



Singapore CA Qualification (Foundation) Examination

4 December 2023

Financial Management

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 **TWENTY-TWO (22)** 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 smart 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.

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. 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 **NOT ALLOWED** 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 6865 9365

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

Question 1 – (a), (b) and (c)

It is currently 1 January 20x9.

Reef Northern Lighting (RNL) designs and manufactures novel, bespoke designer LED lighting solutions. RNL is looking to develop a new range of ‘wallpaper lighting’ – essentially wallpaper with micro-LEDs embedded that enables the homeowner to change the colour of the wallpaper, and to light the room at the same time. The Finance Director is preparing an appraisal of the new investment.

RNL is a small, listed company, financed with a mixture of debt and equity. Extracts from the latest financial statements are as follows:

Statement of financial position extract as at 31 December 20x8:

	\$'000
\$0.10 ordinary shares	20,000
Retained earnings	<u>4,320</u>
Total equity	<u>24,320</u>
9.639% redeemable debentures	<u>100,000</u>
Total capital employed	<u>124,320</u>

Dividends in recent years have been as follows:

Cash paid on 31 December each year:

	20x3	20x4	20x5	20x6	20x7	20x8
Dividend paid (cents per share)	14.9	16	9 (Note 1)	5 (Note 2)	5.5	6

Note 1: During 20x5 there was a stock split to rationalise the share price. Shares were gathered in and cancelled, with 2 new \$0.10 shares issued to replace each historical \$0.20 ordinary share.

Note 2: In the middle of 20x6 there was a scrip issue of shares issued in lieu of an interim dividend. The terms of the issue was one new share for every share in issue.

The Finance Director expects the average annual growth rate in dividends achieved over the period 31 December 20x3 to 31 December 20x8 to continue into the future. The current ex-div share price is \$0.80 per share.

The 9.639% redeemable debentures were issued on 31 December 20x3. They have a 10-year term, redeemable at a 10% premium. They are currently trading for \$118 cum-interest per \$100 nominal. The applicable rate of corporate tax is 17%.

The Finance Director is considering issuing shares to finance the new project and is considering whether the current share price truly reflects the value of RNL as a basis for pricing the new issue. He is unsure of this because, despite there being rumours of the new product in the press, when the idea was formally announced, there was no noticeable change in share price.

**e-Exam
Question
Number**

Question 1 required:

2

(a) Calculate:

(i) The cost and market value of equity;

(7 marks)

(ii) The cost and market value of debt (ex-interest); and

(6 marks)

(iii) The weighted average cost of capital (WACC).

(2 marks)

3

(b) Evaluate if the lack of a noticeable share price reaction to the formal announcement of the new product launch is consistent with the following theories of capital markets efficiency, **AND** whether the current price is likely to reflect the true value of the RNL business:

(i) Weak form efficient;

(2 marks)

(ii) Semi-strong form efficient; and

(2 marks)

(iii) Strong-form efficient.

(2 marks)

**e-Exam
Question
Number**

4

Question 1 required:

- (c) Explain TWO examples of behavioural finance which demonstrate that investors are not entirely rational. Note: You should explain the implications for the share price of the examples you provide.

(4 marks)

(Total: 25 marks)

Question 2 – (a), (b), (c) and (d)

Outer Isles Shoreworks (OIS) provides several services, usually to local government, relating to seashore management. This might include building and maintaining seafront walkways and quays and cleaning beaches in tourist areas.

OIS is considering moving into erosion management. This service would involve moving sand dunes, underpinning them with a wall of rocks and then replacing the sand dunes on top of the rocks. Early trials have been very successful with subsequent tidal erosion dramatically reducing or even stopping altogether. OIS would need to obtain large excavators to move the sand and rocks. These cost \$230,000 each to buy, and 5 excavators would be required. They would be purchased on day 1 of a tax year, each excavator has a scrap value of \$23,000 in year 5 prices at the end of the fifth year and will be eligible for 75% writing down allowances in year 1, and 25% in year 2. Any difference between tax written-down value and scrap proceeds is treated as a balancing allowance/balancing charge.

The new service would be chargeable per tonne. Demand is expected to be as follows:

	Year 1	Year 2	Year 3	Year 4	Year 5
Demand – thousands of tonnes	20	50	80	100	100

The price charged will initially be \$25 per tonne during year 1, increasing at a rate of 8% inflation each subsequent year. Operating costs (excluding spare parts – see below) are expected to be \$10 per tonne in year 1, expected to increase by 5% in each subsequent year.

Spare parts are to be sourced from the USA. It is estimated that US\$10,000 in money terms per excavator will be needed at the end of year 1, increasing by US\$2,500 per excavator in money terms each year. The current exchange rate is 0.74 US\$ per S\$1. Annual general inflation for the foreseeable future is expected to be 8% in Singapore and 3% in the US. These spare parts are a maintenance item and are expensed as incurred for accounting and tax purposes.

Corporate tax is payable at a rate of 17%.

The weighted average cost of capital for OIS is 10% per annum.

**e-Exam
Question
Number**

Question 2 required:

- | | |
|----------|--|
| 5 | (a) Estimate the US dollar to Singapore dollar exchange rates for the end of <u>each</u> year for the 5 years of the project using purchasing power parity. Present your answer to 4 decimal places. (5 marks) |
| 6 | (b) Calculate the amount and timing of nominal (or money) cashflows in Singapore dollars. (14 marks) |
| 7 | (c) Calculate the Net Present Value in Singapore dollars of the project. (2 marks) |

As an alternative to buying the excavators (financed with a 5% (post-tax) loan), they could be leased on a 5-year term, at a cost of \$60,000 per excavator per year in advance in money terms. With the lease, OIS would not benefit from writing down allowances but would save from not having to pay for the spare parts.

**e-Exam
Question
Number**

8

Question 2 required:

(d) Calculate the **impact** of the Net Present Value of the project if OIS chose to lease rather than buy the excavators.

(4 marks)

(Total: 25 marks)

Question 3 – (a), (b) and (c)

Acquire and Grow Ltd (AAG) is a listed retail group and holds a portfolio of brands.

The group owns several high-street chains and some online retailers. The shareholders are keen to expand, and the Finance Director of AAG has identified a suitable target, Profcook, an unlisted, family-owned company that sells high-quality cookware on the high street. It owns a chain of 30 shops.

The latest set of financial statements shows a profit after dividends of \$2,500,000. Dividends paid in that year were \$1,000,000. The Finance Director has also noticed the following in the financial statements:

- Directors' remuneration was only \$100,000 in the year, when a more typical level would be \$800,000.
- The results include the write-off of an unrecovered debt of \$250,000, which was related to their largest customer who unfortunately went into liquidation. This customer gave Profcook 25% of their annual revenues and 20% of their annual profit in the last year.

'Geoff the Chef' is a listed business that is a similar business to Profcook in every other way and has a price-earnings ratio of 15 times. Being listed accounts for 1/3 of this price-earnings ratio.

Ignore taxation.

**e-Exam
Question
Number**

9

Question 3 required:

- (a) Calculate a suitable valuation for Profcook, justifying your answer. **(7 marks)**

Following the acquisition of Profcook, the shareholders of AAG have approved an investment fund of \$145m to acquire further small businesses. The Finance Director has researched various listed high-street chains available that he believes would be suitable to add to the portfolio as he believed AAG can add value to the acquisitions:

Chain	Price \$'m	Net present value of future income stream \$'m
A	50	10
B	25	6
C	60	15
D	40	5
E	20	3

The investment opportunities are divisible – so a fraction of the investment can be purchased, and that same fraction of the Net Present Value would be earned.

**e-Exam
Question
Number**

10

Question 3 required:

- (b) Advise on a suitable investment plan and the resulting total value created, showing supporting calculations.

(6 marks)

At a recent meeting with the key shareholders, one large institutional investor questioned the current growth strategy. 'Anyone can grow revenues and profits by simply buying up businesses. We need to build them from nothing ourselves to create any real value. That's the only way we get to keep all the value ourselves without having to buy it from someone else.'

**e-Exam
Question
Number**

11

Question 3 required:

- (c)** Give TWO advantages and TWO disadvantages of growing by acquisition as opposed to growing internally (also known as organically). Note: You are required to provide supporting explanations for each advantage and disadvantage.

(12 marks)

(Total: 25 marks)

Question 4 – (a), (b), (c) and (d)

Pelynjaplayz (PLP) is a children's toy manufacturer. The Finance Director is reviewing working capital management performance as she is concerned that it is straining cash resources. The Finance Director has gathered the following data:

- Revenue is \$50m in 20x5 (\$40m in 20x4), of which 80% is on credit in both years.
- Gross profit margin is 25% of revenue in both years.
- Extract from the management accounts:

	31 Dec 20x4	31 Dec 20x5
Receivables	\$5m	\$7m
Payables	\$3m	\$1m
Inventory	\$4m	\$6m

Assume 365 days in a year.

e-Exam Question Number

Question 4 required:

12

- (a) Calculate the receivables days, payables days, inventory days, and the length of the working capital cycle at 31 December 20x4 and 31 December 20x5.

(9 marks)

13

- (b) Advise TWO actions that could be used to reduce the length of the working capital cycle.

(4 marks)

The Finance Director is reviewing working capital to ensure sufficient cash is available to finance a new business venture that has just been launched – Robospinner – a new generation of smart toys. The business plan highlights the need for significant research and development for the first year of operation. The subsidiary will need \$30m of cash, to be spent evenly over the first year. The Finance Director is planning for how often to sell investments to create the required cash, and how much cash to transfer each time to the subsidiary. There is a fixed charge each time of \$10,500 for selling investments. The investments earn PLP an annual return of 10%, compared to the 3% annual interest that cash earns in the bank.

Assume 365 days a year.

**e-Exam
Question
Number**

14

Question 4 required:

- (c) Using the Baumol model, calculate the value of investments that should be sold each time and transferred to the new venture, and how often (in days) a sale of investments should happen. **(6 marks)**

At a recent Board Meeting where working capital management was discussed, the Operations Director commented – ‘Working capital is just money tied up for no reason, and not earning us a return. We should just get rid of it!’

**e-Exam
Question
Number**

15

Question 4 required:

- (d) Explain THREE reasons why PLP needs to have working capital in order to operate successfully as a business.

(6 marks)

(Total: 25 marks)

END OF PAPER

Appendix A – Formulae and Present Value Tables

Financial ratios

Current ratio	= Current assets / Current liabilities
Net working capital	= Current assets - Current liabilities
Return on total assets	= Net income / Average total assets
Return on equity	= Net income / Average shareholders' equity
Receivables days	= (Accounts receivable balance / annual credit sales) x 365
Receivables turnover	= (Annual credit sales/ Accounts receivable balance) to give 'times a year'
Payables days	= (Accounts payable balance / annual purchases or cost of sales) x 365
Payables turnover	= (Annual purchases or cost of sales/ Accounts payable balance) to give 'times a year'
Inventory days	= (Inventory balance / cost of sales) x 365
Inventory turnover	= (Cost of sales / inventory balance) to give 'times a year'
Working Capital cycle	= Receivables days + Inventory days – payables days

Dividend growth model

$$K_e = [D_0(1+g) / P_0] + g$$

Where:

K_e = the cost of equity

D_0 = the current dividend per share

g = future anticipated annual growth rate in dividends per share

P_0 = the current ex-div share price

g can be estimated as

$$(D_r / D_e)^{(1/n)} - 1$$

Where:

D_r = the latest dividend in a historical pattern

D_e = the earliest dividend in a historical pattern

n = the number of years between the earliest and the latest dividend in a sequence of historical dividends.

Or $g = b \times r$

Where:

b = the proportion of earnings held back

r = the return on reinvested earnings

Capital Asset Pricing Model (CAPM):

$$K_e = R_f + \beta(R_m - R_f)$$

K_e = the cost of equity

R_f = The risk-free rate of return

R_m = the return on a market portfolio

β = the systematic risk factor

Valuations

Weighted Average Cost of Capital (WACC)

$$\text{WACC}\% = \left[\frac{V_e}{V_e + V_d} \times K_e \right] + \left[\frac{V_d}{V_e + V_d} \times K_d \right]$$

Where:

V_e = The market value of all ordinary shares

V_d = The market value of debt

K_e = Cost of Equity

K_d = After-tax Cost of Debt

Constant Growth Dividend discount model

$$P_0 = D_0 (1+g) / (K_e - g)$$

Where:

K_e = the cost of equity

D_0 = the current dividend per share

g = future anticipated annual growth rate in dividends per share

P_0 = the current ex-div share value of one share

Price-Earnings (P/E) model (EPS)

$$P_0 = P/E \times \text{EPS}$$

Where:

P_0 = value of 1 ordinary share

P/E = an applicable price/earnings ratio (calculated as price per share / earnings per share)

EPS = earnings per share (being earnings available for distribution to ordinary shareholders / number of ordinary shares)

Present value of an annuity

$$\frac{1-(1+r)^{-n}}{r}$$

Where:

r = discount rate

n = number of periods

Present value

$$PV = FV_n / (1 + i)^n$$

Where:

PV = Present Value

FV_n = Future value at end of period n

i = Interest rate per period

n = Number of periods

Internal Rate of Return

$$\text{IRR is approximately } A + \frac{(B - A)N_A}{(N_A - N_B)}$$

Where:

A = The lower discount rate chosen

B = The higher discount rate chosen

N_A = The net present value calculated at A%

N_B = The net present value calculated at B%

The nominal (or money) cost of capital

$$(1+m) = (1+i)(1+r)$$

m = the money rate

i = inflation rate

r = the real rate

The Baumol model of cash management:

$$Q = \sqrt{\frac{2C_oD}{C_H}}$$

Where:

Q = The value of securities to sell each time

C_o = The fixed costs associated with selling a parcel of securities

D = The annual demand for cash

C_H = The annual interest rate, as a decimal, associated with holding cash as opposed to investments

Purchasing Power Parity

An unbiased estimate for the future spot rate of exchange can be calculated as:

$$S_1 = S_0 \times (1+i_a / 1+i_b)$$

Where:

a = One country

b = The base country

S₁ = The estimated future spot rate in 1 year's time in terms of the number of \$ in country a per \$1 in country b

S₀ = The current spot rate in terms of the number of \$ in country a per \$1 in country b

i_a = Annual inflation in country a as a decimal

i_b = Annual inflation in country b as a decimal

Present value interest factor of an (ordinary) annuity of \$1 per period at i% for n periods, PVIFA(i,n).										
Period	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	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.365
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	1.713	1.690	1.668	1.647	1.626	1.605	1.585	1.566	1.547	1.528
3	2.444	2.402	2.361	2.322	2.283	2.246	2.210	2.174	2.140	2.106
4	3.102	3.037	2.974	2.914	2.855	2.798	2.743	2.690	2.639	2.589
5	3.696	3.605	3.517	3.433	3.352	3.274	3.199	3.127	3.058	2.991
6	4.231	4.111	3.998	3.889	3.784	3.685	3.589	3.498	3.410	3.326
7	4.712	4.564	4.423	4.288	4.160	4.039	3.922	3.812	3.706	3.605
8	5.146	4.968	4.799	4.639	4.487	4.344	4.207	4.078	3.954	3.837
9	5.537	5.328	5.132	4.946	4.772	4.607	4.451	4.303	4.163	4.031
10	5.889	5.650	5.426	5.216	5.019	4.833	4.659	4.494	4.339	4.192
11	6.207	5.938	5.687	5.453	5.234	5.029	4.836	4.656	4.486	4.327
12	6.492	6.194	5.918	5.660	5.421	5.197	4.988	4.793	4.611	4.439
13	6.750	6.424	6.122	5.842	5.583	5.342	5.118	4.910	4.715	4.533
14	6.982	6.628	6.302	6.002	5.724	5.468	5.229	5.008	4.802	4.611
15	7.191	6.811	6.462	6.142	5.847	5.575	5.324	5.092	4.876	4.675
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

Present value interest factor of \$1 per period at i% for n periods, PVIF(i,n).										
Period	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

Period	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	0.901	0.893	0.885	0.877	0.870	0.862	0.855	0.847	0.840	0.833
2	0.812	0.797	0.783	0.769	0.756	0.743	0.731	0.718	0.706	0.694
3	0.731	0.712	0.693	0.675	0.658	0.641	0.624	0.609	0.593	0.579
4	0.659	0.636	0.613	0.592	0.572	0.552	0.534	0.516	0.499	0.482
5	0.593	0.567	0.543	0.519	0.497	0.476	0.456	0.437	0.419	0.402
6	0.535	0.507	0.480	0.456	0.432	0.410	0.390	0.370	0.352	0.335
7	0.482	0.452	0.425	0.400	0.376	0.354	0.333	0.314	0.296	0.279
8	0.434	0.404	0.376	0.351	0.327	0.305	0.285	0.266	0.249	0.233
9	0.391	0.361	0.333	0.308	0.284	0.263	0.243	0.225	0.209	0.194
10	0.352	0.322	0.295	0.270	0.247	0.227	0.208	0.191	0.176	0.162
11	0.317	0.287	0.261	0.237	0.215	0.195	0.178	0.162	0.148	0.135
12	0.286	0.257	0.231	0.208	0.187	0.168	0.152	0.137	0.124	0.112
13	0.258	0.229	0.204	0.182	0.163	0.145	0.130	0.116	0.104	0.093
14	0.232	0.205	0.181	0.160	0.141	0.125	0.111	0.099	0.088	0.078
15	0.209	0.183	0.160	0.140	0.123	0.108	0.095	0.084	0.074	0.065
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

Appendix B – Common verbs used by the Examiners

Verb	Description
Advise / Give advice	This type of question requires you to give specific guidance to an individual or a group (e.g. a taxpayer, audit client, management, etc.), so your answer must provide specific information or make a recommendation tailored to the individual or group and justify your position.
Calculate / Compute	Do the number crunching and derive the correct answer. Make sure that you write down your workings and crosscheck your numbers.
Estimate	Suggest an approximate value (or range of values) based on the available information. Remember, although estimating involves uncertainty, some answers will be <u>more right</u> (or appropriate) than others.
Evaluate	Pass judgment on or provide your opinion based on the facts at hand. When making an evaluation , there are often predetermined criteria that you will use to base your opinion on. The key here is to give your opinion or make a judgment of the facts, but providing just a description of the facts is insufficient. Professional judgment and scepticism (a questioning mind) are called for when making an evaluation .
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.