

LCCI Level 3 in Advanced Business Calculations February 2025

Qu 1	MCQ The sum of £2000 is invested in a savings account at 10% compound interest. By how much will the initial investment have grown after nine years?	
A	£2715.90	✓
B	£4715.90	
C	£1800.00	
D	£3800.00	

Qu 2	INSERT VALUE Majid has the sum of \$4500 to invest in an account earning 4% interest. How much more will Majid receive if the interest is compounded, rather than simple interest? (Give your answer to the nearest dollar.)	
A	\$44	

Qu 3	INSERT VALUE Launa buys a musical instrument on hire purchase. The normal selling price of the instrument is £600 but Launa pays a deposit of £120 and is charged 15% per annum simple interest on the balance, which pays in 24 monthly instalments. Calculate the amount of each instalment.	
A	£26	

Qu 4	<p>MCQ</p> <p>Anna deposits \$1,500 in a bank account for 94 days at 3.5% per annum simple interest.</p> <p>How much interest will she earn?</p>	
A	\$13.52	✓
B	\$52.50	
C	\$15.26	
D	\$46.88	

Qu 5	<p>MCQ</p> <p>A small business borrows \$85000 at a fixed rate of interest of 4.25% per annum, to be repaid in a single full repayment after 25 years.</p> <p>What sum will need to be paid as a final repayment?</p>	
A	\$240613.79	✓
B	\$238772.26	
C	\$232688.47	
D	\$236426.84	

Qu 6	<p>MCQ</p> <p>Imma invests \$9500 for seven years.</p> <p>What is the rate of compound interest that will result in total interest of \$3690.24 over this period?</p>	
A	4.8%	✓
B	6.3%	
C	4.5%	
D	5.4%	

Qu 7	INSERT VALUE The total costs of manufacture of a product are £480,000, of which 45% are variable. If the total production of this product is 250,000 units, what is the variable cost per item?	
A	86.4p	✓

Qu 8	MCQ A business manufactures a product that has fixed costs of £2000000 and variable costs of 50p per item. The product is sold at a price of £1 per item. What is the breakeven sales volume?	
A	4000000	✓
B	3600000	
C	3950000	
D	8050000	

Qu 9	INSERT VALUE A company produces a model of washing machine. The fixed costs of production are £30,500 and the variable costs are £335 per unit. Calculate the selling price if the breakeven sales level is found to be 1,220 units.	
A	£360.00	✓

Qu 10	MCQ Given the following information, calculate the	
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	gross profit as a percentage of the net turnover.															
	<table><tr><td></td><td>£</td></tr><tr><td>Stock at start of year</td><td>9000</td></tr><tr><td>Stock at end of year</td><td>7000</td></tr><tr><td>Annual purchases</td><td>57000</td></tr><tr><td>Purchase returns</td><td>6800</td></tr><tr><td>Annual sales</td><td>82000</td></tr><tr><td>Sales returns</td><td>5600</td></tr></table>		£	Stock at start of year	9000	Stock at end of year	7000	Annual purchases	57000	Purchase returns	6800	Annual sales	82000	Sales returns	5600	
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Sales returns	5600															
A	31.7%	✓														
B	65.7%															
C	68.3%															
D	42.5%															

Qu 11

INSERT VALUE

The following information has been taken from the balance sheet of a small business.

Financed by	£	£
Capital	90000	
Add net profit	16270	
Less drawings	(10750)	95520

Calculate the return on capital employed.

(Give your answer to one decimal place.)

A	17.5%	
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Qu 12	<p>INSERT VALUE</p> <p>An asset that initially cost \$25000 is depreciated by an amount of \$4200 per year.</p> <p>What will be the residual value of the asset after its working life of 5 years is finished?</p>	
A	\$4000	✓

Qu 13	<p>MCQ</p> <p>A factory production machine cost \$75000 and is expected to depreciate at a constant rate of 27% per annum.</p> <p>What will be the annual depreciation for Year 4?</p>	
A	\$7877.59	✓
B	\$53701.32	
C	\$21298.68	
D	\$5750.64	

Qu 14	<p>MCQ</p> <p>A commercial printer is purchased for £24000. It is estimated to have a working life of 7 years and a residual value of £3000.</p> <p>Calculate the constant annual rate of depreciation.</p>	
A	26%	✓
B	28%	
C	30%	
D	32%	

Qu 15	INSERT VALUE	
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	<p>A motor vehicle that cost \$45000 is depreciated at a constant rate of 27% of its value each year,</p> <p>Calculate the book value at the end of eight years' use.</p> <p>(Give your answer correct to the nearest dollar.)</p>	
A	\$3629	

Qu 16	MCQ	
	Hubert invests £520000 in an investment project, with the expected returns shown below.	
	Year 1	£40000
	Year 2	£140000
	Year 3	£220000
	Year 4	£240000
	What will be the expected payback period?	
A	3 years 6 months	✓
B	3 years 5 months	
C	4 years 0 months	
D	4 years 2 months	

Qu 17	<p>MCQ</p> <p>An investment of \$50000 is expected to provide the annual returns shown in the table.</p> <table><tr><td></td><td>Return</td></tr><tr><td>Year 1</td><td>\$10000</td></tr><tr><td>Year 2</td><td>\$20000</td></tr><tr><td>Year 3</td><td>\$30000</td></tr></table> <p>Calculate the average rate of return (ARR).</p>			Return	Year 1	\$10000	Year 2	\$20000	Year 3	\$30000
	Return									
Year 1	\$10000									
Year 2	\$20000									
Year 3	\$30000									
A	40%	✓								
B	50%									

C	60%	
D	30%	

Qu 18	MCQ	
	A business receives £15000 each year from a project.	
	Using a discount factor of 12% and the discount factors indicated, calculate the net present value of the total return for the first three years.	
	Year	Discount factors using 12%
	1	0.893
	2	0.797
	3	0.712
A	£36030	✓
B	£34864	
C	£38320	
D	£39476	

Qu 19	<p>INSERT VALUE</p> <p>The following data shows an index of production of computers in a certain country over a period of six years.</p> <table border="1"> <tr> <th>Year</th><th>2019</th><th>2020</th><th>2021</th><th>2022</th><th>2023</th><th>2024</th></tr> <tr> <th>Index</th><td>274.1</td><td>271.2</td><td>272.0</td><td>273.7</td><td>278.3</td><td>285.4</td></tr> </table> <p>Calculate the index for 2024, with 2023 as the base year.</p> <p>(Give your answer to one decimal place.)</p>						Year	2019	2020	2021	2022	2023	2024	Index	274.1	271.2	272.0	273.7	278.3	285.4
Year	2019	2020	2021	2022	2023	2024														
Index	274.1	271.2	272.0	273.7	278.3	285.4														
A	102.6					✓														

Qu 20	<p>INSERT VALUE</p> <p>The index for the prices for food items is 150, compared to a given base year. The index for drinks is 190, compared to the same base year.</p> <p>Using a weighting of 75 for food items and 25 for drinks, calculate the composite index for food items and drinks.</p> <p>(Give your answer as a whole number.)</p>	
A	160	✓

Qu 21	<p>DROP DOWN</p> <p>The original sum invested or borrowed is called the (principle). The written instruction to pay a certain sum to a specified person on a certain date is know as the (bill of exchange).</p>	
A	<p>principle</p> <p>total, capital, proposition</p>	✓
B	<p>bill of exchange</p> <p>invoice, credit note, cheque</p>	
Qu 22	<p>MCQ</p> <p>Which of the following is the correct formula for calculating compound interest?</p>	
A	$I = P (R / 100)^T$	✓
B	$I = PRT / 100$	
C	$I = R (P / 100)^T$	
D	$I = PR / 100T$	

Qu 23	<p>DROP DOWN</p> <p>The acid test ratio compares (liquid) assets with current (liabilities).</p>	
A	liquid	✓

	current, non-current, fixed	
B	liabilities assets, profit, income	✓

Qu 24	<p>True or False</p> <p>a) A borrowing ration of 0.42 means that 58% of a company's capital is provided by the proprietor, whilst 42% of its revenue is provided by sales.</p> <p>b) A borrowing ration of 0.42 means that 58% of a company's capital is provided by the proprietor, whilst 42% of its capital is provided by investors.</p>	
A	False	✓
B	True	

Qu 25	<p>DROP DOWN</p> <p>The depreciation schedule is a schedule showing for each year the depreciation of an asset for that year, the (cumulative) depreciation to date, and the (book) value at the end of they year.</p>	
A	cumulative annual, total, calculated	
B	book estimated, indicated, forecasted	

Qu 26	<p>MRQ</p> <p>There are two main methods used for</p>	
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	determining depreciation. What are they?	
A	The equal instalment methods	✓
B	The diminishing balance method	✓
C	The working asset model	
D	The asset distribution model	

Qu 27	MCQ Which of the following is the correct formula for calculating the depreciation by a constant rate of depreciation (d) over a given time period (t)?	
A	$(1 - d)^t = \text{Residual value} / \text{original cost}$	✓
B	$(1 - t)^d = \text{Residual value} / \text{original cost}$	
C	$(1 + d)^t = \text{Residual value} / \text{original cost}$	
D	$(1 + t)^d = \text{Residual value} / \text{original cost}$	

Qu 28	True or False a) The average rate of return is calculated by the original investment divided by the average return over the duration of the investment. b) The net present value method uses discounting factors that increase with time.	
A	False	✓
B	False	✓

Qu 29	MCQ The internal rate of return is the discounting factor that give which of the following values for	
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	net present value?	
A	0	✓
B	1	
C	Maximum	
D	Minimum	

Qu 30	DROP DOWN A weighted index is a composite index in which each separate index number is (multiplied by) a number called a weighting that reflects its importance in the composite index.	
A	multiplied by	✓
B	divide by	
C	added to	
D	subtracted from	