accounts, the correct amounts, and has a description (narration) – easy marks are often thrown away through carelessness.
Recommend	Make a statement about the most appropriate course of action. If there is more than one possible course of action, <b>state</b> which action you would choose and why ( <b>justify</b> your choice). Your professional judgment and your ability to <b>interpret</b> the wider situation are critical to scoring well in these types of questions. Don't forget to think about the future and the past, not just the present when making a <b>recommendation</b> .
Record	<b>Record</b> is similar to <b>prepare</b> in that you may need to perform a calculation and show the specific components in an appropriate format.
State	State is similar to <b>list</b> , but the items require your professional judgement. For instance, " <b>State</b> any restrictions that apply". One of the easiest ways to make sure that you <b>state</b> comprehensively is to think, " <b>list</b> <u>and</u> <b>justify</b> ". You will note that <b>state</b> appears in many of the verb descriptions given.

# **Appendix B - Future Value and Present Value Tables**

P	resent v	alue inte	erest fac	tor of \$	l per pe	riod at i	% for n	periods	(T), PVIF	(i,n).
T	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
F	uture va	alue inte	rest fact	tor of \$1	per per	iod at i%	6 for n p	eriods (	T), FVIF	(i,n).
T	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.539	1.611
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358
Pre	sent valu	Present value interest factor of an (ordinary) annuity of \$1 per period (T) at i% for								
1	n periods (T), PVIFA(i,n).									
					-		-	per peri	od (1) a	t 1% tor
T	1%	2%	3%		-		-	per peri		10%
				n perio	ds (T), l	PVIFA(i,ı	n).			
T	1%	2%	3%	n perio	ods (T), I 5%	PVIFA(i,ı	n).	8%	9%	10%
<b>T</b>	1% 0.990	2% 0.980	3% 0.971	n perio 4% 0.962	ods (T), I 5% 0.952	<b>PVIFA(i,i</b> 6% 0.943	7% 0.935	8% 0.926	9% 0.917	10% 0.909
<b>T</b> 1 2	1% 0.990 1.970	2% 0.980 1.942	3% 0.971 1.913	n perio 4% 0.962 1.886	5% 0.952 1.859	PVIFA(i,i 6% 0.943 1.833	7% 0.935 1.808	8% 0.926 1.783	9% 0.917 1.759	10% 0.909 1.736
1 2 3	1% 0.990 1.970 2.941	2% 0.980 1.942 2.884	3% 0.971 1.913 2.829	9 4% 0.962 1.886 2.775	5% 0.952 1.859 2.723	6% 0.943 1.833 2.673	7% 0.935 1.808 2.624	8% 0.926 1.783 2.577	9% 0.917 1.759 2.531	10% 0.909 1.736 2.487
1 2 3 4	1% 0.990 1.970 2.941 3.902	2% 0.980 1.942 2.884 3.808	3% 0.971 1.913 2.829 3.717	962 1.886 2.775 3.630	5% 0.952 1.859 2.723 3.546	9VIFA(i,i 6% 0.943 1.833 2.673 3.465	7% 0.935 1.808 2.624 3.387	8% 0.926 1.783 2.577 3.312	9% 0.917 1.759 2.531 3.240	10% 0.909 1.736 2.487 3.170
T 1 2 3 4 5	1% 0.990 1.970 2.941 3.902 4.853	2% 0.980 1.942 2.884 3.808 4.713	3% 0.971 1.913 2.829 3.717 4.580	n period 4% 0.962 1.886 2.775 3.630 4.452	5% 0.952 1.859 2.723 3.546 4.329	PVIFA(i,1 6% 0.943 1.833 2.673 3.465 4.212	7% 0.935 1.808 2.624 3.387 4.100	8% 0.926 1.783 2.577 3.312 3.993	9% 0.917 1.759 2.531 3.240 3.890	10% 0.909 1.736 2.487 3.170 3.791
T 1 2 3 4 5 6	1% 0.990 1.970 2.941 3.902 4.853 5.795	2% 0.980 1.942 2.884 3.808 4.713 5.601	3% 0.971 1.913 2.829 3.717 4.580 5.417	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242	0.952 1.859 2.723 3.546 4.329 5.076	PVIFA(i,I 6% 0.943 1.833 2.673 3.465 4.212 4.917	7% 0.935 1.808 2.624 3.387 4.100 4.767	8% 0.926 1.783 2.577 3.312 3.993 4.623	9% 0.917 1.759 2.531 3.240 3.890 4.486	10% 0.909 1.736 2.487 3.170 3.791 4.355
T 1 2 3 4 5 6 7	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002	0.952 1.859 2.723 3.546 4.329 5.076 5.786	PVIFA(i,1 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868
T 1 2 3 4 5 6 7 8 9	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435	0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108	PVIFA(i,1 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759
T 1 2 3 4 5 6 7 8 9	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108	PVIFA(i,1 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759
T 1 2 3 4 5 6 7 8 9	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an o	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary a	PVIFA(i,i 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802 annuity VIFA(i,n	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515 of \$1 pe	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995  (T) at i%	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759
T 1 2 3 4 5 6 7 8 9	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786 st factor	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an operiod 4%	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary at the state of t	PVIFA(i,i 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802 vIFA(i,n) 6%	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515 of \$1 pe	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247  r period	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995  (T) at i%	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759
T 1 2 3 4 5 6 7 8 9	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566  ure valu  1% 1.000	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  3% 1.000	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an operiod 4% 1.000	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary a ds (T), F 5% 1.000	PVIFA(i,1 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802 VIFA(i,n) 6% 1.000	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe ). 7% 1.000	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247 r period  8% 1.000	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995  (T) at i%	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759
T 1 2 3 4 5 6 7 8 9  Fut  T 1 2	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu  1% 1.000 2.010	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere  2% 1.000 2.020	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  1.000 2.030	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 cof an operiod 4% 1.000 2.040	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary a ds (T), F 5% 1.000 2.050	PVIFA(i,i 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802 annuity VIFA(i,n) 6% 1.000 2.060	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe 1.000 2.070	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247 r period  8% 1.000 2.080	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995 (T) at i%	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n  10% 1.000 2.100
T 1 2 3 4 5 6 7 8 9  Fut  T 1 2 3	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu  1% 1.000 2.010 3.030	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere  2% 1.000 2.020 3.060	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  3% 1.000 2.030 3.091	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an operiod 4% 1.000 2.040 3.122	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary a ds (T), F 5% 1.000 2.050 3.153	PVIFA(i,i) 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802  annuity VIFA(i,n) 6% 1.000 2.060 3.184	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe 1.000 2.070 3.215	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247 r period  8% 1.000 2.080 3.246	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995 (T) at i% 9% 1.000 2.090 3.278	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n  10% 1.000 2.100 3.310
T 1 2 3 4 5 6 7 8 9 Fut T 1 2 3 4	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu  1% 1.000 2.010 3.030 4.060	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere  2% 1.000 2.020 3.060 4.122	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  3% 1.000 2.030 3.091 4.184	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an o period 1.000 2.040 3.122 4.246	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary at the second	PVIFA(i,i 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802 annuity VIFA(i,n) 6% 1.000 2.060 3.184 4.375	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe 1.000 2.070 3.215 4.440	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247 r period  8% 1.000 2.080 3.246 4.506	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995 (T) at i% 1.000 2.090 3.278 4.573	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n  10% 1.000 2.100 3.310 4.641
T 1 2 3 4 5 6 7 8 9  Fut 1 2 3 4 5	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566  ure valu  1% 1.000 2.010 3.030 4.060 5.101	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere  2% 1.000 2.020 3.060 4.122 5.204	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  3% 1.000 2.030 3.091 4.184 5.309	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an o period 4% 1.000 2.040 3.122 4.246 5.416	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary at the second	PVIFA(i,i 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802 VIFA(i,n) 6% 1.000 2.060 3.184 4.375 5.637	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe 1.000 2.070 3.215 4.440 5.751	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247  r period  8% 1.000 2.080 3.246 4.506 5.867	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995 (T) at i% 1.000 2.090 3.278 4.573 5.985	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n  10% 1.000 2.100 3.310 4.641 6.105
T 1 2 3 4 5 6 7 8 9  Fut  T 1 2 3 4 5 6	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu  1% 1.000 2.010 3.030 4.060 5.101 6.152	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere  2% 1.000 2.020 3.060 4.122 5.204 6.308	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  3% 1.000 2.030 3.091 4.184 5.309 6.468	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 cof an operiod 1.000 2.040 3.122 4.246 5.416 6.633	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary at 5% 1.000 2.050 3.153 4.310 5.526 6.802	PVIFA(i,i) 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802  PVIFA(i,i) 6% 1.000 2.060 3.184 4.375 5.637 6.975	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe 1.000 2.070 3.215 4.440 5.751 7.153	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247  r period  8% 1.000 2.080 3.246 4.506 5.867 7.336	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995 (T) at i% 1.000 2.090 3.278 4.573 5.985 7.523	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n  10% 1.000 2.100 3.310 4.641 6.105 7.716
T 1 2 3 4 5 6 7 8 9  Fut  1 2 3 4 5 6 7	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu  1% 1.000 2.010 3.030 4.060 5.101 6.152 7.214	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere  2% 1.000 2.020 3.060 4.122 5.204 6.308 7.434	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  3% 1.000 2.030 3.091 4.184 5.309 6.468 7.662	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an operiod 1.000 2.040 3.122 4.246 5.416 6.633 7.898	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary a ds (T), F  5% 1.000 2.050 3.153 4.310 5.526 6.802 8.142	PVIFA(i,i) 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802  annuity VIFA(i,n) 6% 1.000 2.060 3.184 4.375 5.637 6.975 8.394	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe 1.000 2.070 3.215 4.440 5.751 7.153 8.654	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247 r period  8% 1.000 2.080 3.246 4.506 5.867 7.336 8.923	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995 (T) at i% 1.000 2.090 3.278 4.573 5.985 7.523 9.200	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n  10% 1.000 2.100 3.310 4.641 6.105 7.716 9.487
T 1 2 3 4 5 6 7 8 9  Fut  T 1 2 3 4 5 6	1% 0.990 1.970 2.941 3.902 4.853 5.795 6.728 7.652 8.566 ure valu  1% 1.000 2.010 3.030 4.060 5.101 6.152	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e intere  2% 1.000 2.020 3.060 4.122 5.204 6.308	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786  st factor  3% 1.000 2.030 3.091 4.184 5.309 6.468	n period 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an operiod 1.000 2.040 3.122 4.246 5.416 6.633	5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108  rdinary at 5% 1.000 2.050 3.153 4.310 5.526 6.802	PVIFA(i,i) 6% 0.943 1.833 2.673 3.465 4.212 4.917 5.582 6.210 6.802  PVIFA(i,i) 6% 1.000 2.060 3.184 4.375 5.637 6.975	7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515  of \$1 pe 1.000 2.070 3.215 4.440 5.751 7.153	8% 0.926 1.783 2.577 3.312 3.993 4.623 5.206 5.747 6.247  r period  8% 1.000 2.080 3.246 4.506 5.867 7.336	9% 0.917 1.759 2.531 3.240 3.890 4.486 5.033 5.535 5.995 (T) at i% 1.000 2.090 3.278 4.573 5.985 7.523	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n  10% 1.000 2.100 3.310 4.641 6.105 7.716