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**UTHM**  
Universiti Tun Hussein Onn Malaysia

**UNIVERSITI TUN HUSSEIN ONN MALAYSIA**

**FINAL EXAMINATION  
SEMESTER I  
SESSION 2015/2016**

COURSE NAME : FINANCIAL AND INVESTMENT MANAGEMENT  
COURSE CODE : BPB 23403  
PROGRAMME : 3 BPA  
EXAMINATION DATE : DECEMBER 2015/JANUARY 2016  
DURATION : 3 HOURS  
INSTRUCTION : ANSWER ALL QUESTIONS

THIS QUESTION PAPER CONSISTS OF TEN (10) PAGES

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- Q1** (a) Differentiate between current yield and yield to maturity. (4 marks)
- (b) Define the following value terms:
- (i) Liquidation value (2 marks)
  - (ii) Market value (2 marks)
  - (iii) Intrinsic value (2 marks)
- (c) Daya Berhad has bonds outstanding that mature in 10 years. The bonds have RM1,000 par value, pay interest annually at a rate of 9%, and have a current selling price of RM1,125.
- (i) Determine the yield to maturity. (6 marks)
  - (ii) Calculate the value of the bonds if investor's required rate of return is 9.5%. (4 marks)
- Q2** Your firm have been asked to analyze a capital investment proposal. The project's cost is RM2,775,000. Cash inflows are projected to be RM925,000 in Year 1; RM1,000,000 in Year 2; RM1,000,000 in Year 3; RM1,000,000 in Year 4; and RM1,225,000 in Year 5. Assume that your firm discounts capital projects at 15.5%.
- Compute the followings:
- (a) Payback period. (3 marks)
  - (b) Discounted payback period. (5 marks)
  - (c) Net Present Value (NPV). (3 marks)
  - (d) Profitability Index (PI). (3 marks)
  - (e) Internal Rate of Return (IRR). (6 marks)

- Q3** (a) List **THREE (3)** important factors in selecting a source of short-term credit.  
(3 marks)
- (b) Differentiate between pledging and factoring of account receivables.  
(4 marks)
- (c) Richenstein Enterprises is in the business of selling dishwashers. The firm needs RM192,000 to finance an anticipated expansion in receivables due to increased sales. Richenstein's credit terms are net 40, and its average monthly credit sales are RM180,000. In general, the firm's customers pay within the credit period; thus, the firm's average accounts receivable balance is RM240,000.

The comptroller of Richenstein Enterprises, Mr. Harris, approached their bank for the needed capital, placing the accounts receivable as collateral. The bank offered to make the loan at a rate of 2% over prime plus a 1% processing charge on all receivables pledged. The bank agreed to loan up to 80% of the face value of the receivables pledged.

- (i) Estimate the cost of the receivables loan to Richenstein where the firm borrows the RM192,000. The prime rate is currently 13%.  
(6 marks)
- (ii) Richenstein also requested a line of credit for RM192,000 from the bank. The bank agreed to grant the necessary line of credit at a rate of 4% over prime and required a 12% compensating balance. The company currently maintains an average demand deposit of RM40,000.

Estimate the cost of the line of credit to Richenstein.

(6 marks)

- (iii) Determine the source of credit that Richenstein Enterprises should select.  
(1 mark)

**Q4 (a)** Explain **TWO (2)** objectives of determining company's cost of capital. (4 marks)

- (b)** As a consultant to GBH Skiwear, you have been asked to compute the appropriate discount rate to use evaluate the purchase of a new warehouse facility. The market value of the firm's capital structure are presented in the following **Table Q4 (b)**.

**Table Q4 (b):** Market Value of Firm's Capital Structure

Source of Capital	Market value
Bonds	500,000
Preferred stock	100,000
Common stock	400,000

To finance the purchase, GBH will sell 20-year bonds, paying 8 percent, at the market price of RM850. Floatation costs for issuing the bonds are 6 percent of the market price.

Preferred stock paying a RM2.50 dividend can be sold for RM35, the cost issuing these shares is RM5 per share.

Common stock for GBH is currently selling for RM50 per share. The firm paid a RM2 dividend last year and expects dividends to continue growing at a rate of 8 percent per year. Floatation costs for issuing new common stock will be 10 percent of the market price.

The firm's marginal tax rate is 34 percent.

Calculate;

- (i) After tax Cost of debt (5 marks)
- (ii) Cost of Preferred Stock (3 marks)
- (iii) Cost of Common Stock (4 marks)
- (iv) Weighted Average Cost of Capital (WACC) (4 marks)

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**Q5** (a) Define the followings:

(i) Asked rate (2 marks)

(ii) Bid rate (2 marks)

(iii) Spread (2 marks)

(b) Differentiate between exchange and political risk.

(4 marks)

(c) The following **Table Q5(c)** contains information on Selling Quotes for Foreign Currencies in New York.

**Table Q5(c):** Selling Quotes for Foreign Currencies in New York.

Country-Currency	Contract	USD/Foreign
Canada – Dollar	Spot	0.8437
	30-day	0.8417
	90-day	0.8395
Japan – Yen	Spot	0.004684
	30-day	0.004717
	90-day	0.004781
Switzerland – Franc	Spot	0.5139
	30-day	0.5169
	90-day	0.5315

(i) Compute the indirect quote for the spot and forward Canadian Dollar, Yen, and Swiss Franc contracts.

(3 marks)

(ii) The spreads on the contracts as a percent of the asked rates are 2 percent for Yen, 3 percent for Canadian Dollars, and 5 percent for Swiss Francs.

Determine the bid rates for the different spot and forward rates.  
(3 marks)

(iii) You own USD10,000. The USD rate in Tokyo is 216.6743. The Yen rate in New York is given in the **Table Q5(c)**.

Calculate the gain (loss) for the arbitrage scheme with your capital.  
(4 marks)

**- END OF QUESTIONS -**

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$$FV_n = AMT (1+i)^n \text{ or } AMT (FVIF_{i,n})$$

$$C + \frac{\text{Par} - \text{Net Price}}{2}$$

$$PV = AMT (1+i)^{-n} \text{ or } AMT (PVIF_{i,n})$$

$$k_d = \frac{n}{\text{Par} + \text{Net Price}}$$

$$FVA = AMT (FVIFA_{i,n})$$

2

$$\text{After-tax cost of debt} = k_d (1-T)$$

$$FVIFA_{i,n} = \frac{(1+i)^n - 1}{i}$$

$$K_{ps} = \frac{D}{NP}$$

$$PVA = AMT (PVIFA_{i,n})$$

$$\bar{k}_{cs} = \frac{D_1}{P_0} + g$$

$$NPV = \sum_{t=1}^n \frac{FCF_t}{(1+k)^t} - IO$$

$$k_{ncs} = \frac{D_1}{NP_{cs}} + g$$

$$PI = \frac{\sum_{t=1}^n \frac{FCF_t}{(1+k)^t}}{IO}$$

$$k_{wacc} = w_d k_d (1-T_c) + w_{ps} k_{ps} + w_{ncs} k_{ncs}$$

$$k_i = k_{rf} + \beta_i (k_m - k_{rf})$$

$$IRR = IRR_I + \left[ \frac{PV_L - IO}{PV_L - PV_2} \times (IRR_2 - IRR_I) \right]$$

$$\bar{k} = \sum_{i=1}^n k_i P(k_i)$$

$$V_b = \$I_t (PVIFA_{k,n}) + \$M (PVIF_{k,n})$$

$$\sigma = \sqrt{\sum_{i=1}^n (k_i - \bar{k})^2 P(k_i)}$$

$$V_b = \sum_{t=1}^n \frac{\$I_t}{(1+k_b)^t} + \frac{\$M}{(1+k_b)^n}$$

$$APR = \frac{\text{interest}}{\text{principle} \times \text{time}} \text{ or}$$

$$V_{ps} = \frac{D}{k_{ps}}$$

$$APR = \frac{\text{interest}}{\text{principle}} \times \frac{1}{\text{time}}$$

$$V_{cs} = \frac{D_1}{k_{cs} - g}$$

$$APY = \left[ 1 + \frac{i}{m} \right]^m$$

$$V_{cs} = \frac{D_1}{(1+k_{cs})} + \frac{P_1}{(1+k_{cs})}$$

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Present Value Table

	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	0.990	0.980	0.971	0.962	0.952	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870
2	0.980	0.961	0.943	0.925	0.907	0.890	0.873	0.857	0.842	0.826	0.812	0.797	0.783	0.769	0.756
3	0.971	0.942	0.915	0.889	0.864	0.840	0.816	0.794	0.772	0.751	0.731	0.712	0.693	0.675	0.658
4	0.961	0.924	0.888	0.855	0.823	0.792	0.763	0.735	0.708	0.683	0.659	0.636	0.613	0.592	0.572
5	0.951	0.906	0.863	0.822	0.784	0.747	0.713	0.681	0.650	0.621	0.593	0.567	0.543	0.519	0.497
6	0.942	0.888	0.837	0.790	0.746	0.705	0.666	0.630	0.596	0.564	0.535	0.507	0.480	0.456	0.432
7	0.933	0.871	0.813	0.760	0.711	0.665	0.623	0.583	0.547	0.513	0.482	0.452	0.425	0.400	0.376
8	0.923	0.853	0.789	0.731	0.677	0.627	0.582	0.540	0.502	0.467	0.434	0.404	0.376	0.351	0.327
9	0.914	0.837	0.766	0.703	0.645	0.592	0.544	0.500	0.460	0.424	0.391	0.361	0.333	0.308	0.294
10	<b>0.905</b>	<b>0.820</b>	<b>0.744</b>	<b>0.676</b>	<b>0.614</b>	<b>0.558</b>	<b>0.508</b>	<b>0.463</b>	<b>0.422</b>	<b>0.386</b>	<b>0.352</b>	<b>0.322</b>	<b>0.295</b>	<b>0.270</b>	<b>0.247</b>
11	0.896	0.804	0.722	0.650	0.585	0.527	0.475	0.429	0.388	0.350	0.317	0.287	0.261	0.237	0.215
12	0.887	0.788	0.701	0.625	0.557	0.497	0.444	0.397	0.356	0.319	0.286	0.257	0.231	0.208	0.187
13	0.879	0.773	0.681	0.601	0.530	0.469	0.415	0.368	0.326	0.290	0.258	0.229	0.204	0.182	0.163
14	0.870	0.758	0.661	0.577	0.506	0.442	0.388	0.340	0.299	0.263	0.232	0.205	0.181	0.160	0.141
15	0.861	0.743	0.642	0.555	0.481	0.417	0.362	0.315	0.275	0.239	0.209	0.183	0.160	0.140	0.123
16	0.853	0.728	0.623	0.534	0.458	0.394	0.339	0.292	0.252	0.218	0.188	0.163	0.141	0.123	0.107
17	0.844	0.714	0.605	0.513	0.436	0.371	0.317	0.270	0.231	0.198	0.170	0.146	0.125	0.108	0.093
18	0.836	0.700	0.587	0.494	0.416	0.350	0.296	0.250	0.212	0.180	0.153	0.130	0.111	0.095	0.081
19	0.828	0.686	0.570	0.475	0.396	0.331	0.277	0.232	0.194	0.164	0.138	0.116	0.098	0.083	0.070
20	<b>0.820</b>	<b>0.673</b>	<b>0.554</b>	<b>0.456</b>	<b>0.377</b>	<b>0.312</b>	<b>0.258</b>	<b>0.215</b>	<b>0.178</b>	<b>0.149</b>	<b>0.124</b>	<b>0.104</b>	<b>0.087</b>	<b>0.073</b>	<b>0.061</b>
21	0.811	0.660	0.538	0.439	0.359	0.294	0.242	0.199	0.164	0.135	0.112	0.093	0.077	0.064	0.053
22	0.803	0.647	0.522	0.422	0.342	0.278	0.226	0.184	0.150	0.123	0.101	0.083	0.068	0.056	0.046
23	0.795	0.634	0.507	0.406	0.326	0.262	0.211	0.170	0.138	0.112	0.091	0.074	0.060	0.049	0.040
24	0.788	0.622	0.492	0.390	0.310	0.247	0.197	0.158	0.126	0.102	0.082	0.066	0.053	0.043	0.035
25	0.780	0.610	0.478	0.375	0.296	0.233	0.184	0.146	0.116	0.092	0.074	0.059	0.047	0.038	0.030
26	0.772	0.598	0.464	0.361	0.281	0.220	0.172	0.135	0.106	0.084	0.066	0.053	0.042	0.033	0.026
27	0.764	0.586	0.450	0.347	0.268	0.207	0.161	0.125	0.098	0.076	0.060	0.047	0.037	0.029	0.023
28	0.757	0.574	0.437	0.333	0.255	0.196	0.150	0.116	0.090	0.069	0.054	0.042	0.033	0.026	0.020
29	0.749	0.558	0.424	0.321	0.243	0.185	0.141	0.107	0.082	0.063	0.048	0.037	0.029	0.022	0.017
30	<b>0.742</b>	<b>0.552</b>	<b>0.412</b>	<b>0.308</b>	<b>0.231</b>	<b>0.174</b>	<b>0.131</b>	<b>0.099</b>	<b>0.075</b>	<b>0.057</b>	<b>0.044</b>	<b>0.033</b>	<b>0.026</b>	<b>0.020</b>	<b>0.015</b>
31	0.735	0.541	0.400	0.296	0.220	0.164	0.123	0.092	0.069	0.052	0.039	0.030	0.023	0.017	0.013
32	0.727	0.531	0.388	0.285	0.210	0.155	0.115	0.085	0.063	0.047	0.035	0.027	0.020	0.015	0.011
33	0.720	0.520	0.377	0.274	0.200	0.146	0.107	0.079	0.058	0.043	0.032	0.024	0.018	0.013	0.010
34	0.713	0.510	0.366	0.264	0.190	0.138	0.100	0.073	0.053	0.039	0.029	0.021	0.016	0.012	0.009
35	0.706	0.500	0.355	0.253	0.181	0.130	0.094	0.068	0.049	0.036	0.026	0.019	0.014	0.010	0.008
36	0.699	0.490	0.345	0.244	0.173	0.123	0.088	0.063	0.045	0.032	0.023	0.017	0.012	0.009	0.007
37	0.692	0.481	0.335	0.234	0.164	0.116	0.082	0.058	0.041	0.029	0.021	0.015	0.011	0.008	0.006
38	0.685	0.471	0.325	0.225	0.157	0.109	0.076	0.054	0.038	0.027	0.019	0.013	0.010	0.007	0.005
39	0.678	0.462	0.316	0.217	0.149	0.103	0.071	0.050	0.035	0.024	0.017	0.012	0.009	0.006	0.004
40	<b>0.672</b>	<b>0.453</b>	<b>0.307</b>	<b>0.206</b>	<b>0.142</b>	<b>0.097</b>	<b>0.067</b>	<b>0.046</b>	<b>0.032</b>	<b>0.022</b>	<b>0.015</b>	<b>0.011</b>	<b>0.006</b>	<b>0.005</b>	<b>0.004</b>

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1	0.990	0.980	0.971	0.962	0.962	0.943	0.935	0.926	0.917	0.909	0.901	0.893	0.885	0.877	0.870
2	1.970	1.942	1.913	1.885	1.859	1.833	1.808	1.783	1.759	1.736	1.713	1.690	1.668	1.647	1.626
3	2.941	2.884	2.829	2.775	2.723	2.673	2.624	2.577	2.531	2.487	2.444	2.402	2.361	2.322	2.283
4	3.902	3.808	3.717	3.630	3.546	3.465	3.387	3.312	3.240	3.170	3.102	3.037	2.974	2.914	2.855
5	4.853	4.713	4.580	4.452	4.329	4.212	4.100	3.993	3.890	3.791	3.696	3.605	3.517	3.433	3.352
6	5.795	5.601	5.417	5.242	5.076	4.917	4.767	4.623	4.486	4.355	4.231	4.111	3.998	3.889	3.784
7	6.728	6.472	6.230	6.002	5.796	5.582	5.389	5.206	5.033	4.968	4.712	4.423	4.288	4.160	
8	7.652	7.325	7.020	6.733	6.463	6.210	5.971	5.747	5.535	5.335	5.146	4.968	4.799	4.639	4.487
9	8.566	8.162	7.786	7.435	7.108	6.802	6.515	6.247	5.995	6.759	5.537	5.328	5.132	4.946	4.772
10	9.471	8.963	8.530	8.111	7.722	7.360	7.024	6.710	6.418	6.145	5.889	5.650	5.426	5.216	5.019
11	10.368	9.787	9.253	8.760	8.306	7.887	7.499	7.139	6.805	6.496	6.207	5.938	5.687	5.453	5.234
12	11.255	10.575	9.954	9.385	8.863	8.384	7.943	7.536	7.161	6.914	6.492	6.194	5.918	5.660	5.421
13	12.134	11.348	10.635	9.986	9.384	8.853	8.358	7.904	7.487	7.103	6.750	6.424	6.122	5.842	5.583
14	13.004	12.106	11.296	10.563	9.800	9.205	8.745	8.244	7.786	7.387	6.982	6.628	6.302	6.002	5.724
15	13.865	12.849	11.938	11.118	10.380	9.712	9.108	8.559	8.061	7.606	7.191	6.811	6.462	6.142	5.947
16	14.718	13.578	12.561	11.652	10.838	10.106	9.447	8.851	8.313	7.824	7.379	6.974	6.604	6.265	5.964
17	15.582	14.292	13.166	12.166	11.274	10.477	9.763	9.122	8.544	8.022	7.549	7.120	6.729	6.373	6.047
18	16.396	14.992	13.754	12.659	11.690	10.828	10.059	9.372	8.756	8.201	7.702	7.250	6.840	6.467	6.128
19	17.226	15.678	14.324	13.134	12.085	11.158	10.336	9.604	8.950	8.366	7.839	7.366	6.938	6.550	6.196
20	18.046	16.351	14.877	13.590	12.462	11.470	10.594	9.818	9.129	8.514	7.963	7.489	7.025	6.623	
21	18.857	17.011	15.415	14.029	12.821	11.764	10.836	10.017	9.292	8.649	8.075	7.562	7.102	6.687	
22	19.660	17.658	15.937	14.451	13.163	12.042	11.061	10.201	9.442	8.772	8.176	7.645	7.170	6.743	6.359
23	20.456	18.292	16.444	14.857	13.499	12.303	11.272	10.371	9.580	8.883	8.266	7.718	7.230	6.792	6.399
24	21.243	18.914	16.936	15.247	13.799	12.550	11.469	10.529	9.707	9.065	8.548	7.784	7.283	6.835	6.434
25	22.023	19.523	17.413	15.622	14.094	12.783	11.654	10.675	9.823	9.077	8.422	7.843	7.330	6.873	6.464
26	22.795	20.121	17.877	15.963	14.375	13.003	11.826	10.810	9.929	9.161	8.488	7.896	7.372	6.906	6.491
27	23.560	20.707	18.327	16.330	14.643	13.211	11.987	10.935	10.027	9.237	8.546	7.943	7.409	6.935	6.541
28	24.316	21.281	18.764	16.663	14.996	13.406	12.137	11.051	10.116	9.307	8.602	7.984	7.441	6.961	6.534
29	25.066	21.844	19.188	16.984	15.141	13.591	12.278	11.158	10.198	9.370	8.650	8.022	7.470	6.983	6.551
30	25.806	22.396	19.800	17.292	15.372	13.765	12.409	11.258	10.274	9.427	8.694	8.055	7.496	7.003	6.566
31	26.542	22.938	20.000	17.588	15.593	13.929	12.532	11.350	10.343	9.479	8.733	8.085	7.518	7.020	6.579
32	27.270	23.468	20.389	17.874	15.803	14.084	12.647	11.435	10.406	9.526	8.769	8.112	7.538	7.035	6.591
33	27.990	23.989	20.766	18.148	16.003	14.230	12.754	11.514	10.464	9.569	8.801	8.135	7.556	7.048	6.600
34	28.703	24.499	21.132	18.411	16.193	14.368	12.854	11.587	10.518	9.609	8.829	8.157	7.572	7.060	6.609
35	29.409	24.999	21.487	18.665	16.374	14.498	12.948	11.655	10.587	9.644	8.855	8.176	7.588	7.070	6.617
36	30.108	25.489	21.832	18.908	16.547	14.621	13.035	11.717	10.612	9.677	8.879	8.192	7.598	7.079	6.623
37	30.800	25.969	22.167	19.143	16.711	14.737	13.117	11.775	10.653	9.706	8.900	8.208	7.609	7.087	6.629
38	31.485	26.441	22.492	19.368	16.968	14.846	13.193	11.829	10.691	9.733	8.919	8.221	7.618	7.094	6.634
39	32.163	26.903	22.808	19.584	17.017	14.949	13.265	11.879	10.726	9.757	8.936	8.233	7.627	7.100	6.638
40	32.835	27.355	23.115	19.793	17.169	15.046	13.332	11.925	10.757	9.779	8.961	8.244	7.634	7.106	6.642

## FINAL EXAMINATION

SEMESTER/SESSION: SEM I/2015-2016  
 COURSE NAME: FINANCIAL & INVESTMENT MANAGEMENT

PROGRAMME: 3 BPA  
 COURSE CODE: BPB 23403

Future Value Tabl

	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	1.010	1.020	1.030	1.040	1.050	1.060	1.070	1.080	1.090	1.100	1.110	1.120	1.130	1.140	1.150
2	1.020	1.040	1.061	1.082	1.103	1.124	1.145	1.166	1.188	1.210	1.232	1.254	1.277	1.300	1.323
3	1.030	1.061	1.093	1.125	1.158	1.191	1.225	1.260	1.295	1.331	1.368	1.405	1.443	1.482	1.521
4	1.041	1.082	1.126	1.170	1.216	1.262	1.311	1.360	1.412	1.464	1.518	1.574	1.630	1.689	1.749
5	1.051	1.104	1.159	1.217	1.276	1.338	1.403	1.469	1.539	1.611	1.685	1.762	1.842	1.925	2.011
6	1.062	1.126	1.194	1.265	1.340	1.419	1.501	1.587	1.677	1.772	1.870	1.974	2.082	2.195	2.313
7	1.072	1.149	1.230	1.316	1.407	1.504	1.606	1.714	1.828	1.949	2.076	2.211	2.353	2.502	2.660
8	1.083	1.172	1.267	1.369	1.477	1.594	1.718	1.851	1.993	2.144	2.305	2.476	2.658	2.853	3.059
9	1.094	1.195	1.305	1.423	1.551	1.689	1.838	1.999	2.172	2.358	2.558	2.773	3.004	3.252	3.518
10	1.105	1.218	1.344	1.480	1.629	1.791	1.967	2.159	2.367	2.594	2.839	3.106	3.395	3.707	4.046
11	1.116	1.243	1.384	1.539	1.710	1.898	2.105	2.332	2.580	2.853	3.152	3.479	3.836	4.226	4.652
12	1.127	1.268	1.426	1.601	1.796	2.012	2.252	2.518	2.813	3.138	3.498	3.896	4.335	4.818	5.350
13	1.138	1.294	1.469	1.665	1.886	2.133	2.410	2.720	3.066	3.452	3.883	4.363	4.898	5.492	6.153
14	1.149	1.319	1.513	1.732	1.980	2.261	2.579	2.937	3.342	3.797	4.310	4.887	5.535	6.261	7.076
15	1.161	1.346	1.558	1.801	2.079	2.397	2.759	3.172	3.642	4.177	4.785	5.474	6.254	7.138	8.137
16	1.173	1.373	1.605	1.873	2.183	2.540	2.952	3.426	3.970	4.595	5.311	6.130	7.067	8.137	9.358
17	1.184	1.400	1.653	1.948	2.292	2.693	3.159	3.700	4.328	5.054	5.895	6.866	7.986	9.276	10.761
18	1.196	1.428	1.702	2.026	2.407	2.854	3.380	3.996	4.717	5.560	6.544	7.690	9.024	10.575	12.375
19	1.208	1.457	1.754	2.107	2.527	3.026	3.617	4.316	5.142	6.116	7.263	8.613	10.197	12.056	14.232
20	1.220	1.486	1.806	2.191	2.653	3.207	3.870	4.661	5.604	6.727	8.062	9.523	11.523	13.743	16.367
21	1.232	1.516	1.860	2.279	2.786	3.400	4.141	5.034	6.109	7.400	8.949	10.804	13.021	15.668	18.822
22	1.245	1.546	1.916	2.370	2.925	3.604	4.430	5.437	6.659	8.140	9.934	12.100	14.714	17.861	21.645
23	1.257	1.577	1.974	2.465	3.072	3.820	4.741	5.871	7.258	8.954	11.026	13.552	16.627	20.362	24.891
24	1.270	1.608	2.033	2.563	3.225	4.049	5.072	6.341	7.911	9.850	12.239	15.179	18.788	23.212	28.625
25	1.282	1.641	2.094	2.666	3.386	4.292	5.427	6.848	8.623	10.835	13.585	17.000	21.231	26.462	32.919
26	1.295	1.673	2.157	2.772	3.556	4.549	5.807	7.396	9.399	11.918	15.080	19.040	23.991	30.167	37.857
27	1.308	1.707	2.221	2.883	3.733	4.822	6.214	7.988	10.245	13.110	16.739	21.325	27.109	34.390	43.535
28	1.321	1.741	2.288	2.999	3.920	5.112	6.649	8.627	11.167	14.421	18.580	23.884	30.633	39.204	50.066
29	1.335	1.776	2.357	3.119	4.116	5.418	7.114	9.317	12.172	15.863	20.624	26.750	34.616	44.693	57.575
30	1.348	1.811	2.427	3.243	4.322	5.743	7.612	10.063	13.268	17.449	22.892	29.960	39.116	50.950	66.212
31	1.361	1.848	2.500	3.373	4.538	6.088	8.145	10.868	14.462	19.194	25.410	33.555	44.201	58.083	76.144
32	1.375	1.885	2.575	3.508	4.765	6.453	8.715	11.737	15.763	21.114	28.206	37.582	49.947	66.215	87.565
33	1.389	1.922	2.652	3.648	5.003	6.841	9.325	12.676	17.182	23.225	31.308	42.092	56.440	75.485	100.700
34	1.403	1.961	2.732	3.794	5.253	7.251	9.978	13.690	18.728	25.548	34.752	47.143	63.777	86.053	115.805
35	1.417	2.000	2.814	3.946	5.516	7.686	10.677	14.785	20.414	28.102	38.575	52.800	72.069	98.100	133.176
36	1.431	2.040	2.898	4.104	5.792	8.147	11.424	15.968	22.251	30.913	42.818	59.136	81.437	111.834	153.152
37	1.445	2.081	2.985	4.268	6.081	8.636	12.224	17.246	24.254	34.004	47.528	66.232	92.024	127.491	176.125
38	1.460	2.122	3.075	4.439	6.385	9.154	13.079	18.625	26.437	37.404	52.756	74.180	103.987	145.340	202.543
39	1.474	2.165	3.167	4.616	6.705	9.704	13.995	20.115	28.816	41.145	58.559	83.081	117.506	165.687	232.925
40	1.489	2.208	3.262	4.801	7.040	10.286	14.947	21.725	31.409	45.259	65.001	93.051	132.782	188.884	267.864

## FINAL EXAMINATION

SEMESTER/SESSION: SEM I/2015-2016

COURSE NAME: FINANCIAL &amp; INVESTMENT MANAGEMENT

PROGRAMME: 3 BPA

COURSE CODE: BPB 23403

Future Value of an Annuity Table

	1%	2%	3%	4%	5%	6%	7%	8%	9%	10%	11%	12%	13%	14%	15%
1	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2	2.010	2.020	2.030	2.040	2.050	2.060	2.070	2.080	2.090	2.100	2.110	2.120	2.130	2.140	2.150
3	3.030	3.060	3.091	3.122	3.153	3.184	3.215	3.246	3.278	3.310	3.342	3.374	3.407	3.440	3.473
4	4.060	4.122	4.184	4.246	4.310	4.375	4.440	4.506	4.573	4.641	4.710	4.779	4.850	4.921	4.993
5	5.101	5.204	5.309	5.416	5.526	5.637	5.751	5.867	5.985	6.105	6.228	6.353	6.480	6.610	6.742
6	6.152	6.308	6.468	6.633	6.802	6.975	7.153	7.336	7.523	7.716	7.913	8.115	8.323	8.536	8.754
7	7.214	7.434	7.662	7.898	8.142	8.394	8.654	8.923	9.200	9.487	9.783	10.089	10.405	10.730	11.067
8	8.286	8.583	8.892	9.241	9.549	9.897	10.260	10.637	11.028	11.436	11.859	12.300	12.757	13.233	13.727
9	9.369	9.755	10.159	10.583	11.207	11.491	11.978	12.488	13.021	13.579	14.164	14.776	15.416	16.085	16.786
10	10.462	10.950	11.464	12.006	12.578	13.181	13.816	14.487	15.193	15.937	16.722	17.549	18.420	19.337	20.304
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	23.045	24.349
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	29.002
13	13.809	14.680	15.618	16.627	17.713	18.882	20.141	21.495	22.953	24.523	26.212	28.029	30.989	34.352	
14	14.947	15.974	17.086	18.292	19.599	21.015	22.550	24.215	26.019	27.975	30.095	32.393	34.883	37.581	40.505
15	15.097	17.293	18.599	20.024	21.579	23.276	25.129	27.152	29.361	31.772	34.405	37.280	40.417	43.842	47.580
16	17.258	18.639	20.157	21.825	23.657	25.673	27.888	30.324	33.003	35.950	39.190	42.753	46.672	50.980	55.717
17	18.430	20.012	21.762	23.698	25.840	28.213	30.840	33.750	36.974	40.545	44.501	48.884	53.739	59.118	65.075
18	19.615	21.412	23.414	25.645	28.132	30.906	33.999	37.450	41.301	45.599	50.396	55.750	61.725	68.394	75.836
19	20.811	22.841	25.117	27.671	30.539	33.760	37.379	41.446	46.018	51.159	56.939	63.440	70.749	78.969	88.212
20	22.019	24.297	26.870	29.778	33.066	36.786	40.995	45.762	51.160	57.275	64.203	72.052	80.947	91.025	102.444
21	23.239	25.783	28.676	31.969	35.719	39.993	44.865	50.423	56.765	64.002	72.265	81.699	92.470	104.768	118.810
22	24.472	27.299	30.537	34.248	38.505	43.392	49.006	55.457	62.873	71.403	81.214	92.503	105.491	120.436	137.632
23	25.716	28.845	32.453	36.618	41.430	46.996	53.436	60.893	69.532	79.543	91.148	104.603	120.205	138.297	159.276
24	26.973	30.422	34.426	39.083	44.502	50.816	58.177	66.765	76.790	88.497	102.174	118.155	136.831	158.659	184.168
25	28.243	32.030	36.459	41.646	47.727	54.865	63.249	73.106	84.701	98.347	114.413	133.334	155.620	181.871	212.793
26	29.526	33.671	38.553	44.312	51.113	59.156	68.676	79.954	93.324	109.182	127.999	150.334	176.850	208.333	245.712
27	30.821	35.344	40.710	47.084	54.669	63.706	74.484	87.351	102.723	121.100	143.079	169.374	200.841	238.499	283.569
28	32.129	37.051	42.931	49.968	58.403	68.528	80.698	95.339	112.968	134.210	159.817	190.699	227.950	272.889	
29	33.450	38.792	45.219	52.966	62.323	73.640	87.347	103.966	124.135	148.631	178.397	214.583	258.583	312.094	377.170
30	34.785	40.568	47.575	56.085	66.439	79.058	94.461	113.283	136.308	164.494	199.021	241.333	293.199	356.787	434.745
31	36.133	42.379	50.003	59.328	70.761	84.802	102.073	123.346	149.575	181.943	221.913	271.293	332.315	407.737	500.957
32	37.494	44.227	52.503	62.701	75.299	90.890	110.218	134.214	164.037	201.138	247.324	304.848	376.516	465.820	577.100
33	38.869	46.112	55.078	66.210	80.064	97.343	118.933	145.951	179.800	222.252	275.529	342.429	426.463	532.035	664.666
34	40.258	48.034	57.730	69.858	85.067	104.184	128.259	158.627	196.982	245.477	306.837	384.521	482.903	607.520	765.365
35	41.660	49.994	60.462	73.652	90.320	111.435	138.237	172.317	215.711	271.024	341.590	431.663	546.681	693.573	881.170
36	43.077	51.994	63.276	77.598	95.836	119.121	148.913	187.102	236.125	299.127	380.164	484.463	618.749	791.673	1014.346
37	44.508	54.034	66.174	81.702	101.628	127.268	160.337	203.070	258.376	330.039	422.982	543.599	700.187	903.507	1167.498
38	45.953	56.115	69.159	85.970	107.710	135.904	172.561	220.316	282.630	364.043	470.511	609.831	792.211	1030.998	1343.622
39	47.412	58.237	72.234	90.409	114.095	145.058	185.640	238.941	309.066	401.448	523.267	684.010	896.198	1176.338	1546.165
40	48.886	60.402	75.401	95.026	120.800	154.762	199.635	259.057	337.882	442.593	581.826	757.091	1013.704	1342.025	1779.090