

**SULIT**



**KEMENTERIAN PENDIDIKAN TINGGI  
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI**

**BAHAGIAN PEPERIKSAAN DAN PENILAIAN  
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI  
KEMENTERIAN PENDIDIKAN TINGGI**

**JABATAN PERDAGANGAN**

**PEPERIKSAAN AKHIR**

**SESI II : 2022/2023**

**DPB50113: BUSINESS FINANCE**

**TARIKH : 14 JUN 2023**

**MASA : 8.30 PG – 10.30 PG (2 JAM)**

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Kertas ini mengandungi **SEPULUH (10)** halaman bercetak.

Struktur (4 soalan)

Dokumen sokongan yang disertakan : Formula dan Jadual PVIF

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**JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN**

(CLO yang tertera hanya sebagai rujukan)

**SULIT**

**INSTRUCTION:**

This section consists of **FOUR (4)** structured questions. Answer **ALL** questions.

**ARAHAN:**

*Bahagian ini mengandungi EMPAT (4) soalan struktur. Jawab SEMUA soalan.*

**QUESTION 1****SOALAN 1**

- CLO1 (a) State **FOUR (4)** responsibilities of a financial manager in a company.  
*Nyatakan EMPAT (4) tanggungjawab seorang pengurus kewangan dalam sebuah syarikat.*

[4 marks]

[4 markah]

- CLO1 (b) Mr Sol Sol, a risk averse investor is considering two possible investments. Below is the information he gathered for two related investments:  
*En. Sol Sol, pelabur yang mengelakkan risiko sedang mempertimbangkan dua kemungkinan pelaburan. Di bawah ialah maklumat yang beliau kumpulkan untuk kedua-dua pelaburan tersebut:*

State of economy <i>Keadaan ekonomi</i>	Probability <i>Kebarangkalian</i>	Rate of returns (RM) <i>Kadar pulangan</i>	
		Stock Maggi <i>Saham Maggi</i>	Stock Cintan <i>Saham Cintan</i>
Recession <i>Kemelesetan</i>	0.20	12%	10%
Normal <i>Biasa</i>	0.55	15%	13%
Growth <i>Berkembang</i>	0.25	18%	16%

- i. Calculate the expected return and standard and deviation for both stocks.  
*Bandingkan jangkaan pulangan dan sisihan piawai bagi kedua-dua stok.*

[9 marks]

[9 markah]

- ii. Choose the investment that has low risk by using the coefficient of variation.  
*Pilih pelaburan yang berisiko rendah dengan menggunakan pekali variasi bagi kedua-dua stok.*

[3 marks]

[3 markah]

- CLO1 (c) A pro forma income statement of Malim Berhad, based on the output level of 1,500 units is shown below:

*Pro forma penyata pendapatan Malim Berhad, berdasarkan tahap pengeluaran 1,500 unit ditunjukkan di bawah:*

	RM
Sales <i>Jualan</i>	52,500
Variable cost <i>Kos berubah</i>	(31,500)
Fixed cost <i>Kos tetap</i>	(10,000)
<b>Earnings before interest and taxes</b> <i>Pendapatan sebelum faedah dan cukai</i>	<b>11,000</b>
Interest <i>Faedah</i>	(750)
<b>Earning before tax</b> <i>Pendapatan sebelum cukai</i>	<b>10,250</b>
Taxes (28%) <i>Cukai (28%)</i>	(2,870)
<b>Net income</b> <i>Pendapatan bersih</i>	<b>7,380</b>

Calculate **THREE (3)** degrees of leverage that may be faced by the company based on the pro forma income statement above.

*Kirakan TIGA (3) darjah leverage yang mungkin dihadapi oleh syarikat berdasarkan pro forma penyata kewangan di atas.*

[9 marks]

[9 markah]

**QUESTION 2****SOALAN 2**

- CLO1 (a) Explain **TWO (2)** sources of short-term financing.

*Terangkan DUA (2) sumber pembiayaan jangka masa pendek.*

[6 marks]

[6 markah]

- CLO1 (b) Kundang Berhad is thinking of buying a new sophisticated machine in order to meet higher demand of product produced by the company. Below is information of existing and new proposed machine.

Kundang Berhad sedang memikirkan untuk membeli sebuah mesin baharu yang canggih bagi memenuhi permintaan yang tinggi terhadap produk keluaran syarikat. Di bawah adalah maklumat mesin sedia ada dan mesin baru yang dicadangkan.

	Existing Machine <i>Mesin sedia ada</i>	New Machine <i>Mesin baru</i>
Purchase price <i>Harga beli</i>	RM400,000	RM600,000
Shipping costs <i>Kos pengangkutan</i>	-	RM30,000
Expected life <i>Jangka hayat</i>	10 years / <i>tahun</i>	7 years / <i>tahun</i>
Age <i>Umur</i>	5 years / <i>tahun</i>	-
Current scrap value <i>Nilai skrap semasa</i>	RM100,000	-
Operating expenses <i>Kos operasi</i>	RM50,000	RM30,000
Sales <i>Jualan</i>	RM500,000	RM650,000
Electricity <i>Elektrik</i>	RM20,000	RM30,000

The assets are depreciated using straight line method. The corporate tax rate is 25%.

*Aset disusutnilaikan menggunakan kaedah garis lurus. Kadar cukai korporat ialah 25%.*

- i. Calculate initial outlay for new machine.

*Kirakan modal permulaan untuk mesin baharu.*

[9 marks]  
[9 markah]

- ii. Compute annual differential cash flows.

*Kirakan perbezaan aliran tunai tahunan.*

[6 marks]  
[6 markah]

CLO1 (c)

	Existing Machine	New Machine
Net Present Value	RM130,000	RM137,000
Payback Period	3.7 Years	3.5 years
Profitability Index	1.21 x	1.30 x

Based on information given, should the company proceed with its plan using a new machine? Explain your reason.

*Berdasarkan maklumat yang diberikan, patutkah syarikat meneruskan rancangannya menggunakan mesin baru? Terangkan alasan anda.*

[4 marks]  
[4 markah]

**QUESTION 3****SOALAN 3**

- CLO2 a) List **FOUR(4)** purposes of financial analysis.  
*Senaraikan EMPAT (4) tujuan analisis kewangan.*

[4 marks]

[4 markah]

- CLO2 b) Fill in **FAVOURABLE (F)** or **UNFAVOURABLE (UF)** for the following ratios between company and industry:

*Isikan "FAVOURABLE(F)" atau "UNFAVOURABLE (UF)" bagi nisbah antara syarikat dan industri yang berikut:*

	<b>Company's ratio</b> <i>Nisbah syarikat</i>	<b>Industry average</b> <i>Purata industri</i>	<b>Comment</b> <b>(F/UF)</b>
Quick ratio <i>Nisbah cepat</i>	1.9x	2.0x	
Total assets turnover <i>Pusing ganti jumlah aset</i>	1.5x	1.2x	
Average collection period <i>Tempoh pengumpulan purata</i>	36 days	40 days	
Fixed assets turnover <i>Pusing ganti aset tetap</i>	1.8x	1.4x	
Inventory turnover <i>Pusing ganti inventori</i>	2.1x	2.5x	
Debt ratio <i>Nisbah hutang</i>	61.3%	50%	
Gross profit margin <i>Margin untung kasar</i>	40%	41%	
Return on equity <i>Pulangan atas jumlah ekuiti</i>	9.6%	10%	
Return on asset <i>Pulangan atas jumlah aset</i>	3.6%	4.0%	

[9 marks]

[9 markah]

- CLO2 c) The table below shows the Income Statement and Statement of Financial Position for two companies.

*Jadual di bawah menunjukkan Penyata Pendapatan dan Penyata Kedudukan Kewangan bagi dua syarikat.*

ITEM <i>PERKARA</i>	POWER TREND SDN BHD	PERFECT BOUTIQUE SDN BHD
Sales <i>Jualan</i>	RM800,000	RM5,625,000
Net Income <i>Pendapatan bersih</i>	RM35,000	RM45,000
Total assets <i>Jumlah aset</i>	RM130,000	(iii)
Total assets turnover <i>Jumlah pusing ganti aset</i>	6.15X	(iv)
Net profit margin <i>Margin keuntungan bersih</i>	(i)	0.8%
Return on total assets <i>Pulangan atas jumlah aset</i>	(ii)	4%

Find the values represented by (i) to (iv) by showing your calculation.

*Cari nilai yang diwakili oleh (i) hingga (iv) dengan menunjukkan pengiraan anda.*

[12 marks]  
[12 markah]

**QUESTION 4****SOALAN 4**

- CLO2 a) State **FOUR (4)** facilities in marketable securities.  
*Kenalpasti EMPAT (4) kemudahan dalam sekuriti boleh pasar.*
- [4 marks]  
[4 markah]
- CLO2 b) Teratai Bhd. is considering a major change in credit policy by extending credit to riskier class of customers and increasing their credit period from net 40 days to net 55 days. They do not expect the bad debts losses on their current customers to change. Based on the following information, should they go ahead with the change in credit policy.  
*Teratai Bhd. sedang mempertimbangkan perubahan besar dalam polisi kredit dengan melanjutkan kredit kepada kelas pelanggan yang lebih berisiko dan meningkatkan tempoh kredit mereka daripada 40 hari bersih kepada 55 hari bersih. Mereka tidak menjangkakan kerugian hutang lapuk pada pelanggan semasa mereka akan berubah. Berdasarkan maklumat berikut, adakah mereka perlu meneruskan perubahan dalam dasar kredit.*

Current sales <i>Jualan semasa</i>	RM12 500 000
Additional sales <i>Pertambahan jualan</i>	RM1 500 000
Contribution margin <i>Margin sumbangan</i>	30%
Percentage of bad debt on additional sales <i>Peratus kerugian hutang lapuk ke atas pertambahan jualan</i>	10%
Current average collection period <i>Purata tempoh kutipan semasa</i>	40 days
New average collection period <i>Purata tempoh kutipan baharu</i>	55 days
Additional investment in inventory <i>Pertambahan pelaburan dalam inventori</i>	RM500 000



Additional investment in inventory <i>Pertambahan pelaburan dalam inventori</i>	RM500 000
Pre-tax required rate of return <i>Kadar pulangan yang diperlukan sebelum cukai</i>	16%

Encik Malek, a financial manager in Teratai Berhad, had only finished calculating the change in profit of RM300,000 and could not complete finishing the Marginal Analysis due to a personal reason. Please help the company to complete the Marginal Analysis by:

*Encik Malek, pengurus kewangan di Teratai Berhad hanya selesai mengira perubahan keuntungan sebanyak RM300,000 dan tidak dapat menyelesaikan Analisis Marginal atas sebab peribadi. Sila bantu syarikat melengkapkan Analisis Marginal dengan:*

- i. Compute the additional cost in account receivables and inventory.

*Kira kos tambahan dalam akaun belum terima dan inventori.*

[9 marks]

[9 markah]

- ii. Calculate net change in profit and provide a decision for Teratai Mekar Berhad whether it should implement the changes policy or not. Why?

*Kira perubahan bersih dalam keuntungan dan sediakan keputusan kepada Teratai Mekar Berhad samada ia patut melaksanakan perubahan polisi atau tidak. Kenapa?*

[6 marks]

[6 markah]

CLO2

- c) Pallas Jazz recorded an annual sale of 500, 000 pairs of shoes every year. The purchase price is RM2 and the carrying cost is 20% of the purchase price. The ordering cost is RM90 per order. The company's safety stock is 1000 pairs. The delivery period will take 7 days by assuming that the company operates 50 weeks a year.

Based on this information, determine the quantities to be ordered (EOQ) and reorder level should be made.

*Pallas Jazz merekodkan jualan tahunan sebanyak 500,000 pasang kasut setiap tahun. Harga belian ialah RM2 dan kos bawaan ialah 20% daripada harga belian. Kos tempahan ialah RM90 setiap pesanan. Stok keselamatan syarikat ialah 1000 pasang. Tempoh penghantaran akan mengambil masa 7 hari dengan andaian bahawa syarikat beroperasi 50 minggu setahun.*

*Berdasarkan maklumat ini, tentukan kuantiti yang hendak dipesan (EOQ) dan tahap tempahan semula yang perlu dibuat.*

[6 marks]

[6 markah]

**END OF QUESTIONS**

**SOALAN TAMAT**

Table A-4 Present Value Interest Factors for a One-Dollar Annuity Discounted at  $k$  Percent for  $n$  Periods:  $PVIFA = [1 - 1/(1 + k)^n] / k$

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7652
2	1.9704	1.9416	1.9135	1.8861	1.8594	1.8334	1.8080	1.7833	1.7591	1.7355	1.7125	1.6901	1.6681	1.6467	1.6257	1.6052	1.5278	1.4568	1.4400	1.3609
3	2.9410	2.8939	2.8286	2.7751	2.7232	2.6730	2.6243	2.5771	2.5313	2.4869	2.4437	2.4018	2.3612	2.3216	2.2832	2.2459	2.1065	1.9813	1.9520	1.8161
4	3.9020	3.8077	3.7171	3.6289	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.5887	2.4043	2.3616	2.1662
5	4.8534	4.7155	4.5797	4.4518	4.3295	4.2124	4.1002	3.9927	3.8897	3.7908	3.6959	3.6048	3.5172	3.4331	3.3522	3.2743	2.9906	2.7454	2.6893	2.4256
6	5.7955	5.6014	5.4172	5.2421	5.0757	4.9173	4.7665	4.6229	4.4859	4.3553	4.2305	4.1114	3.9975	3.8887	3.7845	3.6847	3.3255	3.0205	2.9514	2.6427
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2054	5.0330	4.8694	4.7122	4.5608	4.4226	4.2863	4.1604	4.0386	3.6046	3.2423	3.1611	2.8021
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9743	5.7466	5.5248	5.3049	5.1461	4.9876	4.7988	4.6599	4.4873	4.3436	3.8372	3.4212	3.3289	2.9247
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5162	6.2469	5.9902	5.7509	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.0310	3.5655	3.4631	3.0190
10	9.4713	8.9626	8.5302	8.1109	7.7217	7.3601	7.0236	6.7101	6.4177	6.1446	5.8892	5.6502	5.4262	5.2161	5.0188	4.8332	4.1925	3.6819	3.5705	3.0515
11	10.368	9.7968	9.2526	8.7605	8.3064	7.8889	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6868	5.4527	5.2337	5.0286	4.3271	3.7757	3.6564	3.1473
12	11.255	10.575	9.9540	9.3851	8.8693	8.3858	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.4392	3.8514	3.7251	3.1903
13	12.134	11.348	10.639	9.9856	9.3936	8.8527	8.3577	7.9038	7.4869	7.1034	6.7499	6.4235	6.1218	5.8424	5.5831	5.3423	4.5327	3.9124	3.7801	3.2233
14	13.004	12.106	11.296	10.563	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	4.6106	3.9616	3.8241	3.2487
15	13.865	12.849	11.938	11.118	10.340	9.7122	9.1079	8.5595	8.0607	7.6361	7.1909	6.8169	6.4624	6.1422	5.8474	5.5755	4.6013	3.8593	3.7158	3.2682
16	14.718	13.578	12.561	11.652	10.838	10.106	9.4466	8.8544	8.3126	7.8237	7.3782	6.9740	6.6039	6.2651	5.9542	5.6695	4.7296	4.0333	3.8874	3.2632
17	15.562	14.292	13.166	12.166	11.274	10.477	9.7532	9.1216	8.5438	8.0216	7.5688	7.1456	6.7251	6.3729	6.0472	5.7487	4.7746	4.0591	3.9099	3.2948
18	16.398	14.962	13.764	12.659	11.690	10.828	10.069	9.3719	8.7556	8.2014	7.7016	7.2637	6.8399	6.4674	6.1280	5.8178	4.8122	4.0798	3.9279	3.3037
19	17.226	15.678	14.324	13.134	12.085	11.168	10.346	9.6036	8.9501	8.3649	7.8383	7.3658	6.9380	6.5504	6.1982	5.8775	4.8436	4.0867	3.9421	3.3105
20	18.046	16.361	14.877	13.590	12.462	11.470	10.584	9.8101	9.1285	8.5136	7.9533	7.4554	7.0240	6.6231	6.2593	5.9208	4.8696	4.1103	3.9639	3.3158
21	18.857	17.011	15.415	14.029	12.821	11.764	10.896	10.017	9.2922	8.6487	8.0751	7.5520	7.1016	6.6870	6.3125	5.9731	4.8943	4.1212	3.9631	3.3198
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.0113	4.9094	4.1300	3.9705	3.3230
23	20.456	18.292	16.444	14.857	13.489	12.303	11.272	10.371	9.5802	8.8832	8.2664	7.7184	7.2237	6.7921	6.3988	6.0442	4.9245	4.1371	3.9764	3.3254
24	21.243	18.914	16.936	15.247	13.799	12.569	11.469	10.529	9.7966	9.0847	8.4481	7.8843	7.3829	6.9351	6.5333	6.1726	4.9371	4.1428	3.9811	3.3272
25	22.023	19.523	17.415	15.622	14.094	12.783	11.654	10.675	9.9226	9.2770	8.6217	7.9431	7.3300	6.8729	6.4641	6.0971	4.9476	4.1474	3.9849	3.3286
30	25.868	22.356	19.600	17.292	15.372	13.765	12.409	11.258	10.274	9.4269	8.6938	8.0522	7.4957	7.0027	6.5660	6.1772	4.9768	4.1601	3.9950	3.3321
35	29.409	24.969	21.487	18.665	16.374	14.498	12.948	11.865	10.567	9.6442	8.8522	8.1765	7.5856	7.0700	6.6166	6.2163	4.9945	4.1644	3.9984	3.3330
40	32.895	27.365	23.115	19.793	17.159	15.046	13.392	11.925	10.757	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.2305	4.9966	4.1659	3.9995	3.3332
50	38.166	31.424	25.730	21.482	18.266	15.762	13.801	12.233	10.962	9.9448	9.0417	8.3045	7.6752	7.1327	6.6605	6.2463	4.9986	4.1668	3.9999	3.3333

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

Period	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%	16%	20%	24%	25%	30%
1	0.9901	0.9804	0.9709	0.9615	0.9524	0.9434	0.9346	0.9259	0.9174	0.9091	0.9009	0.8929	0.8850	0.8772	0.8696	0.8621	0.8333	0.8065	0.8000	0.7692
2	0.9803	0.9612	0.9426	0.9246	0.9070	0.8900	0.8734	0.8573	0.8417	0.8264	0.8116	0.7972	0.7831	0.7695	0.7561	0.7432	0.6944	0.6504	0.6400	0.5917
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	0.5787	0.5245	0.5120	0.4552
4	0.9610	0.9238	0.8885	0.8548	0.8227	0.7921	0.7629	0.7350	0.7084	0.6830	0.6587	0.6355	0.6133	0.5921	0.5718	0.5523	0.4823	0.4230	0.4096	0.3501
5	0.9515	0.9057	0.8626	0.8219	0.7835	0.7473	0.7130	0.6806	0.6499	0.6209	0.5935	0.5674	0.5428	0.5194	0.4972	0.4761	0.4019	0.3341	0.3277	0.2693
6	0.9420	0.8880	0.8375	0.7903	0.7462	0.7050	0.6663	0.6302	0.5963	0.5645	0.5346	0.5066	0.4803	0.4556	0.4323	0.4104	0.3349	0.2751	0.2621	0.2072
7	0.9327	0.8706	0.8131	0.7599	0.7107	0.6651	0.6227	0.5835	0.5470	0.5132	0.4817	0.4523	0.4251	0.3996	0.3759	0.3538	0.2791	0.2218	0.2097	0.1594
8	0.9235	0.8535	0.7894	0.7307	0.6768	0.6274	0.5820	0.5403	0.5019	0.4665	0.4339	0.4039	0.3762	0.3506	0.3269	0.3050	0.2326	0.1789	0.1678	0.1226
9	0.9143	0.8368	0.7664	0.7026	0.6446	0.5919	0.5439	0.5002	0.4604	0.4241	0.3909	0.3606	0.3329	0.3075	0.2843	0.2630	0.1938	0.1443	0.1342	0.0943
10	0.9053	0.8203	0.7441	0.6756	0.6139	0.5584	0.5083	0.4632	0.4224	0.3855	0.3522	0.3220	0.2946	0.2697	0.2472	0.2267	0.1615	0.1164	0.1074	0.0725
11	0.8963	0.8043	0.7224	0.6496	0.5847	0.5268	0.4751	0.4289	0.3875	0.3505	0.3173	0.2875	0.2607	0.2366	0.2149	0.1954	0.1346	0.0938	0.0859	0.0558
12	0.8874	0.7885	0.7014	0.6246	0.5568	0.4970	0.4440	0.3971	0.3555	0.3186	0.2858	0.2567	0.2307	0.2076	0.1869	0.1685	0.1122	0.0757	0.0687	0.0429
13	0.8787	0.7730	0.6810	0.6006	0.5303	0.4688	0.4150	0.3677	0.3262	0.2897	0.2575	0.2292	0.2042	0.1821	0.1625	0.1452	0.0935	0.0610	0.0550	0.0330
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3876	0.3405	0.2982	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413	0.1252	0.0779	0.0492	0.0440	0.0254
15	0.8613	0.7430	0.6419	0.5553	0.4810	0.4173	0.3624	0.3152	0.2745	0.2394	0.2090	0.1827	0.1599	0.1401	0.1229	0.1079	0.0649	0.0397	0.0352	0.0195
16	0.8528	0.7284	0.6232	0.5339	0.4581	0.3936	0.3387	0.2919	0.2519	0.2176	0.1883	0.1631	0.1415	0.1229	0.1069	0.0930	0.0541	0.0320	0.0281	0.0150
17	0.8444	0.7142	0.6050	0.5134	0.4363	0.3714	0.3166	0.2703	0.2311	0.1978	0.1696	0.1456	0.1252	0.1078	0.0929	0.0802	0.0451	0.0258	0.0225	0.0116
18	0.8360	0.7002	0.5874	0.4936	0.4155	0.3503	0.2959	0.2502	0.2120	0.1799	0.1528	0.1300	0.1108	0.0946	0.0808	0.0691	0.0376	0.0208	0.0180	0.0089
19	0.8277	0.6864	0.5703	0.4745	0.3957	0.3305	0.2785	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703	0.0596	0.0313	0.0158	0.0144	0.0068
20	0.8195	0.6730	0.5537	0.4564	0.3769	0.3118	0.2584	0.2145	0.1784	0.1486	0.1240	0.1037	0.0868	0.0728	0.0611	0.0514	0.0261	0.0135	0.0115	0.0053
21	0.8114	0.6598	0.5375	0.4388	0.3589	0.2942	0.2415	0.1987	0.1637	0.1351	0.1117	0.0926	0.0768	0.0638	0.0531	0.0443	0.0217	0.0109	0.0092	0.0040
22	0.8034	0.6468	0.5219	0.4220	0.3418	0.2775	0.2257	0.1839	0.1502	0.1228	0.1007	0.0826	0.0680	0.0560	0.0462	0.0382	0.0181	0.0088	0.0074	0.0031
23	0.7954	0.6342	0.5067	0.4057	0.3256	0.2618	0.2109	0.1703	0.1378	0.1117	0.0907	0.0738	0.0601	0.0491	0.0402	0.0329	0.0151	0.0071	0.0059	0.0024
24	0.7876	0.6217	0.4919	0.3901	0.3101	0.2470	0.1971	0.1577	0.1264	0.1015	0.0817	0.0659	0.0532	0.0431	0.0349	0.0284	0.0126	0.0057	0.0047	0.0018
25	0.7798	0.6095	0.4776	0.3751	0.2953	0.2330	0.1842	0.1460	0.1160	0.0923	0.0736	0.0588	0.0471	0.0378	0.0304	0.0245	0.0105	0.0046	0.0038	0.0014
30	0.7419	0.5521	0.4120	0.3083	0.2314	0.1741	0.1314	0.0994	0.0754	0.0573	0.0437	0.0334	0.0256	0.0196	0.0151	0.0116	0.0042	0.0016	0.0012	*
35	0.7059	0.5009	0.3554	0.2534	0.1813	0.1301	0.0937	0.0676	0.0490	0.0356	0.0259	0.0189	0.0139	0.0102	0.0075	0.0055	0.0017	0.0005	*	*
36	0.6989	0.4902	0.3450	0.2437	0.1727	0.1227	0.0875	0.0626	0.0449	0.0323	0.0234	0.0169	0.0123	0.0089	0.0065	0.0048	0.0014	*	*	*
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0688	0.0460	0.0318	0.0221	0.0154	0.0107	0.0075	0.0053	0.0037	0.0026	0.0007	*	*	*
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0640	0.0339	0.0213	0.0134	0.0085	0.0054	0.0035	0.0022	0.0014	0.0009	0.0006	*	*	*	*

## FORMULA BUSINESS FINANCE

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

$$k = [P_1 k_1] + [P_2 k_2] + \dots + [P_i k_i]$$

$$\sigma^2 = \sum P_i (k_i - k)^2$$

$$\sigma = \sqrt{\sum P_i (k_i - k)^2}$$

$$cv = \sigma / k$$

$$CR = CA / CL$$

$$QR = \frac{CA - \text{Inventory} - \text{Prepaid Exp}}{CL}$$

$$CR = \frac{\text{Cash} + \text{Cash Equivalent}}{CL}$$

$$ITO = \frac{COGS}{\text{Inventory}}$$

$$ACP = \frac{A/C \text{ Rec} \times 365 \text{ days}}{ACS}$$

$$FATO = \frac{\text{Sales}}{FA}$$

$$TATO = \frac{\text{Sales}}{TA}$$

$$DR = \frac{TL}{TA} \times 100\%$$

$$DTE = \frac{TL}{CE} \times 100\%$$

$$TIE = \frac{EBIT}{\text{Interest}}$$

$$GPM = \frac{GP}{\text{Sales}} \times 100\%$$

$$OPM = \frac{EBIT}{\text{Sales}} \times 100\%$$

$$NPM = \frac{NIACSH}{\text{Sales}} \times 100\%$$

$$ROA = \frac{NIACSH}{TA} \times 100\%$$

$$ROE = \frac{NIACSH}{CE} \times 100\%$$

$$EPS = \frac{NIACSH}{\text{No of CS}} \times 100\%$$

$$EAC = \left[ \frac{a}{(1-a)} \times \frac{360}{(c-b)} \right] \times 100\%$$

$$EOQ = \sqrt{\frac{2(S)(O)}{C}}$$

$$TIC = [(Q/2) + SS] \times C + [(S/Q) \times O]$$

$$ROP = SS + [DT \times (S/\text{Days in a year})]$$

$$AI = [EOQ/2] + SS$$

$$ANO = S / EOQ$$

$$I = \% \times AB \times T$$

$$EAC = [(I / AR) \times (1 / T)] \times 100\%$$

$$COEC = [(I + OC / AR) \times (1 / T)] \times 100\%$$

$$PP = IO / ACF$$

$$NPV = \sum FCF (PVIF, i, n) - IO$$

$$NPV = ACF (PVIFA, i, n) - IO$$

$$IRR : ACF (PVIFA, i, n) = IO$$

$$PI = \frac{ACF (PVIFA, i, n)}{IO}$$

$$PI = \frac{\sum FCF (PVIF, i, n)}{IO}$$

$$DOL = \frac{S - TVC}{EBIT}$$

$$DFL = \frac{EBIT}{EBIT - I - \left( \frac{PD}{1 - \text{Tax}} \right)}$$

$$DCL = DOL \times DFL$$