



Singapore CA Qualification (Foundation) Examination 6 December 2023 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 **SIXTEEN (16)** 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. You are allowed to have only the following materials with you at your 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 ACRA's regulations. Please note that watches, mobile phones, tablets, and all other electronic devices **MUST NOT** be used during the examination.
- 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 2023.
- 9. Present all Journal Entries in the following format:

Transaction date	
DR Account Name	ххх
CR Account Name	ххх
(Narration or journal title)	

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.

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****VERY IMPORTANT NOTICE****

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.
- 3. 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 **<u>NOT ALLOWED</u>** 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 6865 9365

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

Question 1 – (a)

The CFO of Company Acai provided the following trial balance on 31 December 2023 for the purpose of preparing the statement of financial position and statement of comprehensive income. This trial balance is prepared prior to posting of adjusting entries and closing entries.

Account	Debit	Credit
	S\$'000	S\$'000
Cash	500	
Accounts receivable	18,500	
Dividend receivable	1,800	
FVOCI equity investment	15,700	
Inventory	35,500	
Prepaid expense	12,000	
Freehold Land	175,000	
Building	104,000	
Accumulated Depreciation – Building		26,000
Equipment	50,000	
Accumulated Depreciation – Equipment		15,000
Patent (net of accumulated amortisation)	8,000	
Accounts payable		7,800
Salary payable		3,600
Interest payable		1,000
Loan payable		62,000
Tax payable		24,000
Dividend payable		4,000
Share capital		100,000
Retained earnings		151,000
Fair value reserve		6,500
Sales		160,000
Purchases	110,000	
Salary expenses	12,400	

Other operating expenses (excluding salary	8,000	
expenses and depreciation expenses)		
Interest expenses	1,000	
Tax expense	3,800	
Dividend income		2,300
Dividend declared	7,000	
Total	<u>563,200</u>	<u>563,200</u>

Additional information:

- Company Acai carried out an inventory stocktake on 31 December 2023 and determined the inventory at \$33.4 million. Inventory is accounted using the periodic method. Assume there is no impairment loss.
- 2. There are no purchases and sales of FVOCI equity investment during the year 2023. FVOCI equity investment was held for long-term strategic purpose. Fair value of the FVOCI equity investment on 31 December 2023 was \$16.8 million. Dividend receivable was zero on 1 January 2023. Ignore tax effects on fair value changes in FVOCI equity investment.
- Prepaid expense consisted of 12-month prepaid rent (\$9 million) paid on 1 October 2023 and 12-month prepaid insurance (\$3 million) paid on 1 August 2023. Adjusting entries have not been made for the prepaid expense. Prepaid expenses are classified as 'Other Operating Expenses'.
- 4. Freehold land, building, equipment and patent are measured at cost. Depreciation and amortization for the year 2023 had not been adjusted on the trial balance. Average remaining useful lives of building, equipment and patent are 37.5 years, 7 years, and 4 years respectively as at 31 December 2023. Straight-line depreciation policy is applied.
- 5. Salary payable, interest payable, tax payable and dividend payable on 1 January 2023 had been settled. The salary expense for the period 15 December 2023 to

31 December 2023 amounting \$1.1 million had not been accrued. Interest expense on the loan payable amounting to \$0.5 million had not been accrued on 31 December 2023. \$10 million of the loan payable is due on 31 December 2024.

e-Exam Question Number	Que	estion 1 required:
2	(a)	Prepare Company Acai's statement of comprehensive income and statement of financial position (with classification into current and non-current assets and liabilities) for the year ending 31 December 2023. (28 marks) (Total: 28 marks)

Question 2 – Part I and Part II

Part I

Company Pear provides a variety of telecommunication services as follows:

Item	Products/services	Price
Α	No contract, 75GB data, 100 minutes voice call, 100	\$45 per month
	SMS per month prepaid at start of month	
В	Selected mobile phone brand X paid on delivery;	\$900
	delivery on transaction date	
С	1-year contract, 75GB data, 100 minutes voice call, 100	\$34 per month
	SMS per month, paid at end of month	
D	1-year contract, 75GB, 100 minutes voice call, 100 SMS	\$110 per month
	per month, selected mobile phone brand X delivery on	
	transaction date; paid at end of month	
Е	Buy now, pay at the end of two years (deferred payment	\$1,120
	scheme) for mobile phone brand X delivery on	
	transaction date	

On 1 December 2023, Company Pear sold item A to 300 customers, item B to 500 customers, item C to 800 customers, item D to 1,000 customers and item E to 100 customers. Each customer purchased one unit of product. 1 December 2023 is the transaction date.

The financial year end of Company Pear is 31 December. Ignore tax effects.

Where the contract is only one-year, the simplified straight-line method (instead of effective interest method) can be used to recognise interest revenue. The effective

interest method needs to be applied for two-year contracts (derive effective interest with 4 decimal places).

e-Exam Question Number	Que	estion 2 Part I required:	
	(a)	Prepare journal entries in relation to the above transactions for December 2023. (15 marks)	

Part II

Company Pear assessed that the impairment of its mobile phone handset inventory is \$100,000 on 31 December 2023.

Company Pear provides 15 days annual paid leave. The annual paid leave can be carried forward to the following year only. Unused leave will be forfeited at the end of the following year. 340 employees of Company Pear have an average of 12 days unused paid leave on 31 December 2023 that are to be carried forward to 2024. It was estimated that 20% of the employees would not utilise their carried forward leave in 2024. Average daily salary of the 340 employees was \$250.

Company Pear's data services were constantly interrupted due to server overload when most customers were working from home during the COVID lockdown period. Company Pear sent messages before 31 December 2023 to inform all affected customers of compensation that amounted to \$45,000 in total. It was also possible that the regulator would impose penalty on Company Pear, but the penalty could not be estimated reliably.

e-Exam Question 2 Part II required:

Question Number

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(a) Explain any two specific indicators for assessment of impairment for the handset inventory and state the journal entry to record the impairment on 31 December 2023.

(4 marks)

(b) Record the journal entries (if any) in relation to the accumulating leave balances that are carried forward to the following year and data service interruption costs. Provide a disclosure (if any) for these events.
 (6 marks) (Total: 25 marks)

Question 3 – Part I and Part II

Part I

Company Orange is a shipping company. It faces competition from shipping companies globally. Its revenues are derived from freight charges denominated in US dollars (USD), which is the main currency used for transactions in the shipping industry. Its costs are mainly paid in Singapore dollars (SGD).

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

Part II

Assume the functional currency of Company Grape is Singapore dollars (SGD). Company Grape purchased a US dollar (USD) investment property for USD 10,800,000 in cash on 1 December 2023. The fair value of the investment property was USD 11,000,000 on 31 December 2023.

On 1 December 2023, Company Grape collected from its tenants USD 100,000, consisting of rental for December 2023 and refundable deposit. The refundable deposit is based on one-month rental. Company Grape paid maintenance expenses of USD 20,000 on 1 December 2023 and on 31 December 2023 accrued for USD 40,000 incurred evenly in the month December 2023.

On 1 December 2023, Company Grape obtained a bank loan of USD 10,000,000 to finance the purchase of its investment property. The coupon rate of the bank loan was 7.5% per annum payable yearly.

Company Grape held inventory with cost of USD 3,100,000 on 1 December 2023 and purchased inventory of USD 300,000 in cash on 31 December 2023. There were no sales of inventory in December 2023. The net realisable value of the inventory on 31 December 2023 was USD 3,350,000.

The foreign exchange rates are as follows:

	1 USD to SGD
1 December 2023	1.3468
31 December 2023	1.3522
Average December 2023	1.3506

Company Grape held cash balances of USD 2,000,000 on 1 December 2023.

Question 3 Part II required:

e-Exam Question Number

- 7
- (a) Record journal entries for the month of December 2023 in the functional currency of Company Grape. Journal entries for foreign exchange gains and losses on monetary assets and monetary liabilities should be recorded at month end.

(28 marks) (Total: 31 marks)

Question 4 – Part I and Part II

Part I

The new general manager wants to understand the work of finance function. She asked you the following questions. As you are the company accountant, prepare suitable responses for these questions.

e-Exam Question Number	Que	estion 4 Part I required:
8	(a)	What is the primary purpose of preparing financial statements? (2 marks)
9	(b)	What are the characteristics of a "high-quality" financial statement? Is cost a consideration in preparing the financial statements? (4 marks)
10	(c)	What are the different measurement bases of assets, primarily inventory, property plant and equipment (PPE) and investment property? (5 marks)
11	(d)	What are the different measurement bases for liabilities, primarily financial liabilities? (2 marks)

Part II

The general manager asked you to book as current year revenues the goods that were delivered to customers after the financial year end. These goods were still held in the company warehouse on financial year end. Legal titles over the goods are transferred only upon delivery. She reasoned that the goods would be delivered soon, and it is more efficient to record the revenues before delivery to facilitate preparation of financial statements. She was angry and threatened to fire you when you explained that it is not appropriate to book the revenues before completing the performance obligation, which is delivery of goods.

Question 4 Part II required:

Question Number

e-Exam

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(a) Assess the ethical dilemma position you face arising from the instruction by the general manager. Recommend an appropriate course of action in the face of the ethical dilemma. Explain the potential consequences of not upholding ethical principles.

(3 marks) (Total: 16 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 assess . For instance, " Assess 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 assessment . Appraise and Assess are interchangeable.
Explain	Explain requires you to write at least several sentences conveying how you have analysed the information in a way that a layperson can easily understand the concept or grasp the technical issue at hand.
Prepare / Present	Prepare (or present) requires you to produce your answer using a specific format. For instance, " Present an extract of the notes to the accounts for" or " Prepare all the relevant journal entries for". Remember, a journal is only complete if it shows the date of the entry, the correct accounts, the correct amounts, and has a description (narration) – easy marks are often thrown away through carelessness.
Record	Record is similar to prepare in that you may need to perform a calculation and show the specific components in an appropriate format.
State	State is similar to list , but the items require your professional judgement. For instance, " State any restrictions that apply". One of the easiest ways to make sure that you state comprehensively is to think, " list and justify ". You will note that state appears in many of the verb descriptions given.

Appendix B - Future Value and Present Value Tables

	resent v	alue inte	erest fac	tor of \$	1 per pe	riod at i	% for n p	periods	(T), PVIF	(i,n).
Т	1%	2%	3%	4%	5%		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	lue inte	rest fac	tor of \$1	per per	iod at i%	∕₀ for n p	eriods (T), FVIF	(i,n).
Т	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	ue intere	est facto		-		ty of \$1	per peri	od (T) a	t i% for
				n peric	ods (T),	PVIFA(i,	n).			
Pre T	1%	ue intere	3%		-	PVIFA(i,	-	per peri 8%	od (T) at 9%	t i% for 10%
	1% 0.990	2% 0.980	3% 0.971	n perio 4% 0.962	ods (T), 5% 0.952	PVIFA(i, 6% 0.943	n). 7% 0.935			10% 0.909
T 1 2	1%	2% 0.980 1.942	3% 0.971 1.913	n perio 4%	ods (T), 5% 0.952 1.859	PVIFA(i,i 6% 0.943 1.833	n). 7% 0.935 1.808	8%	9%	10%
T 1 2 3	1% 0.990 1.970 2.941	2% 0.980 1.942 2.884	3% 0.971 1.913 2.829	n perio 4% 0.962 1.886 2.775	ods (T), 5% 0.952 1.859 2.723	PVIFA(i,i 6% 0.943 1.833 2.673	n). 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
T 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	n perio 4% 0.962 1.886 2.775 3.630	ods (T), 5% 0.952 1.859 2.723 3.546	PVIFA(i,i 6% 0.943 1.833 2.673 3.465	n). 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
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T 1 2 3 4 5 6 7 8 9 Fut	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 perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 of an o period	ods (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary ds (T), F	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	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 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 % for n
T 1 2 3 4 5 6 7 8 9 9 Fut	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 interes 2%	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786 st factor	n perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 r of an o period	ods (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary ds (T), F 5%	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%	n). 7% 0.935 1.808 2.624 3.387 4.100 4.767 5.389 5.971 6.515 of \$1 pe). 7%	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 % for n
T 1 2 3 4 5 6 7 8 9 Fut T 1	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 2% 1.000	3% 0.971 1.913 2.829 3.717 4.580 5.417 6.230 7.020 7.786 st facto 3% 1.000	n perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 c of an o period 4% 1.000	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary ds (T), F 5% 1.000	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	n). 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% 9% 1.000	10% 0.909 1.736 2.487 3.170 3.791 4.355 4.868 5.335 5.759 6 for n
T 1 2 3 4 5 6 7 8 9 Fut 1 2	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 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 facto 3% 1.000 2.030	n perio 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	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary 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	n). 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 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 % 9% 1.000 2.090	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 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 perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.445 7.445 7.445 7.445 7.445 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.57.5 7.57.5 7.57.57.57.57.57.57.57.5	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary 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	n). 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 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 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 perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.5 7.57.5 7.5 7.57.5 7.57.5 7.57.57.57.57.57.57.57.5	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary ds (T), F 5% 1.000 2.050 3.153 4.310	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	n). 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 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 % (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 % for n 10% 1.000 2.100 3.310 4.641
T 1 2 3 4 5 6 7 8 9 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 	2% 0.980 1.942 2.884 3.808 4.713 5.601 6.472 7.325 8.162 e interes 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 facto 3% 1.000 2.030 3.091 4.184 5.309	n perio 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	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary ds (T), F 5% 1.000 2.050 3.153 4.310 5.526	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	n). 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 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 % 9% 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 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 2.010 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 facto 3% 1.000 2.030 3.091 4.184 5.309 6.468	n perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.445 7.446 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary ds (T), F 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 annuity VIFA(i,n 6% 1.000 2.060 3.184 4.375 5.637 6.975	n). 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 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 i9 9% 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 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 5.417 6.230 7.020 7.786 5.417 6.230 7.020 7.786 5.417 6.230 3.091 4.184 5.309 6.468 7.662	n perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.898	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary 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	n). 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 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 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.247 f.268 f.246 f.246 f.247 f.268 f.246 f.246 f.247 f.268 f.246 f.246 f.247 f.268 f.246 f.246 f.247 f.268 f.246 f.246 f.246 f.247 f.268 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.246 f.366 f.3667 f.336 f.3246 f.326 f.336 f.326 f.336 f.3226 f.336 f.3223	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 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 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 2.010 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 facto 3% 1.000 2.030 3.091 4.184 5.309 6.468	n perio 4% 0.962 1.886 2.775 3.630 4.452 5.242 6.002 6.733 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.435 7.446 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416 7.416	bds (T), 5% 0.952 1.859 2.723 3.546 4.329 5.076 5.786 6.463 7.108 rdinary ds (T), F 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 annuity VIFA(i,n 6% 1.000 2.060 3.184 4.375 5.637 6.975	n). 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 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 i9 9% 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