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FACULTY OF BUSINESS

FINAL EXAMINATION

Student ID (in Figures) :														

Student ID (in Words) : _____

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Course Code & Name : **FIN1314 FUNDAMENTALS OF FINANCE**
Semester & Year : SEPTEMBER - DECEMBER 2023
Lecturer/Examiner : DR. ABD HADI MUSTAFFA
Duration : 2 Hours

INSTRUCTIONS TO CANDIDATES

1. **This question paper consists of the following:**
   PART A (25 Marks) : Answer ALL Short Essay Questions in the Answer Booklet
   PART B (75 Marks) : Answer ALL Problem-Solving Questions in the Answer Booklet
2. **Candidates are not allowed to bring any unauthorized materials except writing equipment into the Exam Hall. Electronic dictionaries are strictly prohibited.**
3. **This question paper must be submitted with all used and/or unused rough papers and/or graph paper (if any). Candidates are NOT allowed to take any examination materials from the examination hall.**
4. **Only ballpoint pens are allowed to answer the questions, except for multiple choice questions, where 2B pencils are to be used.**

WARNING: The University Examination Board (UEB) of BERJAYA University College regards cheating as a most serious offence and will not hesitate to mete out the appropriate punitive actions according to the severity of the offence committed and in accordance with the clauses stipulated in the Students' Handbook, up to and including expulsion from BERJAYA University College.

Total Number of pages = 11 (Including the cover page)

PART A : SHORT ESSAY QUESTIONS (25 Marks)

INSTRUCTION (S) : Answer ALL Short Essay Questions in the Answer Booklet.

QUESTION 1

List **FIVE (5)** main roles of Financial Managers

(5 Marks)

QUESTION 2

Explain **TWO (2)** types of Financial Markets

(4 Marks)

QUESTION 3

Differentiate between Present Value Interest Factor Annuity (PVIFA) and Future Value Interest Factor Annuity (FVIFA).

(4 Marks)

QUESTION 4

Describe **THREE (3)** reasons why ethical financial behaviour needs to be implemented in a company.

(6 Marks)

QUESTION 5

Explain **THREE (3)** types of Efficient Market Hypothesis (EMH).

(6 Marks)

END OF PART A

PART B : PROBLEM-SOLVING QUESTIONS (75 Marks)

INSTRUCTION (S) : Answer ALL Problem-Solving Questions in the Answer Booklet.

QUESTION 1

Below are the financial statements of Duro Bakery for the financial year ending 31st December 2022.

DURO BAKERY

Statement of Financial Position as at 31st December 2022

	RM		RM
Cash	37,500	Accounts Payable	99,000
Prepayments	22,500	Notes payable	24,000
Accounts Receivables	90,800	Accruals	16,500
Inventories	110,200		
		Long Term Debt	99,000
Net Fixed Asset	414,000		
		Common shares	249,000
		Paid-in capital	58,500
		Retained Earnings	129,000
TOTAL ASSET	**675,000**	**TOTAL LIABILITIES & EQUITIES**	**675,000**

DURO BAKERY

Statement of Profit and Loss for the Year Ended 31st December 2022

	RM
Sales	1,400,000
Less: Cost of Goods Sold	(826,000)
Gross Profit	574,000
Less: Expenses	(267,190)
Less: Depreciation	(30,000)
Earnings before interest and tax	276,810
Less: Interest	(25,000)
Earnings before tax	251,810
Less: Tax	(100,724)
Net Profit after tax	151,086

INDUSTRY AVERAGE RATIOS

Current Ratio	2.5 times	Average Collection Period	30 days
Debt Ratio	40%	Net Profit Margin	10%
Quick Ratio	1.35 times	Inventory Turnover	4.6 times
Times Interest Earned	9 times	Return on Equity	25%

a) Calculate the relevant financial ratios.

(16 Marks)

b) Based on your answer in (a), assess the performance of the company.

(9 Marks)

[Total: 25 Marks]

QUESTION 2

a) Lola is helping her father, Mr Lulu to decide on which bond to invest. Below is the following information about two (2) bonds:

	Calum Bond	Scott Bond
Year of Issuance	2017	2017
Year of maturity	2027	2037
Coupon rate	5%	10%
Market price of the bond	RM 900	RM 1,100

i. If the required rate of return is 8%, calculate the value of each bond.

(8 Marks)

ii. Which bond should Mr Lulu invest in? Justify your answer.

(5 Marks)

b) Pudding Corporation paid a dividend of RM 1.50 last year. The dividend is expected to grow at an annual rate of 4% for year 1, 5% for year 2, 6% for year 3, 9% for year 4, and the growth rate is expected to be constant at 10% thereafter. The required rate of return is 12%.

i. Calculate today's value of stock for Pudding Corporation using the Variable Growth Model.

(10 Marks)

ii. Justify if it is worth purchasing Pudding Corporation stock, given that the stock's market price is RM 65.

(2 Marks)

[Total: 25 Marks]

QUESTION 3

Arab Holdings Berhad is considering two (2) mutually exclusive projects - Project A and Project B. Those two projects involve an investment cost of RM 500,000. The cost of capital is 9 percent, and the expected cash flow for each project is given below:

Year	Project A (RM)	Project B (RM)
1	200,000	180,000
2	200,000	200,000
3	200,000	220,000
4	200,000	240,000
5	200,000	260,000

a) Calculate for Project A and Project B on the following:

i. Payback Period

(8 Marks)

ii. Net Present Value

(10 Marks)

iii. Accounting Rate of Return

(4 Marks)

b) Based on the answer (a), which Project should Arab Holdings Berhad choose? Justify your answer.

(3 Marks)

[Total: 25 Marks]

END OF PART B

END OF QUESTION PAPER

Table 1: Future Value Interest Factor for RM 1.00 Compounded: FVIF r,n = $(1 + r)^t$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	16%	18%	20%	22%	24%	26%	28%	30%
1	1.0100	1.0200	1.0300	1.0400	1.0500	1.0600	1.0700	1.0800	1.0900	1.1000	1.1200	1.1400	1.1600	1.1800	1.2000	1.2200	1.2400	1.2600	1.2800	1.3000
2	1.0201	1.0404	1.0609	1.0816	1.1025	1.1236	1.1449	1.1664	1.1881	1.2100	1.2544	1.2996	1.3456	1.3924	1.4400	1.4884	1.5376	1.5876	1.6384	1.6900
3	1.0303	1.0612	1.0927	1.1249	1.1576	1.1910	1.2250	1.2597	1.2950	1.3310	1.4049	1.4815	1.5609	1.6430	1.7280	1.8158	1.9066	2.0004	2.0972	2.1970
4	1.0406	1.0824	1.1255	1.1699	1.2155	1.2625	1.3108	1.3605	1.4116	1.4641	1.5735	1.6890	1.8106	1.9388	2.0736	2.2153	2.3642	2.5205	2.6844	2.8561
5	1.0510	1.1041	1.1593	1.2167	1.2763	1.3382	1.4026	1.4693	1.5386	1.6105	1.7623	1.9254	2.1003	2.2878	2.4883	2.7027	2.9316	3.1758	3.4360	3.7129
6	1.0615	1.1262	1.1941	1.2653	1.3401	1.4185	1.5007	1.5869	1.6771	1.7716	1.9738	2.1950	2.4364	2.6996	2.9860	3.2973	3.6352	4.0015	4.3980	4.8268
7	1.0721	1.1487	1.2299	1.3159	1.4071	1.5036	1.6058	1.7138	1.8280	1.9487	2.2107	2.5023	2.8262	3.1855	3.5832	4.0227	4.5077	5.0419	5.6295	6.2749
8	1.0829	1.1717	1.2668	1.3686	1.4775	1.5938	1.7182	1.8509	1.9926	2.1436	2.4760	2.8526	3.2784	3.7589	4.2998	4.9077	5.5895	6.3528	7.2058	8.1573
9	1.0937	1.1951	1.3048	1.4233	1.5513	1.6895	1.8385	1.9990	2.1719	2.3579	2.7731	3.2519	3.8030	4.4355	5.1598	5.9874	6.9310	8.0045	9.2234	10.604
10	1.1046	1.2190	1.3439	1.4802	1.6289	1.7908	1.9672	2.1589	2.3674	2.5937	3.1058	3.7072	4.4114	5.2338	6.1917	7.3046	8.5944	10.086	11.806	13.786
11	1.1157	1.2434	1.3842	1.5395	1.7103	1.8983	2.1049	2.3316	2.5804	2.8531	3.4785	4.2262	5.1173	6.1759	7.4301	8.9117	10.657	12.708	15.112	17.922
12	1.1268	1.2682	1.4258	1.6010	1.7959	2.0122	2.2522	2.5182	2.8127	3.1384	3.8960	4.8179	5.9360	7.2876	8.9161	10.872	13.215	16.012	19.343	23.298
13	1.1381	1.2936	1.4685	1.6651	1.8856	2.1329	2.4098	2.7196	3.0658	3.4523	4.3635	5.4924	6.8858	8.5994	10.699	13.264	16.386	20.175	24.759	30.288
14	1.1495	1.3195	1.5126	1.7317	1.9799	2.2609	2.5785	2.9372	3.3417	3.7975	4.8871	6.2613	7.9875	10.147	12.839	16.182	20.319	25.421	31.691	39.374
15	1.1610	1.3459	1.5580	1.8009	2.0789	2.3966	2.7590	3.1722	3.6425	4.1772	5.4736	7.1379	9.2655	11.974	15.407	19.742	25.196	32.030	40.565	51.186
16	1.1726	1.3728	1.6047	1.8730	2.1829	2.5404	2.9522	3.4259	3.9703	4.5950	6.1304	8.1372	10.748	14.129	18.488	24.086	31.243	40.358	51.923	66.542
17	1.1843	1.4002	1.6528	1.9479	2.2920	2.6928	3.1588	3.7000	4.3276	5.0545	6.8660	9.2765	12.468	16.672	22.186	29.384	38.741	50.851	66.461	86.504
18	1.1961	1.4282	1.7024	2.0258	2.4066	2.8543	3.3799	3.9960	4.7171	5.5599	7.6900	10.5752	14.463	19.673	26.623	35.849	48.039	64.072	85.071	112.46
19	1.2081	1.4568	1.7535	2.1068	2.5270	3.0256	3.6165	4.3157	5.1417	6.1159	8.6128	12.0557	16.777	23.214	31.948	43.736	59.568	80.731	108.89	146.19
20	1.2202	1.4859	1.8061	2.1911	2.6533	3.2071	3.8697	4.6610	5.6044	6.7275	9.6463	13.7435	19.461	27.393	38.338	53.358	73.864	101.72	139.38	190.05
21	1.2324	1.5157	1.8603	2.2788	2.7860	3.3996	4.1406	5.0338	6.1088	7.4002	10.804	15.6676	22.574	32.324	46.005	65.096	91.592	128.17	178.41	247.06
22	1.2447	1.5460	1.9161	2.3699	2.9253	3.6035	4.4304	5.4365	6.6586	8.1403	12.100	17.8610	26.186	38.142	55.206	79.418	113.57	161.49	228.36	321.18
23	1.2572	1.5769	1.9736	2.4647	3.0715	3.8197	4.7405	5.8715	7.2579	8.9543	13.552	20.362	30.376	45.008	66.247	96.889	140.83	203.48	292.30	417.54
24	1.2697	1.6084	2.0328	2.5633	3.2251	4.0489	5.0724	6.3412	7.9111	9.8497	15.179	23.212	35.236	53.109	79.497	118.21	174.63	256.39	374.14	542.80
25	1.2824	1.6406	2.0938	2.6658	3.3864	4.2919	5.4274	6.8485	8.6231	10.835	17.000	26.462	40.874	62.669	95.396	144.21	216.54	323.05	478.90	705.64
30	1.3478	1.8114	2.4273	3.2434	4.3219	5.7435	7.6123	10.063	13.268	17.449	29.960	50.950	85.850	143.37	237.38	389.76	634.82	1025.9	1645.5	2620.0
35	1.4166	1.9999	2.8139	3.9461	5.5160	7.6861	10.677	14.785	20.414	28.102	52.800	98.100	180.31	328.00	590.67	1053.4	1861.1	3258.1	5653.9	9727.9
40	1.4889	2.2080	3.2620	4.8010	7.0400	10.286	14.974	21.725	31.409	45.259	93.051	188.88	378.72	750.38	1469.8	2847.0	5455.9	10347	19427	36119
50	1.6446	2.6916	4.3839	7.1067	11.467	18.420	29.457	46.902	74.358	117.39	289.00	700.23	1670.7	3927.4	9100.4	20797	46890	104358	229350	497929
60	1.8167	3.2810	5.8916	10.520	18.679	32.988	57.946	101.26	176.03	304.48	897.60	2595.9	7370.2	20555	56348	151911	402996	1052526	2707685	6864377

Table 2: Present Value Interest Factor for RM 1.00 Discounted: PVIF r,n = $1/(1 + r)^t$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	16%	18%	20%	22%	24%	26%	28%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8621	0.8475	0.8333	0.8197	0.8065	0.7937	0.7813	0.7692
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.7972	0.7695	0.7432	0.7182	0.6944	0.6719	0.6504	0.6299	0.6104	0.5917
3	0.9706	0.9423	0.9151	0.8890	0.8638	0.8396	0.8163	0.7938	0.7722	0.7513	0.7118	0.6750	0.6407	0.6086	0.5787	0.5507	0.5245	0.4999	0.4768	0.4552
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6355	0.5921	0.5523	0.5158	0.4823	0.4514	0.4230	0.3968	0.3725	0.3501
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5674	0.5194	0.4761	0.4371	0.4019	0.3700	0.3411	0.3149	0.2910	0.2693
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5066	0.4556	0.4104	0.3704	0.3349	0.3033	0.2751	0.2499	0.2274	0.2072
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4523	0.3996	0.3538	0.3139	0.2791	0.2486	0.2218	0.1983	0.1776	0.1594
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4039	0.3506	0.3050	0.2660	0.2326	0.2038	0.1789	0.1574	0.1388	0.1226
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3606	0.3075	0.2630	0.2255	0.1938	0.1670	0.1443	0.1249	0.1084	0.0943
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3220	0.2697	0.2267	0.1911	0.1615	0.1369	0.1164	0.0992	0.0847	0.0725
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.2875	0.2366	0.1954	0.1619	0.1346	0.1122	0.0938	0.0787	0.0662	0.0558
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2567	0.2076	0.1685	0.1372	0.1122	0.0920	0.0757	0.0625	0.0517	0.0429
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2292	0.1821	0.1452	0.1163	0.0935	0.0754	0.0610	0.0496	0.0404	0.0330
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2046	0.1597	0.1252	0.0985	0.0779	0.0618	0.0492	0.0393	0.0316	0.0254
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.1827	0.1401	0.1079	0.0835	0.0649	0.0507	0.0397	0.0312	0.0247	0.0195
16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1631	0.1229	0.0930	0.0708	0.0541	0.0415	0.0320	0.0248	0.0193	0.0150
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1456	0.1078	0.0802	0.0600	0.0451	0.0340	0.0258	0.0197	0.0150	0.0116
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799	0.1300	0.0946	0.0691	0.0508	0.0376	0.0279	0.0208	0.0156	0.0118	0.0089
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1161	0.0829	0.0596	0.0431	0.0313	0.0229	0.0168	0.0124	0.0092	0.0068
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.1037	0.0728	0.0514	0.0365	0.0261	0.0187	0.0135	0.0098	0.0072	0.0053
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.0926	0.0638	0.0443	0.0309	0.0217	0.0154	0.0109	0.0078	0.0056	0.0040
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.0826	0.0560	0.0382	0.0262	0.0181	0.0126	0.0088	0.0062	0.0044	0.0031
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0738	0.0491	0.0329	0.0222	0.0151	0.0103	0.0071	0.0049	0.0034	0.0024
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015	0.0659	0.0431	0.0284	0.0188	0.0126	0.0085	0.0057	0.0039	0.0027	0.0018
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923	0.0588	0.0378	0.0245	0.0160	0.0105	0.0069	0.0046	0.0031	0.0021	0.0014
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0334	0.0196	0.0116	0.0070	0.0042	0.0026	0.0016	0.0010	0.0006	0.0004
35	0.7059	0.5000	0.3554	0.2534	0.1813	0.1301	0.0937	0.0676	0.0490	0.0356	0.0189	0.0102	0.0055	0.0030	0.0017	0.0009	0.0005	0.0003	0.0002	0.0001
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0668	0.0460	0.0318	0.0221	0.0107	0.0053	0.0026	0.0013	0.0007	0.0004	0.0002	0.0001	0.0001	0.0000
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0543	0.0339	0.0213	0.0134	0.0085	0.0035	0.0014	0.0006	0.0003	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000
60	0.5504	0.3048	0.1697	0.0951	0.0535	0.0303	0.0173	0.0099	0.0057	0.0033	0.0011	0.0004	0.0001	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Table 3: Present Value Interest Factor for RM 1.00 Annuity Discounted: PVIFA r,n = [1-1/(1 + r)^n]/r

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	16%	18%	20%	22%	24%	26%	28%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.8929	0.8772	0.8621	0.8475	0.8333	0.8197	0.8065	0.7937	0.7813	0.7692
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.6901	1.6467	1.6052	1.5656	1.5278	1.4915	1.4568	1.4235	1.3916	1.3609
3	2.9410	2.8839	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4018	2.3216	2.2459	2.1743	2.1065	2.0422	1.9813	1.9234	1.8684	1.8161
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.0373	2.9137	2.7982	2.6901	2.5887	2.4936	2.4043	2.3202	2.2410	2.1662
5	4.8534	4.7135	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6048	3.4331	3.2743	3.1272	2.9906	2.8636	2.7454	2.6351	2.5320	2.4356
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.1114	3.8887	3.6847	3.4976	3.3255	3.1669	3.0205	2.8850	2.7594	2.6427
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.5638	4.2883	4.0386	3.8115	3.6046	3.4155	3.2423	3.0833	2.9370	2.8021
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	4.9676	4.6389	4.3436	4.0776	3.8372	3.6193	3.4212	3.2407	3.0758	2.9247
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.3282	4.9464	4.6065	4.3030	4.0310	3.7863	3.5655	3.3657	3.1842	3.0190
10	9.4713	8.9826	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.6502	5.2161	4.8332	4.4941	4.1925	3.9232	3.6819	3.4648	3.2689	3.0915
11	10.368	9.787	9.253	8.760	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	5.9377	5.4527	5.0286	4.6560	4.3271	4.0354	3.7757	3.5435	3.3351	3.1473
12	11.255	10.575	9.954	9.385	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.1944	5.6603	5.1971	4.7932	4.4392	4.1274	3.8514	3.6059	3.3868	3.1903
13	12.134	11.348	10.635	9.986	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.4235	5.8424	5.3423	4.9095	4.5327	4.2028	3.9124	3.6555	3.4272	3.2233
14	13.004	12.106	11.296	10.563	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.6282	6.0021	5.4675	5.0081	4.6106	4.2646	3.9616	3.6949	3.4587	3.2487
15	13.865	12.849	11.938	11.118	10.380	9.7122	9.1079	8.5595	8.0607	7.6061	6.8109	6.1422	5.5755	5.0916	4.6755	4.3152	4.0013	3.7261	3.4834	3.2682
16	14.718	13.578	12.561	11.652	10.838	10.106	9.4466	8.8514	8.3126	7.8237	6.9740	6.2651	5.6685	5.1624	4.7296	4.3567	4.0333	3.7509	3.5026	3.2832
17	15.562	14.292	13.166	12.166	11.274	10.477	9.7632	9.1216	8.5436	8.0216	7.1196	6.3729	5.7487	5.2223	4.7746	4.3908	4.0591	3.7705	3.5177	3.2948
18	16.398	14.992	13.754	12.659	11.690	10.828	10.059	9.3719	8.7556	8.2014	7.2497	6.4674	5.8178	5.2732	4.8122	4.4187	4.0799	3.7861	3.5294	3.3037
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.6036	8.9501	8.3649	7.3658	6.5504	5.8775	5.3162	4.8435	4.4415	4.0967	3.7985	3.5386	3.3105
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.8181	9.1285	8.5136	7.4694	6.6231	5.9288	5.3527	4.8696	4.4603	4.1103	3.8083	3.5458	3.3158
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.2922	8.6487	7.5620	6.6870	5.9731	5.3837	4.8913	4.4756	4.1212	3.8161	3.5514	3.3198
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.4424	8.7715	7.6446	6.7429	6.0113	5.4099	4.9094	4.4882	4.1300	3.8223	3.5558	3.3230
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.5802	8.8832	7.7184	6.7921	6.0442	5.4321	4.9245	4.4985	4.1371	3.8273	3.5592	3.3254
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.7066	8.9847	7.7843	6.8351	6.0726	5.4509	4.9371	4.5070	4.1428	3.8312	3.5619	3.3272
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.8226	9.0770	7.8431	6.8729	6.0971	5.4669	4.9476	4.5139	4.1474	3.8342	3.5640	3.3286
30	25.808	22.396	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.4269	8.0552	7.0027	6.1772	5.5168	4.9789	4.5338	4.1601	3.8424	3.5693	3.3321
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.567	9.6442	8.1755	7.0700	6.2153	5.5386	4.9915	4.5411	4.1644	3.8450	3.5708	3.3330
40	32.835	27.355	23.115	19.793	17.159	15.046	13.332	11.925	10.757	9.7791	8.2438	7.1050	6.2335	5.5482	4.9966	4.5439	4.1659	3.8458	3.5712	3.3332
50	39.196	31.424	25.730	21.482	18.256	15.762	13.801	12.233	10.962	9.9148	8.3045	7.1327	6.2463	5.5541	4.9995	4.5452	4.1666	3.8461	3.5714	3.3333
60	44.955	34.761	27.676	22.623	18.929	16.161	14.039	12.377	11.048	9.9672	8.3240	7.1401	6.2492	5.5553	4.9999	4.5454	4.1667	3.8462	3.5714	3.3333

Table 4: Future Value Interest Factor for RM 1.00 Annuity Compounded: FVIFA r,n = $[(1 + r)^t - 1]/r$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	12%	14%	16%	18%	20%	22%	24%	26%	28%	30%
1	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
2	2.0100	2.0200	2.0300	2.0400	2.0500	2.0600	2.0700	2.0800	2.0900	2.1000	2.1200	2.1400	2.1600	2.1800	2.2000	2.2200	2.2400	2.2600	2.2800	2.3000
3	3.0301	3.0604	3.0909	3.1216	3.1525	3.1836	3.2149	3.2464	3.2781	3.3100	3.3744	3.4396	3.5056	3.5724	3.6400	3.7084	3.7776	3.8476	3.9184	3.9900
4	4.0604	4.1216	4.1836	4.2465	4.3101	4.3746	4.4399	4.5061	4.5731	4.6410	4.7793	4.9211	5.0665	5.2154	5.3680	5.5242	5.6842	5.8480	6.0156	6.1870
5	5.1010	5.2040	5.3091	5.4163	5.5256	5.6371	5.7507	5.8666	5.9847	6.1051	6.3528	6.6101	6.8771	7.1542	7.4416	7.7396	8.0484	8.3684	8.6999	9.0431
6	6.1520	6.3081	6.4684	6.6330	6.8019	6.9753	7.1533	7.3359	7.5233	7.7156	8.1152	8.5355	8.9775	9.4420	9.9299	10.442	10.980	11.544	12.136	12.756
7	7.2135	7.4343	7.6625	7.8983	8.1420	8.3938	8.6540	8.9228	9.2004	9.4872	10.089	10.730	11.414	12.142	12.916	13.740	14.615	15.546	16.534	17.583
8	8.2857	8.5830	8.8923	9.2142	9.5491	9.8975	10.260	10.637	11.028	11.436	12.300	13.233	14.240	15.327	16.499	17.762	19.123	20.588	22.163	23.858
9	9.3685	9.7546	10.159	10.583	11.027	11.491	11.978	12.488	13.021	13.579	14.776	16.085	17.519	19.086	20.799	22.670	24.712	26.940	29.369	32.015
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	17.549	19.337	21.321	23.521	25.959	28.657	31.643	34.945	38.593	42.619
11	11.567	12.169	12.808	13.486	14.207	14.972	15.784	16.645	17.560	18.531	20.655	23.045	25.733	28.755	32.150	35.962	40.238	45.031	50.398	56.405
12	12.683	13.412	14.192	15.026	15.917	16.870	17.888	18.977	20.141	21.384	24.133	27.271	30.850	34.931	39.581	44.874	50.895	57.739	65.510	74.327
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	28.029	32.089	36.786	42.219	48.497	55.746	64.110	73.751	84.853	97.625
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	32.393	37.581	43.672	50.818	59.196	69.010	80.496	93.926	109.61	127.91
15	16.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	37.280	43.842	51.660	60.965	72.035	85.192	100.82	119.35	141.30	167.29
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	42.753	50.980	60.925	72.939	87.442	104.93	126.01	151.38	181.87	218.47
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	48.884	59.118	71.673	87.068	105.93	129.02	157.25	191.73	233.79	285.01
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	55.750	68.394	84.141	103.74	128.12	158.40	195.99	242.59	300.25	371.52
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.159	63.440	78.969	98.603	123.41	154.74	194.25	244.03	306.66	385.32	483.97
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.275	72.052	91.025	115.38	146.63	186.69	237.99	303.60	387.39	494.21	630.17
21	23.239	25.783	28.676	31.969	35.719	39.993	44.865	50.423	56.765	64.002	81.699	104.77	134.84	174.02	225.03	291.35	377.46	489.11	633.59	820.22
22	24.472	27.299	30.537	34.248	38.505	43.392	49.006	55.457	62.873	71.403	92.503	120.44	157.41	206.34	271.03	356.44	469.06	617.28	812.00	1067.3
23	25.716	28.845	32.453	36.618	41.430	46.996	53.436	60.893	69.532	79.543	104.60	138.30	183.60	244.49	326.24	435.86	582.63	778.77	1040.4	1388.5
24	26.973	30.422	34.426	39.083	44.502	50.816	58.177	66.765	76.790	88.497	118.16	158.66	213.98	289.49	392.48	532.75	723.46	982.25	1332.7	1806.0
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.347	133.33	181.87	249.21	342.60	471.98	650.96	898.09	1238.6	1706.8	2348.8
30	34.785	40.568	47.575	56.085	66.439	79.058	94.461	113.28	136.31	164.49	241.33	356.79	530.31	790.95	1181.9	1767.1	2640.9	3942.0	5873.2	8730.0
35	41.660	49.994	60.462	73.652	90.320	111.43	138.24	172.32	215.71	271.02	431.66	693.57	1120.7	1816.7	2948.3	4783.6	7750.2	12527	20189	32423
40	48.886	60.402	75.401	95.026	120.80	154.76	199.64	259.06	337.88	442.59	767.09	1342.0	2360.8	4163.2	7343.9	12937	22729	39793	69377	120393
50	64.463	84.579	112.80	152.67	209.35	290.34	406.53	573.77	815.08	1163.9	2400.0	4994.5	10436	21813	45497	94525	195373	401374	819103	1659761
60	81.670	114.052	163.05	237.99	353.58	533.13	813.52	1253.2	1944.8	3034.8	7471.6	18535	46058	114190	281733	690501	1679147	4048172	9670301	22881254

LIST OF FORMULAS

1) $Current\ Ratio = \frac{Current\ asset}{Current\ liabilities}$
2) $Quick\ Ratio = \frac{Current\ asset - inventory}{Current\ liabilities}$
3) $Average\ Collection\ Period = \frac{Accounts\ receivables}{Sales}\ x\ 360$
4) $Account\ receivables\ turnover = \frac{Sales}{Accounts\ Receivable}$
5) $Inventory\ turnover = \frac{COGS}{Inventory}$
6) $Fixed\ asset\ turnover = \frac{Sales}{Fixed\ asset}$
7) $Total\ asset\ turnover = \frac{Sales}{Total\ asset}$
8) $Gross\ Profit\ Margin = \frac{Gross\ Profit}{Sales}$
9) $Operating\ Profit\ Margin = \frac{EBIT}{Sales}$
10) $Net\ Profit\ Margin = \frac{Net\ Profit}{Sales}$
11) $Return\ on\ Asset = \frac{Net\ Profit}{Total\ Asset}$
12) $Return\ on\ equity = \frac{Net\ Profit}{Total\ Equity}$
13) $Debt\ ratio = \frac{Total\ liabilities}{Total\ asset}$
14) $Debt\ to\ equity\ ratio = \frac{Long\ Term\ Liability}{Total\ Equity}$
15) $Times\ interest\ earned = \frac{EBIT}{Interest}$
16) $PV = FV\left(PVIF_{\frac{k}{m},\ nxm}\right)$
17) $FV = PV\left(FVIF_{\frac{k}{m},\ nxm}\right)$
18) $PVIFA = A\left(PVIFA_{\frac{k}{m},\ nxm}\right)$
19) $FVIFA = A\left(FVIFA_{\frac{k}{m},\ nxm}\right)$
20) $Vs = \frac{D}{K}$
21) $Vs = \frac{D_o(1+g)}{k-g}$, OR $Vs = \frac{D_1}{k-g}$
22) $D_n = D_{n-1}\ (1+g)$

23) $SP_n = \frac{D_n\,(1+g)}{k-g}$

24) $Vb = \frac{c}{m}\left(PVIFA_{\frac{k}{m}\,,nxm}\right) + PV\ \left(PVIF_{\frac{k}{m},\ nxm}\right)$

25) $CY = \frac{c\%\ x\ PV}{Vb}$

26) $YTM = \frac{\left[\frac{c\%\ x\ PV}{m}\right]+\left[\frac{PV-MP}{n\ x\ m}\right]}{\left[\frac{PV+MP}{2}\right]}$

27) $YTC\ = \frac{\left[\frac{c\%\ x\ PV}{m}\right]+\left[\frac{CP-MP}{n\ x\ m}\right]}{\left[\frac{CP+MP}{2}\right]}$

28) $PP = Year\ of\ Full\ Recovery + \left(\frac{Investment-a}{b}\right)$

29) $NPV = (\sum CF\ x\ PVIF_{k,n}) - Investment$

30) $AROR = \left(\frac{Average\ Cash\ Flow}{Investment}\right) x\ 100$

31) $K_{CAPM} = rf\ +\ \beta\ (rm - rf)$