



UNIVERSITI KUALA LUMPUR
BUSINESS SCHOOL

FINAL EXAMINATION
MARCH 2026 SEMESTER

COURSE CODE : EIB10603
COURSE TITLE : FINANCE 1
PROGRAMME NAME : BACHELOR OF BUSINESS ADMINISTRATION (HONS) IN
MANAGEMENT AND ENTREPRENEURSHIP
DATE : 26 JUNE 2026
TIME : 3:00PM - 6:00PM
DURATION : 3 HOURS

INSTRUCTIONS TO CANDIDATES

1. Please read the instructions given in the question paper CAREFULLY.
2. This question paper is printed on both sides of the paper.
3. This question paper consist of ONE sections.
4. Section A consist of five questions. Answer FOUR (4) questions only.
5. Please write your answer on the answer booklet provided.
6. Please answer all questions in English only.
7. Refer to the attached Formula/ Appendices. ☐ *Tick if applicable*

SECTION A (Total: 100 marks)

Answer FOUR (4) questions.

Please use the answer booklet provided.

Question 1

Mengkome Corporation is considering a new project that requires an initial investment of \$1 million. The project is expected to generate cash flows of \$300,000 annually for 5 years. Mengkome Corporation has a target capital structure of 60% equity and 40% debt. The cost of equity is estimated at 10%, and the cost of debt is 6%. The tax rate is 30%.

- (a) Calculate the WACC for Mengkome Corporation. (4 marks)
- (b) Explain the significance of WACC in investment decisions. (3 marks)
- (c) Should Mengkome Corporation proceed with the new project based on the calculated WACC? Use the Net Present Value (NPV) method to support your answer. (5 marks)
- (d) Discuss THREE (3) factors could affect the cost of capital for Mengkome Corporation. (6 marks)
- (e) How does a change in the cost of debt to 8% affect the WACC? (4 marks)
- (f) Discuss the implications of a higher cost of capital on project viability. (3 marks)

Question 2

Keyla, a junior financial analyst at Brainee Corporation, has been tasked with evaluating two capital investment projects: Project AA and Project BB. Each project requires an initial investment of RM140,000 and has a cost of capital of 12%. As a senior financial analyst at Brainee Corporation, you are expected to support Keyla in analyzing these proposed capital investment projects. Below are the expected cash flows for each project:

Year	Cash Flow (RM)	
	Project AA	Project BB
0	-140,000	-140,000
1	80,000	71,800
2	70,000	76,000
3	61,000	72,000
4	50,600	64,400

Calculate :

- (a) Payback period for both projects. (6 marks)
- (b) Net present value (NPV) for both projects. (6 marks)
- (c) Internal rate of return (IRR) for both projects. (12 marks)
- (d) If the projects are mutually exclusive, recommend the best project for Keyla Corporation. Furthermore, briefly describe the reason for the recommendation. (1 marks)

Question 3

Bellinda recently has RM200,000, which she has invested entirely in Stock Helok because she believes it carries minimal risk. However, it's important to explore the advantages of diversification. Although Stock Helok is relatively safe, spreading her investments could improve her portfolio's overall risk management. After reviewing Stock Kayoo's performance data, Bellinda recommend a revised investment strategy: allocate RM120,000 to continue with Stock Helok and invest the remaining RM80,000 in Stock Kayoo. This strategy aims to create a more balanced portfolio, potentially lowering overall risk and increasing the chances of achieving stable returns.

Economy	Probability	Stock Helok (%)	Stock Kayoo (%)
Recession	0.2	-7	-15
Average	0.4	20	15
Boom	0.2	30	40

- (a) Compute standard deviations of returns on Stocks Helok and Kayoo. (12 marks)
- (b) Calculate expected return for Bellinda's portfolio. (3 marks)
- (c) Calculate the risk of portfolio after diversification. (6 marks)
- (d) Compare the risk of portfolio after diversification with stand-alone risk of stock Helok or stock Kayoo only. (1 marks)
- (e) Explain how the Coefficient of Variation be a better measure of risk than Standard Deviation when comparing two investments with vastly different expected returns. (3 marks)

Question 4

Tomandjerry wants to borrow RM200,000 for a period of 10 years. The lenders offer her three options of payment structures:

OPTION 1

Tomandjerry pays all of the interest (6% per annum) and principal in one lump sum at the end of 10 years.

OPTION 2

Tomandjerry pays interest at the rate of 6% per year for 1 years and then a final payment of interest and principal at the end of the 10th year.

OPTION 3

Tomandjerry pays 10 equal payments at the end of each year inclusive of interest (6% per annum) and part of the principal.

- (a) Calculate the total amount of interest paid and the total amount of payments under each option. (13 marks)
- (b) Explain which alternative should Tomandjerry choose between these **THREE (3)** options. (2 marks)
- (c) Draw the table (only for first 5 equal payments) to show the equal payments, interest paid and balance that Tomandjerry should pay for Option 3. (10 marks)

Question 5

Given are the financial statements of Ghaso-Ghaso Corporation.

GHASO-GHASO CORPORATION			
Balance Sheet as at December 2025			
Current Assets:		Current Liabilities:	
Cash	112,500.00	Account Payable	56,250.00
Marketable Securities	337,500.00	Notes Payable	900,000.00
A/c Receivables	1,350,000.00	Accruals	900,000.00
Inventories	843,750.00		
Total Current Assets	2,643,750.00	Total Current Liabilities	1,856,250.00
Fixed Assets:		Long-term Debt:	
Building	1,237,500.00	Bond	2,250,000.00
Equipment	2,306,250.00		
Furniture	900,000.00	Equities:	
Total Fixed Assets	4,443,750.00	Common Shares	1,293,750.00
Depreciation	(1,462,500.00)	Retained Earnings	225,000.00
Net Fixed Assets	2,981,250.00	Total Equities	1,518,750.00
Total Assets	5,625,000.00	Total Liabilities & Equities	5,625,000.00

Sales for 2025 were RM 2,500,000 and it was expected to increase to RM 3,000,000 in year 2025. Net income for 2025 was RM515,000 and cash dividend for shareholders in 2025 amounted to RM 250,000.

Based on the information above:

- (a) Determine the growth rate that the company can grow without relying on additional financing.

(5 marks)

- (b) Prepare a Pro forma Balance Sheet of Ghaso-Ghaso Corporation for year 2026.
(20 marks)

END OF EXAMINATION PAPER

FORMULA

- $FV = PV (FVIF_{i,n})$
- $PV = FV (PVIF_{i,n})$
- $FV = CF_A (FVIFA_{i,n})$
- $PV = CF_A (PVIFA_{i,n})$
- $n = \ln [PMT / (PMT - PV \times r)] / \ln (1+r)$
- $i = (FV / PV)^{1/n} - 1$
- $PB = \frac{IO}{\text{Ann CF}}$
- $PBP = [(n-1)] + [(IO - \text{sum of cash flow before } n) / (\text{cash flow of the year } n)]$
- $NPV = CF (PVIFA_{i,n}) - IO$
- $NPV = \sum [CF (PVIF_{i,n})] - IO$
- $PI = \text{PV of future cash flow} / \text{Initial Investment}$
- $d_1 = d_0(1 + g)$
- $k_e = (d_1/p_0) + g$
- $k_p = d/p_0$
- $r_d = k_i(1-t)$
- $WACC = W_e k_e + W_p k_p + W_d k_d$
- $E(R_p) = (w_A \times E(R_A)) + (w_B \times E(R_B))$
- $\sigma_p = \sqrt{(w_A^2 \sigma_A^2) + (w_B^2 \sigma_B^2) + (2w_A w_B \rho \sigma_A \sigma_B)}$
- $ER_i = R_f + \beta_i (ER_m - R_f)$

Present Value and Future Value Tables

Table A-1 Future Value Interest Factors for One Dollar Compounded at k Percent for n Periods: $FVIF_{k,n} = (1 + k)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.1700	1.1800	1.1900	1.2000
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2321	1.2544	1.2769	1.2996	1.3225	1.3456	1.4000	1.5378	1.5826	1.6300
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.3676	1.4049	1.4429	1.4815	1.5209	1.5609	1.7280	1.9066	1.9531	2.0178
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3595	1.4118	1.4641	1.5181	1.5735	1.6305	1.6890	1.7490	1.8106	2.0736	2.3642	2.4414	2.5261
5	1.0510	1.1041	1.1583	1.2167	1.2763	1.3362	1.4025	1.4680	1.5386	1.6105	1.6851	1.7623	1.8424	1.9254	2.0114	2.1003	2.4583	2.8516	3.0518	3.2729
6	1.0615	1.1262	1.1941	1.2663	1.3401	1.4185	1.5007	1.5869	1.6771	1.7715	1.8704	1.9738	2.0820	2.1950	2.3131	2.4364	2.9060	3.4352	3.8147	4.2268
7	1.0721	1.1487	1.2299	1.3169	1.4071	1.5036	1.6068	1.7138	1.8280	1.9487	2.0762	2.2107	2.3526	2.5023	2.6600	2.8262	3.3832	4.0077	4.7684	5.6279
8	1.0829	1.1717	1.2668	1.3686	1.4775	1.5936	1.7182	1.8509	1.9926	2.1435	2.3046	2.4780	2.6664	2.8699	3.0890	3.3244	4.0096	4.8595	5.8905	7.1573
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.5580	2.7731	3.0040	3.2519	3.5178	3.8030	4.6196	5.6930	7.0060	8.6204
10	1.1046	1.2190	1.3438	1.4802	1.6289	1.7908	1.9672	2.1599	2.3697	2.5973	2.8434	3.1096	3.3966	3.7052	4.0466	4.4214	5.4917	6.8244	8.4132	10.3786
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8963	2.1049	2.3315	2.5804	2.8531	3.1518	3.4785	3.8336	4.2282	4.6524	5.1173	6.3401	7.9567	10.0042	12.6228
12	1.1268	1.2682	1.4258	1.6010	1.7953	2.0122	2.2522	2.5182	2.8127	3.1384	3.4985	3.8960	4.3345	4.8179	5.3503	5.9360	7.3181	9.1715	11.6552	14.9398
13	1.1381	1.2936	1.4686	1.6651	1.8856	2.1329	2.4088	2.7196	3.0685	3.4623	3.9033	4.3956	4.9430	5.5514	6.2269	6.9756	8.6181	10.8096	13.7337	17.5844
14	1.1496	1.3195	1.5125	1.7317	1.9799	2.2608	2.5785	2.9372	3.3417	3.7975	4.3104	4.8871	5.5348	6.2613	7.0757	7.9875	10.0096	12.8310	16.5806	21.4566
15	1.1610	1.3468	1.5590	1.8009	2.0789	2.3966	2.7680	3.1722	3.6425	4.1772	4.7846	5.4736	6.2543	7.1379	8.1371	9.2666	11.5407	14.7936	19.1422	24.8641
16	1.1725	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4299	3.9703	4.5950	5.3109	6.1304	7.0673	8.1372	9.3576	10.7448	13.4888	17.3443	22.5277	29.6542
17	1.1843	1.4002	1.6528	1.9470	2.2920	2.6926	3.1588	3.7000	4.3276	5.0545	5.8951	6.8660	7.9811	9.2765	10.7811	12.5236	15.8631	20.3939	26.5511	34.8246
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3789	3.9980	4.7171	5.5589	6.5436	7.6990	9.0423	10.5779	12.3715	14.4633	18.4639	24.1939	31.6511	41.9246
19	1.2081	1.4568	1.7535	2.1068	2.5270	3.0266	3.6165	4.3157	5.1417	6.1158	7.2633	8.6128	10.197	12.056	14.232	16.777	21.348	28.568	37.389	49.192
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6916	5.6844	6.7725	8.0623	9.6663	11.523	13.743	16.367	19.461	24.884	33.336	43.864	58.060
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3996	4.1405	5.0338	6.1088	7.4002	8.9492	10.804	13.021	15.688	18.822	22.574	29.505	39.592	52.420	69.085
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6036	4.4304	5.4366	6.6586	8.1403	9.9336	12.100	14.714	17.961	21.846	26.196	34.606	46.674	62.174	82.184
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	11.026	13.552	16.527	20.362	24.991	30.376	40.247	53.831	71.407	94.539
24	1.2697	1.6084	2.0328	2.5633	3.2261	4.0480	5.0724	6.3412	7.9111	9.8497	12.239	15.179	18.788	23.212	28.625	35.236	46.497	61.743	82.178	108.801
25	1.2824	1.6406	2.0938	2.6668	3.3864	4.2919	5.4274	6.8485	8.6231	10.835	13.565	17.000	21.231	26.482	32.919	40.874	53.396	70.642	93.888	125.641
26	1.2952	1.6735	2.1568	2.7753	3.5525	4.5525	5.8274	7.7405	10.000	12.800	16.400	20.400	25.200	31.200	38.800	48.400	62.800	83.200	109.600	145.600
27	1.3081	1.7071	2.2219	2.8899	3.7249	4.8329	6.2074	8.2405	10.700	13.800	18.000	23.200	29.200	36.800	46.800	59.200	76.800	101.200	133.200	176.800
28	1.3211	1.7414	2.2891	3.0089	3.9029	5.0229	6.5924	8.8405	11.800	15.200	20.000	26.000	33.200	42.000	53.200	67.200	87.200	114.200	150.200	198.200
29	1.3342	1.7764	2.3591	3.1339	4.0929	5.2249	6.8924	9.4405	12.400	16.000	21.200	27.600	35.600	45.600	58.000	73.200	94.200	123.200	162.200	216.200
30	1.3474	1.8114	2.4311	3.2649	4.2969	5.4409	7.1924	9.8405	13.000	16.800	22.400	29.200	38.000	49.200	62.800	80.000	103.200	134.200	178.200	238.200
31	1.3607	1.8471	2.5041	3.3999	4.5069	5.6729	7.5924	10.3405	13.600	17.600	23.600	30.800	40.000	51.200	65.200	83.200	108.200	142.200	188.200	254.200
32	1.3741	1.8834	2.5781	3.5369	4.7249	5.9109	7.9924	10.8405	14.200	18.400	24.800	32.400	42.000	53.200	68.000	87.200	114.200	154.200	200.200	270.200
33	1.3876	1.9203	2.6531	3.6749	4.9489	6.1569	8.3924	11.3405	14.800	19.200	26.000	34.000	44.000	56.000	72.000	92.000	120.200	160.200	212.200	282.200
34	1.4011	1.9578	2.7291	3.8149	5.1749	6.4009	8.7924	11.8405	15.400	19.800	27.200	35.600	46.000	58.000	76.000	98.000	128.200	168.200	224.200	298.200
35	1.4147	1.9959	2.8061	3.9569	5.4049	6.6529	9.1924	12.3405	16.000	20.400	28.400	37.200	48.000	60.000	79.200	102.000	132.200	176.200	236.200	314.200
36	1.4284	2.0346	2.8841	4.0999	5.6409	6.9069	9.5924	12.8405	16.600	21.000	29.600	38.800	50.000	62.000	82.000	106.000	138.200	184.200	248.200	330.200
37	1.4421	2.0739	2.9631	4.2449	5.8829	7.1649	9.9924	13.3405	17.200	21.600	30.800	40.400	52.000	64.000	84.000	109.200	142.200	192.200	260.200	346.200
38	1.4559	2.1137	3.0441	4.3919	6.1309	7.4269	10.3924	13.8405	17.800	22.200	32.000	42.000	54.000	66.000	86.000	112.000	146.200	198.200	272.200	362.200
39	1.4697	2.1541	3.1261	4.5399	6.3829	7.6929	10.7924	14.3405	18.400	22.800	33.200	43.600	56.000	68.000	88.000	115.200	150.200	204.200	284.200	378.200
40	1.4836	2.1951	3.2091	4.6889	6.6399	7.9629	11.1924	14.8405	19.000	23.400	34.400	45.200	58.000	70.000	90.000	118.200	154.200	210.200	296.200	394.200
41	1.4976	2.2366	3.2931	4.8389	6.8969	8.2369	11.5924	15.3405	19.600	24.000	35.600	46.800	60.000	72.000	92.000	121.200	158.200	216.200	308.200	410.200
42	1.5117	2.2786	3.3781	4.9899	7.1569	8.5129	11.9924	15.8405	20.200	24.600	36.800	48.400	62.000	74.000	94.000	124.200	162.200	222.200	320.200	426.200
43	1.5259	2.3211	3.4641	5.1419	7.4189	8.7929	12.3924	16.3405	20.800	25.200	38.000	50.000	64.000	76.000	96.000	127.200	166.200	228.200	332.200	442.200
44	1.5401	2.3641	3.5511	5.2949	7.6829	9.0729	12.7924	16.8405	21.400	25.800	39.200	51.600	66.000	78.000	98.000	130.200	170.200	234.200	344.200	458.200
45	1.5544	2.4076	3.6391	5.4489	7.9489	9.3569	13.1924	17.3405	22.000	26.400	40.400	53.200	68.000	80.000	100.000	133.200	174.200	240.200	356.200	474.200
46	1.5687	2.4516	3.7281	5.6039	8.2169	9.6429	13.5924	17.8405	22.600	27.000	41.600	54.800	70.000	82.000	102.000	136.200	178.200	246.200	368.200	490.200
47	1.5831	2.4961	3.8181	5.7599	8.4869	9.9309	13.9924	18.3405	23.200	27.600	42.800	56.400	72.000	84.000	104.000	139.200	182.200	252.200	380.200	506.200
48	1.5976	2.5411	3.9091	5.9169	8.7569	10.2209	14.3924	18.8405	23.800	28.200	44.000	58.000	74.000	86.000	106.000	142.200	186.200	258.200	392.200	522.200
49	1.6121	2.5866	4.0011	6.0719	9.0289	10.5129	14.7924	19.3405	24.400	28.800	45.200	59.600	76.000	88.000	108.000	145.200	190.200	264.200	404.200	538.200
50	1.6267	2.6326	4.0941	6.2269	9.3029	10.8069	15.1924	19.8405	25.000	29.400	46.400	61.200	78.000	90.000	110.000	148.200	194.200	270.200	416.200	554.200

Table A-2 Future Value Interest Factors for a One-Dollar Annuity Compounded at k Percent for n Periods: $FVIFA_{k,n} = [(1 + k)^n - 1] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%	30%
1	1.0000	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1100	1.1200	1.1300	1.1400	1.1500	1.1600	1.1700	1.1800	1.1900	1.2000	1.2100	1.2200	1.2300	1.2400	1.2500	1.2600	1.2700	1.2800	1.2900	1.3000
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1100	2.1200	2.1300	2.1400	2.1500	2.1600	2.1700	2.1800	2.1900	2.2000	2.2100	2.2200	2.2300	2.2400	2.2500	2.2600	2.2700	2.2800	2.2900	2.3000
3	3.0301	3.0604	3.0908	3.1215	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3421	3.3744	3.4068	3.4396	3.4726	3.5056	3.5386	3.5716	3.6046	3.6376	3.6706	3.7036	3.7366	3.7696	3.8026	3.8356	3.8686	3.9016	3.9346	3.9676
4	4.0604	4.1216	4.1836	4.2456	4.3081	4.3716	4.4356	4.4996	4.5641	4.6291	4.6941	4.7591	4.8246	4.8901	4.9556	5.0211	5.0866	5.1521	5.2176	5.2831	5.3486	5.4141	5.4796	5.5451	5.6106	5.6761	5.7416	5.8071	5.8726	5.9381
5	5.1509	5.2404	5.3301	5.4196	5.5096	5.5996	5.6896	5.7796	5.8696	5.9596	6.0496	6.1396	6.2296	6.3196	6.4096	6.4996	6.5896	6.6796	6.7696	6.8596	6.9496	7.0396	7.1296	7.2196	7.3096	7.3996	7.4896	7.5796	7.6696	7.7596
6	6.1529	6.3061	6.4684	6.6307	6.8019	6.9733	7.1533	7.3336	7.5233	7.7156	7.9129	8.1152	8.3227	8.5356	8.7531	8.9756	9.2031	9.4356	9.6731	9.9156	10.1631	10.4156	10.6731	10.9356	11.1981	11.4606	11.7231	11.9856	12.2481	12.5106
7	7.2135	7.4343	7.6625	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	9.7833	10.0889	10.4046	10.7306	11.0671	11.4141	11.7716	12.1396	12.5181	12.8971	13.2766	13.6566	14.0371	14.4181	14.7996	15.1816	15.5641	15.9471	16.3306	16.7141
8	8.2857	8.5830	8.8923	9.2145	9.5491	9.8975	10.2500	10.6075	10.9700	11.3375	11.7100	12.0875	12.4700	12.8575	13.2500	13.6475	14.0500	14.4575	14.8700	15.2875	15.7000	16.1175	16.5400	16.9675	17.3900	17.8175	18.2500	18.6875	19.1200	19.5525
9	9.3685	9.7566	10.1521	10.5653	11.0071	11.4681	11.9386	12.4196	12.9011	13.3931	13.8956	14.4086	14.9321	15.4661	16.0106	16.5661	17.1326	17.7101	18.2986	18.8981	19.5086	20.1301	20.7626	21.4061	22.0606	22.7261	23.4026	24.0901	24.7886	25.4981
10	10.4662	10.9560	11.4664	12.0006	12.5506	13.1161	13.6981	14.2966	14.9116	15.5441	16.1941	16.8616	17.5466	18.2491	18.9696	19.7081	20.4646	21.2391	22.0316	22.8421	23.6706	24.5181	25.3846	26.2691	27.1716	28.0921	29.0306	29.9881	30.9646	31.9591
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	19.561	20.655	21.814	23.046	24.361	25.761	27.146	28.616	30.071	31.611	32.236	33.956	35.766	37.566	39.356	41.136	42.906	44.666	46.416	48.156
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	22.713	24.133	25.650	27.271	28.986	30.796	32.601	34.401	36.196	38.001	39.806	41.606	43.401	45.196	47.001	48.806	50.606	52.401	54.201	56.001
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.496	22.963	24.523	26.182	27.941	29.801	31.761	33.821	35.881	37.941	40.001	42.061	44.121	46.181	48.241	50.301	52.361	54.421	56.481	58.541	60.601	62.661	64.721
14	14.947	15.974	17.086	18.292	19.589	20.985	22.580	24.275	26.071	27.967	30.000	32.181	34.511	37.001	39.541	42.141	44.801	47.521	50.301	53.141	56.041	59.001	62.021	65.101	68.241	71.441	74.701	78.021	81.401	84.841
15	16.087	17.293	18.596	20.024	21.579	23.276	25.129	27.162	29.361	31.772	34.386	37.200	40.221	43.451	46.891	50.541	54.401	58.371	62.451	66.641	70.941	75.351	79.871	84.501	89.241	94.091	99.051	104.121	109.301	114.591
16	17.268	18.639	20.157	21.826	23.657	25.673	27.888	30.324	33.003	35.950	39.190	42.763	46.672	50.920	55.411	60.146	65.121	70.346	75.811	81.521	87.476	93.681	100.141	106.851	113.811	121.021	128.481	136.191	144.151	152.371
17	18.430	20.012	21.762	23.696	25.840	28.213	30.840	33.759	36.974	40.546	44.581	49.084	54.073	59.451	65.221	71.386	77.941	84.891	92.141	99.691	107.541	115.691	124.141	132.891	141.941	151.291	160.941	170.891	181.141	191.691
18	19.615	21.412	23.416	25.645	28.132	30.906	33.999	37.469	41.391	45.899	50.998	56.760	63.125	70.091	77.656	85.921	94.891	104.561	114.941	126.031	137.841	150.371	163.641	177.661	192.441	208.001	224.341	241.471	259.401	278.141
19	20.811	22.841	25.117	27.671	30.639	33.780	37.379	41.446	46.018	51.199	56.993	63.440	70.742	78.999	88.212	98.503	109.881	122.351	135.911	150.571	166.341	183.221	201.241	220.421	240.771	262.311	285.051	309.001	334.251	360.811
20	22.019	24.297	26.870	29.778	33.066	36.785	40.995	45.762	51.160	57.195	63.987	71.662	80.347	90.141	101.056	113.191	126.551	141.141	156.971	174.061	192.421	212.071	233.021	255.281	278.861	303.781	330.061	357.721	386.771	417.231
21	23.239	25.783	28.576	31.688	35.179	39.093	43.486	48.425	53.960	60.155	67.062	74.837	83.621	93.541	104.701	117.121	130.811	145.781	162.051	179.621	198.501	218.701	240.241	263.141	287.421	313.101	340.201	368.741	398.741	430.221
22	24.472	27.299	30.337	33.648	38.053	42.896	48.240	54.145	60.663	67.855	75.781	84.591	94.421	105.491	117.931	131.751	146.971	163.601	181.651	201.141	222.181	244.791	269.071	295.141	323.021	352.741	384.331	417.811	453.211	490.571
23	25.715	28.845	32.063	35.618	40.430	45.996	52.436	59.893	67.515	76.379	85.541	95.141	106.291	118.021	131.351	146.191	162.541	180.421	200.861	222.901	246.561	271.971	300.181	330.221	362.141	396.001	431.841	469.691	509.571	551.511
24	26.973	30.422	34.126	39.093	44.502	50.816	58.177	66.760	76.790	88.497	102.174	118.156	136.831	158.651	184.181	212.541	243.871	278.211	315.671	356.281	400.071	448.181	500.741	557.991	619.871	686.431	757.811	834.171	915.571	1002.051
25	28.243	32.030	36.469	41.846	47.727	54.866	63.249	73.196	84.791	98.347	114.413	133.334	155.620	181.871	212.793	248.214	298.141	352.611	411.771	475.671	544.451	619.261	701.141	791.231	890.671	1000.601	1122.171	1255.541	1401.871	1561.291
26	29.535	33.743	38.742	44.579	51.002	58.666	68.163	79.846	93.869	110.591	130.541	154.241	182.241	214.971	252.971	296.771	346.811	403.451	467.051	538.051	616.741	708.471	814.501	936.101	1074.541	1231.071	1407.041	1603.741	1832.641	2096.291
27	30.850	35.080	40.539	46.846	53.802	62.002	72.963	86.146	101.869	120.591	142.841	169.141	200.041	236.171	278.171	326.771	382.611	446.351	518.551	600.771	703.471	828.141	976.341	1149.641	1350.541	1581.541	1845.241	2145.241	2495.241	2905.241
28	32.190	36.460	42.379	49.146	56.702	65.462	77.003	91.866	109.591	130.841	156.141	186.141	221.541	263.171	311.571	368.471	434.511	510.351	606.751	725.371	868.841	1041.941	1250.141	1498.141	1791.541	2136.141	2539.141	3009.141	3559.141	4219.141
29	33.555	37.875	44.174	51.481	59.782	69.282	81.403	96.866	115.591	138.441	166.141	200.141	241.141	289.141	345.541	412.141	490.541	581.541	687.541	811.141	956.141	1127.141	1330.141	1581.141	1886.141	2251.141	2681.141	3201.141	3821.141	4561.141
30	34.945	39.345	46.014	53.881	62.882	73.682	86.803	102.866	122.591	147.441	178.141	215.141	259.141	311.141	372.141	444.141	529.141	629.141	746.141	891.141	1069.141	1286.141	1549.141	1866.141	2246.141	2701.141	3241.141	3881.141	4641.141	5541.141
31	36.360	40.820	47.849	56.286	65.982	77.482	91.403	108.266	128.866	155.141	188.141	228.141	276.141	333.141	400.141	480.141	576.141	690.141	824.141	981.141	1166.141	1386.141	1659.141	1991.141	2391.141	2871.141	3441.141	4121.141	4941.141	5941.141
32	37.800	42.340	49.749	58.746	69.282	81.403	96.866	115.591	138.441	166.141	200.141	241.141	289.141	345.541	412.141	490.541	581.541	687.541	811.141	956.141	1127.141	1330.141	1581.141	1886.141	2251.141	2681.141	3201.141	3821.141	4561.141	5541.141
33	39.265	43.845	51.714	61.281	72.482	85.482	101.403	120.266	143.866	173.141	208.141	250.141	300.141	359.141	428.141	508.141	600.141	716.141	859.141	1031.141	1236.141	1481.141	1776.141	2121.141	2531.141	3011.141	3571.141	4241.141	5041.141	6041.141
34	40.755	45.375	53.684	63.881	75.882	89.682	107.403	128.266	153.866	185.141	222.141	266.141	318.141	379.141	449.141	530.141	624.141	736.141	879.141	1056.141	1266.141	1516.141	1811.141	2161.141	2581.141	3081.141	3661.141	4361.141	5201.141	6201.141
35	42.270	46.94																												

Present Value and Future Value Tables

Table A-3 Present Value Interest Factors for One Dollar Discounted at k Percent for n Periods: $PVIF_{kn} = 1 / (1 + k)^n$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	17%	18%	19%	20%	21%	22%	23%	24%	25%	26%	27%	28%	29%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9258	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8547	0.8474	0.8402	0.8331	0.8261	0.8192	0.8124	0.8057	0.7991	0.7926	0.7862	0.7798	0.7735	0.7673
2	0.9803	0.9612	0.9428	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7693	0.7559	0.7428	0.7300	0.7174	0.7051	0.6930	0.6811	0.6694	0.6579	0.6465	0.6353	0.6243	0.6134	0.6027	0.5921	0.5816
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7312	0.7118	0.6931	0.6750	0.6575	0.6407	0.6245	0.6087	0.5933	0.5782	0.5633	0.5486	0.5342	0.5199	0.5058	0.4919	0.4782	0.4647	0.4513	0.4381
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6356	0.6133	0.5921	0.5718	0.5523	0.5332	0.5143	0.4956	0.4771	0.4588	0.4407	0.4228	0.4050	0.3874	0.3700	0.3528	0.3358	0.3189	0.3022
5	0.9515	0.9057	0.8626	0.8210	0.7805	0.7413	0.7030	0.6656	0.6291	0.5934	0.5585	0.5244	0.4911	0.4586	0.4268	0.3957	0.3653	0.3356	0.3066	0.2782	0.2504	0.2232	0.1966	0.1706	0.1452	0.1203	0.0959	0.0720	0.0486	0.0257
6	0.9420	0.8880	0.8375	0.7893	0.7426	0.7060	0.6693	0.6325	0.5963	0.5605	0.5254	0.4911	0.4576	0.4248	0.3926	0.3610	0.3300	0.2996	0.2698	0.2405	0.2118	0.1836	0.1560	0.1290	0.1026	0.0767	0.0513	0.0264	0.0020	0.0000
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6222	0.5835	0.5478	0.5132	0.4817	0.4523	0.4251	0.3996	0.3749	0.3508	0.3272	0.3041	0.2815	0.2594	0.2378	0.2167	0.1961	0.1760	0.1564	0.1373	0.1187	0.1005	0.0828	0.0655
8	0.9235	0.8535	0.7904	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4666	0.4339	0.4039	0.3762	0.3506	0.3269	0.3040	0.2817	0.2599	0.2386	0.2178	0.1974	0.1774	0.1578	0.1387	0.1199	0.1015	0.0835	0.0659	0.0487	0.0319
9	0.9143	0.8368	0.7664	0.7005	0.6406	0.5869	0.5390	0.4963	0.4574	0.4224	0.3909	0.3618	0.3351	0.3106	0.2881	0.2665	0.2454	0.2248	0.2046	0.1848	0.1654	0.1464	0.1277	0.1093	0.0912	0.0734	0.0559	0.0387	0.0219	0.0055
10	0.9063	0.8203	0.7441	0.6726	0.6065	0.5464	0.4933	0.4459	0.4030	0.3644	0.3300	0.2996	0.2722	0.2477	0.2250	0.2040	0.1835	0.1634	0.1436	0.1241	0.1049	0.0860	0.0674	0.0491	0.0311	0.0134	0.0000	0.0000	0.0000	0.0000
11	0.8983	0.8043	0.7224	0.6459	0.5746	0.5102	0.4525	0.4000	0.3524	0.3096	0.2711	0.2366	0.2061	0.1795	0.1557	0.1336	0.1129	0.0935	0.0744	0.0556	0.0371	0.0189	0.0010	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
12	0.8904	0.7885	0.7004	0.6194	0.5438	0.4761	0.4150	0.3594	0.3081	0.2614	0.2191	0.1811	0.1473	0.1175	0.0915	0.0681	0.0471	0.0283	0.0107	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
13	0.8826	0.7730	0.6800	0.5936	0.5124	0.4398	0.3724	0.3100	0.2524	0.2000	0.1524	0.1096	0.0715	0.0381	0.0095	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
14	0.8750	0.7573	0.6591	0.5675	0.4808	0.3946	0.3174	0.2400	0.1724	0.1144	0.0660	0.0271	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
15	0.8673	0.7430	0.6419	0.5459	0.4548	0.3646	0.2774	0.1900	0.1124	0.0544	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
16	0.8600	0.7284	0.6232	0.5230	0.4276	0.3338	0.2414	0.1500	0.0684	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
17	0.8526	0.7142	0.6050	0.5014	0.4024	0.3046	0.2080	0.1124	0.0400	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
18	0.8453	0.7000	0.5874	0.4804	0.3776	0.2760	0.1764	0.0800	0.0200	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
19	0.8380	0.6864	0.5700	0.4584	0.3516	0.2460	0.1464	0.0500	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
20	0.8309	0.6730	0.5537	0.4404	0.3296	0.2200	0.1164	0.0300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
21	0.8238	0.6600	0.5375	0.4216	0.3080	0.1956	0.0880	0.0165	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
22	0.8168	0.6488	0.5224	0.4036	0.2880	0.1724	0.0600	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
23	0.8099	0.6364	0.5060	0.3844	0.2664	0.1480	0.0300	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
24	0.8030	0.6250	0.4916	0.3676	0.2464	0.1240	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
25	0.7962	0.6140	0.4764	0.3504	0.2264	0.1000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
26	0.7895	0.6030	0.4616	0.3324	0.2064	0.0760	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
27	0.7828	0.5920	0.4464	0.3144	0.1864	0.0520	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
28	0.7762	0.5816	0.4324	0.3004	0.1704	0.0360	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
29	0.7696	0.5720	0.4196	0.2864	0.1544	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
30	0.7630	0.5640	0.4084	0.2744	0.1404	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
31	0.7564	0.5560	0.3976	0.2624	0.1264	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
32	0.7500	0.5480	0.3864	0.2504	0.1124	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
33	0.7435	0.5400	0.3756	0.2384	0.1044	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
34	0.7370	0.5320	0.3644	0.2264	0.0944	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
35	0.7306	0.5240	0.3536	0.2184	0.0844	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
36	0.7242	0.5180	0.3444	0.2																										