SULIT

BAHAGIAN PEPERIKSAAN DAN PENILAIAN
JABATAN PENDIDIKAN POLITEKNIK DAN KOLEJ KOMUNITI
KEMENTERIAN PENDIDIKAN MALAYSIA

JABATAN PERDAGANGAN

PEPERIKSAAN AKHIR

SESI JUN 2019

DPB5043: BUSINESS FINANCE

TARIKH : 05 NOVEMBER 2019
MASA : 2.30 PETANG - 4.30 PETANG (2 JAM)

Kertas ini mengandungi **SEMBILAN (9)** halaman bercetak.

Struktur (4 soalan)

Dokumen sokongan yang disertakan : Formula, PVIF & PVIFA

JANGAN BUKA KERTAS SOALAN INI SEHINGGA DIARAHKAN

(CLO yang tertera hanya sebagai rujukan)

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

ARAHAN:
*Bahagian ini mengandungi **EMPAT (4)** soalan berstruktur. Jawab **SEMUA** soalan.*

QUESTION 1
SOALAN 1

CLO 1
C1

(a) (i) Define financial management.
Definisikan maksud pengurusan kewangan.

[2 marks]
[*2 markah*]

(ii) State **THREE (3)** duties of financial manager.
*Nyatakan **TIGA (3)** tugas pengurus kewangan.*

[3 marks]
[*3 markah*]

CLO 1
C2

(b) Wany Hasrita Enterprise is considering two possible projects for the year 2019. The Projects return depend on next year's economic situation. The estimated returns are given below:

Wany Hasrita Enterprise sedang mempertimbangkan 2 projek bagi tahun 2019. Pulangan setiap projek adalah bergantung kepada keadaan ekonomi tahun berikutnya. Jangkaan pulangan adalah seperti berikut:

Project LY ***Projek LY***		**Project MY** ***Projek MY***	
Probability *Kebarangkalian*	RM	Probability *Kebarangkalian*	RM
0.2	7 400	0.3	5 400
0.3	8 800	0.3	5 400
0.5	9 400	0.4	7 400

Compute:
Kirakan:

i) Expected rate of returns for each project.
Kadar pulangan yang dijangka bagi setiap projek.

[4 marks]
[*4 markah*]

ii) The standard deviation of each project.
Sisihan piawai bagi setiap projek.

[4 marks]
[*4 markah*]

iii) The coefficient of variation for each project.
Koefisien variasi bagi setiap projek.

[2 marks]
[*2 markah*]

CLO 1
C3

(c) Tizz Berhad has prepared the financial information for the year ended 31st December 2018. The financial information is as follow:

Tizz Berhad telah menyediakan maklumat kewangan bagi tahun berakhir pada 31 Disember 2018. Maklumat kewangan tersebut adalah seperti berikut:

Sales / *Jualan*	RM 875 000
Variable cost / *Kos berubah*	RM 500 000
Fixed cost / *Kos tetap*	RM 30 000
Interest expenses / *Belanja faedah*	RM 12 000
Tax rate / *Kadar cukai*	24%

You are required to calculate:
Anda dikehendaki untuk mengira:

(i) Degree of operating leverage
Darjah keumpilan operasi

[4 marks]
[*4 markah*]

(ii) Degree of financial leverage
Darjah keumpilan kewangan

[4 marks]
[*4 markah*]

(iii) Degree of combined leverage
Darjah keumpilan gabungan

[2 marks]
[*2 markah*]

QUESTION 2
SOALAN 2

CLO 1
C2

(a) (i) Describe the meaning of short term financing.
Jelaskan maksud pembiayaan jangka pendek.

[1 mark]
[*1 markah*]

(ii) Explain **TWO (2)** advantages and **TWO (2)** disadvantages of short term loans.
*Terangkan **DUA (2)** kebaikan dan **DUA (2)** keburukan pinjaman jangka pendek.*

[4 marks]
[*4 markah*]

CLO 1
C3

(b) Syarikat HerRan is investing in two mutually exclusive projects, that is, Project X and Project Y. Both projects need the same initial investment amount of RM60, 000. The table below shows the cash flows for both projects for the period of 5 years. Assume the Cost of Capital is 16%.

Syarikat HerRan melabur dalam dua projek eksklusif bersama iaitu Projek X dan Projek Y. Kedua-dua projek memerlukan jumlah pelaburan awal sebanyak RM60, 000. Jadual di bawahmenunjukkan aliran tunai bagi kedua-dua projek untuk tempoh 5 tahun. Anggapkan kos modal adalah 16%.

Year ***Tahun***	**Project X (RM)** ***Projek X (RM)***	**Project Y (RM)** ***Projek Y (RM)***
0	(60, 000)	(60, 000)
1	20, 000	10, 000
2	20, 000	15, 000
3	20, 000	20, 000
4	20, 000	23, 000
5	20, 000	28, 000

Calculate:
Kirakan:

(i) Net Present Value for each project.
Nilai Kini Bersih bagi setiap projek.

[6 marks]
[*6 markah*]

(ii) Internal Rate of Return for each project.
Kadar Pulangan Dalaman bagi setiap projek.

[9 marks]
[*9 markah*]

CLO 1
C2

(c) Determine the best project to be invested by the company. Recognize **TWO (2)** reasons.
*Tentukan projek terbaik untuk dilaburkan oleh syarikat. Kenalpasti **DUA (2)** alasan.*

[5 marks]
[*5 markah*]

QUESTION 3
SOALAN 3

CLO 2
C1

(a) Identify **FIVE (5)** purposes of financial ratios analysis.
*Kenalpasti **LIMA (5)** tujuan analisis nisbah kewangan.*

[5 marks]
[*5 markah*]

CLO 2
C2

(b) Bersatu Teguh Sdn Bhd has the following Statement of Comprehensive Income and Statement of Financial Position ended 31st December 2018.

Berikut adalah Penyata Pendapatan Komprehensif dan Penyata Kedudukan Kewangan Bersatu Teguh Sdn Bhd bagi tahun berakhir 31 Disember 2018.

Bersatu Teguh Sdn Bhd
Statement of Comprehensive Income for the year ended 31st December 2018
Penyata Pendapatan Komprehensif bagi tahun berakhir 31 Disember 2018

	RM
Sales / *Jualan*	1,500,000
Less : Cost of goods sold / *Kos Barang dijual*	(800,000)
Gross profit / *Untung Kasar*	700,000
Less : Operating expenses / *Belanja Operasi*	(410,000)
Operating profit / *Keuntungan Operasi*	290,000
Less : Interest expense / *Belanja faedah*	(25,000)
Earnings before taxes / *Pendapatan sebelum cukai*	265,000
Less : Taxes / *Cukai*	(79,500)
Net income / *Pendapatan bersih*	**185,500**

Bersatu Teguh Sdn Bhd
Statement of Financial Position as at 31st December 2018
Penyata Kedudukan Kewangan pada 31 Disember 2018

	RM	**RM**
Non-current assets / Aset Bukan Semasa		600,000
Current assets / *Aset Semasa*		
Cash / *Tunai*	100,000	
Marketable securities / *Sekuriti boleh pasar*	80,000	
Accounts Receivable / *Akaun Belum Terima*	270,000	
Inventories / *Inventori*	250,000	700,000
		1,300,000
Capital and Reserves : *Modal dan Rizab*		
Common stocks (RM1 each) / *Saham biasa*		600,000
Retained earnings / *Pendapatan tertahan*		90,000
		690,000
Non-current liabilities / *Liabiliti Bukan Semasa*		310,000
Current liabilities / *Liabiliti Semasa*		
Accounts Payable / *Akaun Belum Bayar*	125,000	
Notes Payable / *Nota Belum Bayar*	105,000	
Accruals / *Terakru*	70,000	300,000
		1,300,000

	Industry Average
Current ratio / *Nisbah semasa*	2.1 x
Quick ratio / *Nisbah cepat*	1.1 x
Debt ratio / *Nisbah hutang*	40%
Times interest earned / *Nisbah perlindungan faedah*	6 x
Net Profit Margin / *Margin untung bersih*	10.6%
Return on Asset / *Pulangan atas asset*	12.5%

You are required to calculate the above ratios for Bersatu Teguh Sdn Bhd. Assume 360 days a year.

Anda dikehendaki untuk kira nisbah di atas bagi Bersatu Teguh Sdn. Bhd. Andaian 360 hari setahun.

[10 marks]
[*10 markah*]

CLO 2
C4

(c) Berjaya Teguh Sdn. Bhd is applying for a loan from Bank Bumi. As a Bank Bumi Manager, should you approve the loan? Analyze from the aspect of liquidity, leverage and profitability ratios.

Berjaya Teguh Sdn. Bhd. sedang memohon pinjaman dari Bank Bumi. Sebagai Pengurus Bank Bumi, haruskah anda meluluskan pinjaman tersebut? Analisiskan dari aspek nisbah kecairan, leveraj dan keuntungan syarikat.

[10 marks]
[*10 markah*]

QUESTION 4
SOALAN 4

CLO 2
C1

(a) List **FIVE (5)** reasons to keep inventory
*Senaraikan **LIMA (5)** sebab perlu menyimpan inventory*

[5 marks]
[*5 markah*]

CLO 2
C3

(b) MOLIMAU JAYA Sdn Bhd is considering changing its credit policy that will result in average collection period from 20 days to 2/10 net 30 days. The relaxation in credit is expected to produce increase in sales. It is estimated that 80% of its customers will take the discount offer and the rest will pay on day 30. You are given the following additional information.

MOLIMAU JAYA Sdn Bhd sedang mempertimbangkan untuk mengubah dasar kreditnya yang akan menghasilkan purata tempoh kutipan dari 20 hari kepada 2/10, bersih 30 hari. Kelonggaran kredit dijangka menghasilkan peningkatan jualan. Dianggarkan bahawa 80% pelanggan akan mengambil tawaran diskaun dan yang lain akan membayar pada hari 30. Anda diberi maklumat tambahan berikut.

Original credit sales *Jualan kredit asal*	RM10,000,000
New credit sales *Jualan kredit baharu*	RM20,000,000
Contribution margin *Margin sumbangan*	25%
Percentage of bad debts on additional sales *Peratusan hutang lapuk ke atas jualan tambahan*	5%
Additional inventory required *Inventori tambahan diperlukan*	RM500,000
Required rate of return on investment *Kadar pulangan diperlukan*	14%
Assume 360-day a year *Andaikan 360 hari setahun*	

You are required to:
Anda dikehendaki untuk:

(i) Calculate the changes in credit policy based on the information given.
Kirakan perubahan dalam polisi kredit berdasarkan maklumat yang diberi.

[12 marks]
[*12 markah*]

(ii) Should changes in credit policy be implemented? Interpret your answer.
Patutkah perubahan dalam polisi kredit dilaksanakan? Jelaskan jawapan anda.

[3 marks]
[*3 markah*]

CLO 2
C4

(c) Fendy Enterprise sells 45 000 units of products per year. Carrying cost is RM 2 per unit, while the ordering cost is RM 50 per order. You are required to calculate the Economic Order Quantity.

Fendy Enterprise menjual 45 000 unit produk setahun. Kos penyimpanan adalah RM 2 seunit, manakala kos pesanan adalah RM50 bagi setiap pesanan. Anda dikehendaki mengira Kuantiti Pesanan Ekonomi.

[5 marks]
[*5 markah*]

SOALAN TAMAT

FORMULA BUSINESS FINANCE

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

$k = [P_1k_1] + [P_2k_2] + \ldots + [P_ik_i]$

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

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

$cv = \sigma / k$

CR = CA/CL

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$AI = [EOQ/2] + SS$

$ANO = S / EOQ$

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

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

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

$PP = IO / ACF$

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

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

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

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

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

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

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

$DCL = DOL \times DFL$

Table A-3 Present value interest factors 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%	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	0.8547	0.8475	0.8403	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	0.7305	0.7182	0.7062	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	0.6244	0.6086	0.5934	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	0.5337	0.5158	0.4987	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	0.4561	0.4371	0.4190	0.4019	0.3411	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	0.3898	0.3704	0.3521	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	0.3332	0.3139	0.2959	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	0.2848	0.2660	0.2487	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	0.2434	0.2255	0.2090	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	0.2080	0.1911	0.1756	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	0.1778	0.1619	0.1476	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	0.1520	0.1372	0.1240	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	0.1299	0.1163	0.1042	0.0935	0.0610	0.0550	0.0330
14	0.8700	0.7579	0.6611	0.5775	0.5051	0.4423	0.3878	0.3405	0.2992	0.2633	0.2320	0.2046	0.1807	0.1597	0.1413	0.1252	0.1110	0.0985	0.0876	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	0.0949	0.0835	0.0736	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	0.0811	0.0708	0.0618	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	0.0693	0.0600	0.0520	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	0.0592	0.0508	0.0437	0.0376	0.0208	0.0180	0.0089
19	0.8277	0.6864	0.5703	0.4746	0.3957	0.3305	0.2765	0.2317	0.1945	0.1635	0.1377	0.1161	0.0981	0.0829	0.0703	0.0596	0.0506	0.0431	0.0367	0.0313	0.0168	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	0.0433	0.0365	0.0308	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	0.0370	0.0309	0.0259	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	0.0316	0.0262	0.0218	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	0.0270	0.0222	0.0183	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	0.0231	0.0188	0.0154	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	0.0197	0.0160	0.0129	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	0.0090	0.0070	0.0054	0.0042	0.0016	0.0012	°
35	0.7059	0.5000	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	0.0041	0.0030	0.0023	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	0.0035	0.0026	0.0019	0.0014	°	°	°
40	0.6717	0.4529	0.3066	0.2083	0.1420	0.0972	0.0668	0.0460	0.0318	0.0221	0.0154	0.0107	0.0075	0.0053	0.0037	0.0026	0.0019	0.0013	0.0010	0.0007	°	°	°
50	0.6080	0.3715	0.2281	0.1407	0.0872	0.0543	0.0339	0.0213	0.0134	0.0085	0.0054	0.0035	0.0022	0.0014	0.0009	0.0006	0.0004	0.0003	0.0002	°	°	°	°

Present Value and Future Value Tables

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%	17%	18%	19%	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	0.8547	0.8475	0.8403	0.8333	0.8065	0.8000	0.7692
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	1.5852	1.5656	1.5465	1.5278	1.4568	1.4400	1.3609
3	2.9410	2.8839	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	2.2096	2.1743	2.1399	2.1065	1.9813	1.9520	1.8161
4	3.9020	3.8077	3.7171	3.6299	3.5460	3.4651	3.3872	3.3121	3.2397	3.1699	3.1024	3.0373	2.9745	2.9137	2.8550	2.7982	2.7432	2.6901	2.6386	2.5887	2.4043	2.3616	2.1662
5	4.8534	4.7135	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	3.1993	3.1272	3.0576	2.9906	2.7454	2.6893	2.4356
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	3.5892	3.4976	3.4098	3.3255	3.0205	2.9514	2.6427
7	6.7282	6.4720	6.2303	6.0021	5.7864	5.5824	5.3893	5.2064	5.0330	4.8684	4.7122	4.5638	4.4226	4.2883	4.1604	4.0386	3.9224	3.8115	3.7057	3.6046	3.2423	3.1611	2.8021
8	7.6517	7.3255	7.0197	6.7327	6.4632	6.2098	5.9713	5.7466	5.5348	5.3349	5.1461	4.9676	4.7988	4.6389	4.4873	4.3436	4.2072	4.0776	3.9544	3.8372	3.4212	3.3289	2.9247
9	8.5660	8.1622	7.7861	7.4353	7.1078	6.8017	6.5152	6.2469	5.9952	5.7590	5.5370	5.3282	5.1317	4.9464	4.7716	4.6065	4.4506	4.3030	4.1633	4.0310	3.5655	3.4631	3.0190
10	9.4713	8.9826	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	4.6586	4.4941	4.3389	4.1925	3.6819	3.5705	3.0915
11	10.3676	9.7868	9.2526	8.7605	8.3064	7.8869	7.4987	7.1390	6.8052	6.4951	6.2065	5.9377	5.6869	5.4527	5.2337	5.0286	4.8364	4.6560	4.4865	4.3271	3.7757	3.6564	3.1473
12	11.2551	10.5753	9.9540	9.3851	8.8633	8.3838	7.9427	7.5361	7.1607	6.8137	6.4924	6.1944	5.9176	5.6603	5.4206	5.1971	4.9884	4.7932	4.6105	4.4392	3.8514	3.7251	3.1903
13	12.1337	11.3484	10.6350	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	5.1183	4.9095	4.7147	4.5327	3.9124	3.7801	3.2233
14	13.0037	12.1062	11.2961	10.5631	9.8986	9.2950	8.7455	8.2442	7.7862	7.3667	6.9819	6.6282	6.3025	6.0021	5.7245	5.4675	5.2293	5.0081	4.8023	4.6106	3.9616	3.8241	3.2487
15	13.8651	12.8493	11.9379	11.1184	10.3797	9.7122	9.1079	8.5595	8.0607	7.6061	7.1909	6.8109	6.4624	6.1422	5.8474	5.5755	5.3242	5.0916	4.8759	4.6755	4.0013	3.8593	3.2682
16	14.7179	13.5777	12.5611	11.6523	10.8378	10.1059	9.4466	8.8514	8.3126	7.8237	7.3792	6.9740	6.6039	6.2651	5.9542	5.6685	5.4053	5.1624	4.9377	4.7296	4.0333	3.8874	3.2832
17	15.5623	14.2919	13.1661	12.1657	11.2741	10.4773	9.7632	9.1216	8.5436	8.0216	7.5488	7.1196	6.7291	6.3729	6.0472	5.7487	5.4746	5.2223	4.9897	4.7746	4.0591	3.9099	3.2948
18	16.3983	14.9920	13.7535	12.6593	11.6896	10.8276	10.0591	9.3719	8.7556	8.2014	7.7016	7.2497	6.8399	6.4674	6.1280	5.8178	5.5339	5.2732	5.0333	4.8122	4.0799	3.9279	3.3037
19	17.2260	15.6785	14.3238	13.1339	12.0853	11.1581	10.3356	9.6036	8.9501	8.3649	7.8393	7.3658	6.9380	6.5504	6.1982	5.8775	5.5845	5.3162	5.0700	4.8435	4.0967	3.9424	3.3105
20	18.0456	16.3514	14.8775	13.5903	12.4622	11.4699	10.5940	9.8181	9.1285	8.5136	7.9633	7.4694	7.0248	6.6231	6.2593	5.9288	5.6278	5.3527	5.1009	4.8696	4.1103	3.9539	3.3158
21	18.8570	17.0112	15.4150	14.0292	12.8212	11.7641	10.8355	10.0168	9.2922	8.6487	8.0751	7.5620	7.1016	6.6870	6.3125	5.9731	5.6648	5.3837	5.1268	4.8913	4.1212	3.9631	3.3198
22	19.6604	17.6580	15.9369	14.4511	13.1630	12.0416	11.0612	10.2007	9.4424	8.7715	8.1757	7.6446	7.1695	6.7429	6.3587	6.0113	5.6964	5.4099	5.1486	4.9094	4.1300	3.9705	3.3230
23	20.4558	18.2922	16.4436	14.8568	13.4886	12.3034	11.2722	10.3711	9.5802	8.8832	8.2664	7.7184	7.2297	6.7921	6.3988	6.0442	5.7234	5.4321	5.1668	4.9245	4.1371	3.9764	3.3254
24	21.2434	18.9139	16.9355	15.2470	13.7986	12.5504	11.4693	10.5288	9.7066	8.9847	8.3481	7.7843	7.2829	6.8351	6.4338	6.0726	5.7465	5.4509	5.1822	4.9371	4.1428	3.9811	3.3272
25	22.0232	19.5235	17.4131	15.6221	14.0939	12.7834	11.6536	10.6748	9.8226	9.0770	8.4217	7.8431	7.3300	6.8729	6.4641	6.0971	5.7662	5.4669	5.1951	4.9476	4.1474	3.9849	3.3286
30	25.8077	22.3965	19.6004	17.2920	15.3725	13.7648	12.4090	11.2578	10.2737	9.4269	8.6938	8.0552	7.4957	7.0027	6.5660	6.1772	5.8294	5.5168	5.2347	4.9789	4.1601	3.9950	3.3321
35	29.4086	24.9986	21.4872	18.6646	16.3742	14.4982	12.9477	11.6546	10.5668	9.6442	8.8552	8.1755	7.5856	7.0700	6.6166	6.2153	5.8582	5.5386	5.2512	4.9915	4.1644	3.9984	3.3330
36	30.1075	25.4888	21.8323	18.9083	16.5469	14.6210	13.0352	11.7172	10.6118	9.6765	8.8786	8.1924	7.5979	7.0790	6.6231	6.2201	5.8617	5.5412	5.2531	4.9929	4.1649	3.9987	3.3331
40	32.8347	27.3555	23.1148	19.7928	17.1591	15.0463	13.3317	11.9246	10.7574	9.7791	8.9511	8.2438	7.6344	7.1050	6.6418	6.2335	5.8713	5.5482	5.2582	4.9966	4.1659	3.9995	3.3332
50	39.1961	31.4236	25.7298	21.4822	18.2559	15.7619	13.8007	12.2335	10.9617	9.9148	9.0417	8.3045	7.6752	7.1327	6.6605	6.2463	5.8801	5.5541	5.2623	4.9995	4.1666	3.9999	3.3333